

2016 CAMDEN COUNTY COMMUNITY HEALTH ASSESSMENT

Albemarle Regional Health Services, Vidant Bertie, Vidant Chowan, and Vidant Roanoke-Chowan Hospitals, The Outer Banks Hospital, Sentara Albemarle Medical Center, Three Rivers Healthy Carolinians, Gates Partners for Health, and Healthy Carolinians of the Albemarle

*Comprehensive
Secondary Data
Report with
Primary Data
Summary*

March, 2017

Dear Community Member,

Your partnership in the Community Health Assessment process is important to the health of our residents. Albemarle Regional Health Services and Sentara Albemarle Medical Center continue to work together to provide this comprehensive report which illustrates the health status, health needs and improvements, as well as health resources in our communities. This document represents much time and effort by local health department staff, hospital staff, Healthy Carolinians members, and community members like you.

Factors such as the rural landscape of our counties and the diversity of our population continue to make the Albemarle region an exciting place to live, work, and learn, as well as create challenges in our systems of service delivery which drive the need for a continuum of programs. Through the Community Health Assessment process, we are allowed to analyze and prioritize our community's needs and strengths *with* the people of the seven counties.

Strategies are implemented to target needs identified in the 2016 Community Health Assessment priority health rankings selection in order to create increased opportunities for healthier outcomes in our communities. Relationships will continue to be formed and strengthened as we join together to address the needs. This document provides data and steps to ensure we empower our communities to seek available and potential resources.

Thank you for your continued interest in the health of our communities.

Sincerely yours,



R. Battle Betts, Jr., MPA
Health Director
Albemarle Regional Health Services



Coleen Santa Ana, MHA
President
Sentara Albemarle Medical Center

ACKNOWLEDGMENTS

The Community Health Assessment (CHA) process requires much work and dedication from those who are committed to identifying and solving health problems within our communities to improve the quality of life for our residents. The first phase of this process is forming a CHA Leadership Team. It is essential that the CHA Team involve people who have significant influence in the county, as well as the people who are most affected by health problems. People from throughout the county must be mobilized during this process, therefore a broad representation of county residents, agencies, and organizations were invited to be a part of this team.

This document was developed by Albemarle Regional Health Services, in partnership with Sentara Albemarle Medical Center, Vidant Bertie Hospital, Vidant Chowan Hospital, Vidant Roanoke Chowan Hospital, and The Outer Banks Hospital as part of a local community health assessment process. We would like to thank and acknowledge several agencies for their contributions and support in conducting this health assessment:

*Albemarle Hospital Foundation
Albemarle Regional Health Services
Gates Partners for Health
Healthy Carolinians of the Albemarle
Pasquotank County Cooperative Extension
Sentara Albemarle Medical Center
The Outer Banks Hospital
Three Rivers Healthy Carolinians
Town of Hertford
Vidant Bertie Hospital
Vidant Chowan Hospital
Vidant Roanoke Chowan Hospital*

Thank you also to our community for attending the focus groups and contributing information in other ways. Our partners also would like to thank the Center for Survey Research at East Carolina University for primary data collection assistance.

Independent public health consultants Sheila S. Pfaender and Annika Pfaender-Purvis provided secondary data collection and analysis and report development services for a comprehensive Community Health Assessment 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 Albemarle Regional Health Services, Sentara Albemarle Medical Center, Vidant Bertie Hospital, Vidant Chowan Hospital, Vidant Roanoke Chowan Hospital and The Outer Banks Hospital.

TABLE OF CONTENTS

Acknowledgments	1
List of Tables and Figures	12
Introduction	18
Assessment Methodology	20
Chapter One: Demographic Data	22
Geography	22
History	23
Population Characteristics	25
General Population Characteristics	25
Population by Township	25
Population Growth	26
Birth Rate	26
Population Density	27
Race and Ethnicity	27
Race and Ethnicity by Township	28
Age	29
Age by Township	30
Elderly Population	31
Demographic Characteristics of the Elderly Population	32
Non-English Speaking Population	33
Linguistic Isolation	34
Age Distribution of the Latino Population	34
Special Populations	35
Military Veterans	35
Blind and Visually-Impaired Persons	36
Special Needs Registry	36
Civic Engagement	37
Electoral Process	37
Registered Voters	37
Voter Turnout	37
Religious Life	38
Community Services and Organizations	39
Law Enforcement	39
Fire and Rescue Departments	39
Public Libraries	39

Camden County Senior Center	39
Other Community Services and Organizations.....	40
Camden County Community Resource Directories and Guides.....	40
Camden County Government Directory of Services	40
Albemarle Alliance for Children and Families	40
NC 2-1-1 for Camden County	40
Chapter Two: Socioeconomic Data	41
Economic Climate	41
Tier Designation.....	41
County Revenue Indicators.....	41
Income.....	42
Employment.....	43
Employment by Sector	44
Largest Employers	46
Travel for Employment	46
Modes of Transportation to Work.....	47
Public Transportation in Camden County.....	48
Unemployment.....	49
Poverty	49
Children Receiving Free or Reduced-price School Meals.....	53
County Economic Service Utilization	54
Housing	55
Affordable Housing	57
Homelessness	57
Households	57
Family Households	58
Grandparents Responsible for Minor Children	58
Child Care	60
Child Care Facilities	60
Education	63
Higher Education	63
College of the Albemarle	63
Roanoke-Chowan Community College.....	63
Chowan University	63
Martin Community College	64
Elizabeth City State University.....	64

East Carolina University	64
Primary and Secondary Education	65
Schools and Enrollment	65
Educational Attainment	66
Educational Expenditures	66
High School Drop-Out Rate	67
Graduation Rate	67
School Crime and Violence	68
Crime and Safety	71
Crime Rates	71
Other Criminal Activities	73
Juvenile Crime	74
Sexual Assault	76
Domestic Violence	77
Albemarle Hopeline	78
Child Maltreatment	79
Adult Maltreatment	80
Chapter Three: Health Resources	81
Medical Insurance	81
North Carolina Health Choice	82
Medicaid	83
HealthCheck Early Periodic Screening, Diagnosis and Treatment	84
Medicaid Managed Care	84
Overview	84
Participating Plans, Plan Selection, and Rate Setting	85
Quality and Performance Incentives	85
Health Care Providers	86
Practitioners	86
Hospitals	88
Other Hospitals	88
Hospital Utilization	89
Emergency Department (ED) Utilization	90
Inpatient (IP) Hospital Utilization	91
County Emergency Medical Services	93
Public Health Department: Albemarle Regional Health Services	95
Camden County Health Department	95

AgriSafe of the Albemarle	95
Clinical Services	95
Women, Infants, and Children (WIC)	96
Albemarle Regional Diabetes Care	97
Health Education and Promotion.....	97
Environmental Health.....	97
Inter-County Public Transportation Authority.....	97
Preparedness and Response.....	97
Children’s Developmental Service Agency.....	98
Health Department Utilization Data.....	98
Federally-Qualified Health Centers	98
School Health	99
Student-to-School Nurse Ratio	99
School Nurse Reports	99
Long-Term Care Facilities.....	100
Nursing Homes.....	101
Adult Care Homes	101
Alternatives to Institutional Care	102
Adult Day Care/Adult Day Health Centers.....	103
Mental Health Services and Facilities.....	104
Local LME/MCO	104
In-County Mental Health Facilities	105
Other Healthcare Resources.....	105
Dialysis Centers	106
Urgent Care Centers	106
Other Camden County Medical Practitioners.....	106
Recreational Facilities	107
Chapter Four: Health Statistics	108
Methodology.....	108
Understanding Health Statistics	108
Mortality.....	108
Age-adjustment	108
Aggregate Data	109
Morbidity.....	109
Prevalence	109
Incidence.....	109

Trends.....	109
Small Numbers.....	110
Describing Difference and Change.....	110
Behavioral Risk Factor Surveillance System (BRFSS)	110
Final Health Data Caveat	111
Health Rankings.....	112
America’s Health Rankings.....	112
County Health Rankings	112
Maternal and Infant Health	115
Pregnancy.....	115
Pregnancy, Fertility and Abortion Rates, Women Age 15-44	115
Pregnancy, Fertility and Abortion Rates, Women Age 15-19.....	116
Pregnancies among Teens (age 15-19) and Adolescents (under age 15).....	118
Pregnancy Risk Factors.....	118
High Parity and Short Interval Births.....	118
Smoking during Pregnancy.....	119
Early Prenatal Care	120
Pregnancy Outcomes	121
Low Birth Weight and Very Low Birth Weight	121
Cesarean Section Delivery	123
Birth Complications	124
Infant Mortality.....	124
Life Expectancy.....	127
Mortality.....	128
Leading Causes of Death.....	128
Hospital Discharges Associated with Leading Causes of Death	130
Gender Disparities in Leading Causes of Death	132
Racial Disparities in Leading Causes of Death	133
Age Disparities in Leading Causes of Death.....	133
Diseases of the Heart	137
Heart Disease Hospitalizations.....	137
Heart Disease Mortality Rate Trend.....	138
Racial Disparities in Heart Disease Mortality	138
Gender Disparities in Heart Disease Mortality	139
Cancer	140
Total Cancer.....	140

Malignant Neoplasm Hospitalizations.....	140
Total Cancer Mortality Rate Trend	141
Racial Disparities in Total Cancer Mortality	141
Gender Disparities in Total Cancer Mortality	142
Total Cancer Incidence	142
Lung Cancer.....	145
Lung, Trachea and Bronchus Cancer Hospitalizations	145
Lung Cancer Mortality Rate Trend	145
Racial Disparities in Lung Cancer Mortality	146
Gender Disparities in Lung Cancer Mortality	147
Lung Cancer Incidence	147
Female Breast Cancer.....	148
Breast Cancer Hospitalizations	148
Breast Cancer Mortality Rate Trend.....	149
Racial Disparities in Breast Cancer Mortality.....	149
Breast Cancer Incidence.....	150
Prostate Cancer	150
Prostate Cancer Hospitalizations	150
Prostate Cancer Mortality Rate Trend.....	151
Racial Disparities in Prostate Cancer Mortality.....	151
Prostate Cancer Incidence.....	152
Colon Cancer	153
Colon Cancer Hospitalizations	153
Colon Cancer Mortality Rate Trend.....	153
Racial Disparities in Colon Cancer Mortality.....	154
Gender Disparities in Colon Cancer Mortality.....	154
Colon Cancer Incidence.....	155
Chronic Lower Respiratory Disease (CLRD)	156
CLRD Mortality Rate Trend	157
Racial Disparities in CLRD Mortality	157
Cerebrovascular Disease.....	159
Cerebrovascular Disease Hospitalizations.....	159
Cerebrovascular Disease Mortality Rate Trend	160
Racial Disparities in Cerebrovascular Disease Mortality	160
Gender Disparities in Cerebrovascular Disease Mortality	161
Pneumonia and Influenza	162

Pneumonia and Influenza Hospitalizations	162
Pneumonia and Influenza Mortality Rate Trend	163
Racial Disparities in Pneumonia and Influenza Mortality	164
Gender Disparities in Pneumonia and Influenza Mortality	164
Alzheimer’s Disease	165
Alzheimer’s Disease Hospitalizations	165
Alzheimer’s Disease Mortality Rate Trend	165
Racial Disparities in Alzheimer’s Disease Mortality	166
Gender Disparities in Alzheimer’s Disease Mortality	166
Suicide	167
Suicide Hospitalizations	167
Suicide Mortality Rate Trend	167
Racial Disparities in Suicide Mortality	168
Gender Disparities in Suicide Mortality	168
Nephritis, Nephrotic Syndrome, and Nephrosis	170
Nephritis, Nephrotic Syndrome and Nephrosis Hospitalizations	170
Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend	171
Racial Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality	171
Gender Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality	172
Diabetes Mellitus	173
Diabetes Mellitus Hospitalizations	173
Diabetes Mellitus Mortality Rate Trend	174
Racial Disparities in Diabetes Mellitus Mortality	174
Gender Disparities in Diabetes Mellitus Mortality	175
All Other Unintentional Injury	176
All Other Unintentional Injury Hospitalizations	176
All Other Unintentional Injury Mortality Rate Trend	177
Racial Disparities in All Other Unintentional Injury Mortality	177
Gender Disparities in All Other Unintentional Injury Mortality	178
Septicemia	179
Septicemia Hospitalizations	179
Septicemia Mortality Rate Trend	180
Racial Disparities in Septicemia Mortality	180
Gender Disparities in Septicemia Mortality	181
Unintentional Motor Vehicle Injury	182
Unintentional Motor Vehicle Injury Hospitalizations	182

Unintentional Motor Vehicle Injury Mortality Rate Trend	182
Racial Disparities in Unintentional Motor Vehicle Injury Mortality	183
Gender Disparities in Unintentional Motor Vehicle Injury Mortality	183
Age Disparities in Motor Vehicle Injury Mortality	184
Alcohol-Related Traffic Crashes	185
Chronic Liver Disease and Cirrhosis	187
Chronic Liver Disease and Cirrhosis Hospitalizations	187
Chronic Liver Disease and Cirrhosis Mortality Rate Trend.....	187
Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality	188
Gender Disparities in Chronic Liver Disease and Cirrhosis Mortality	188
Acquired Immune Deficiency Syndrome (AIDS)	190
AIDS Hospitalizations	190
AIDS Mortality Rate Trend.....	190
Racial Disparities in AIDS Mortality	191
Gender Disparities in AIDS Mortality	191
Homicide.....	193
Homicide Hospitalizations	193
Homicide Mortality Rate Trend	193
Racial Disparities in Homicide Mortality	193
Gender Disparities in Homicide Mortality	194
Morbidity.....	195
Communicable Disease	195
Sexually Transmitted Infections.....	195
Chlamydia.....	195
Gonorrhea	196
Human Immune Deficiency Virus (HIV).....	198
Asthma	198
Diabetes	200
Obesity	201
Obesity in Adults	201
Obesity in Children	202
Oral Health.....	203
Adult Oral Health	203
Child Oral Health	204
Mental Health.....	206
Mental Health Service Utilization	206

Developmental Disabilities Service Utilization.....	207
Substance Abuse Service Utilization	208
Alcohol and Drugs.....	208
Utilization of the Hospital for Mental Health Services.....	209
Chapter Five: Environmental Data	211
Air Quality.....	211
Air Quality Index.....	211
Toxic Releases	211
Water Quality.....	211
Drinking Water Systems.....	211
Municipal Drinking Water Systems	212
South Camden Water Department	212
Wastewater Systems	213
Municipal Wastewater Systems.....	213
Camden County Wastewater Treatment Plant	213
NPDES Permits	214
Solid Waste	214
Solid Waste Disposal	214
Municipal Solid Waste Management	215
Camden County Solid Waste and Recycling Program	215
Hazardous Waste Generation.....	215
Lead.....	216
Food-, Water-, and Vector-Borne Hazards	217
Food-, Water-, and Vector-Borne Diseases.....	217
Vector Control	217
Animal Control in Camden County	218
Animal Shelters Serving Camden County	218
Built Environment	219
Access to Grocery Stores and Farmers' Markets	219
Access to Fast Food Restaurants	220
Access to Recreational Facilities.....	220
Chapter Six: Community Input	222
Small Group Discussions Summary	222
Methodology	222
Results.....	223
Chapter Seven: Priorities Identification	227

Priorities-Setting Process by Healthy Carolinians of the Albemarle	227
Next Steps.....	229
Dissemination Plan.....	229
References	230
Appendices.....	234

LIST OF TABLES AND FIGURES

Figure 1. Map of Camden County	22
Table 1. General Demographic Characteristics	25
Table 2. Population by Township, Camden County	26
Table 3. Decadal Population Growth.....	26
Figure 2. Birth Rate Trend, Live Births per 1,000 Total Population	27
Table 4. Decadal Population Density	27
Table 5. Population Distribution by Race/Ethnicity	28
Table 6. Population by Race/Ethnicity, by Township, Camden County.....	29
Table 7. Population Distribution by Age and Gender, Number and Percent	29
Figure 3. Population Distribution by Age, Camden County, ARHS Region and NC	30
Table 8. Population by Age, by Township, Camden County	30
Table 9. Growth Trend for the Elderly (Age 65 and Older) Population, by Decade	31
Table 10. Demographic Characteristics of the Population Age 65+	33
Table 11. Growth of the Foreign-Born Population	33
Table 12. Household Language by Linguistic Isolation.....	34
Figure 4. Age Distribution of Overall and Latino Populations in Camden County, Percent	35
Table 13. Veteran Status of Population	36
Table 14. Blind and Visually-Impaired Persons	36
Table 15. Registered Voters, by Race/Ethnicity, Number and Percent.....	37
Table 16. Voter Turnout in General Elections.....	37
Table 17. Religious Bodies in Camden County	38
Table 18. Fire Departments in Camden County	39
Table 19. NC State Sales and Use Tax Gross Collections	41
Table 20. Camden County Financial Data.....	42
Table 21. Income Measures.....	43
Table 22. Median Earnings, by Gender.....	43
Table 23. Insured Employment and Wages by Sector.....	45
Table 24. Largest 25 Employers in Camden County	46
Table 25. Place of Work for Resident Workers Age 16 and Older	47
Table 26. Modes of Transportation to Work	47
Table 27. ICPTA Ridership Statistics	48
Figure 5. Annual Unemployment Rate	49
Table 28. 100%-Level Poverty Rate.....	50
Table 29. Persons in Poverty (100%-Level) by Race, by Decade.....	50
Figure 6. Poverty Rate by Race, Camden County.....	51
Figure 7. Poverty Rate by Race, ARHS Region	51
Figure 8. Poverty Rate by Race, North Carolina.....	51
Table 30. Persons in Poverty (100%-Level) by Age, by Decade	52
Figure 9. Poverty Rate by Age, Camden County.....	52
Figure 10. Poverty Rate by Age, ARHS Region	53
Figure 11. Poverty Rate by Age, North Carolina.....	53
Table 31. Percent of Students Eligible for Free or Reduced price School Meals	54
Table 32. Number of Students Receiving Free or Reduced-price School Meals.....	54
Table 33. Housing by Type	55
Table 34. Estimated Housing Cost.....	56
Table 35. Household Characteristics.....	58
Table 36. Family Households, by Type of Head of Household	58
Table 37. Grandparents with Responsibility for Minor Children	59

Table 38. NC-Licensed Child Care Facilities in Camden County	61
Table 39. Children Enrolled in NC-Regulated Child Care	61
Table 40. Number of Children Receiving WorkFirst Child Care Subsidy	62
Table 41. Number of Schools.....	65
Table 42. Camden County Public Schools (Not Including Charter Schools)	65
Table 43. K-12 Public School Enrollment	66
Table 44. Educational Attainment	66
Table 45. Educational Expenditures.....	67
Table 46. High School Drop-Out Rate.....	67
Table 47. Four Year Cohort Graduation Rate.....	68
Table 48. School Crime and Violence Trend	69
Table 49. School Crime and Violence in Camden County Schools, by Type of Offense.....	69
Table 50. School Disciplinary Activity.....	70
Table 51. Crime Rates, Crimes per 100,000 Population.....	71
Figure 12. Index Crime Rate Trend.....	72
Figure 13. Violent Crime Rate Trend.....	72
Figure 14. Property Crime Rate Trend	72
Table 52. Types of Crimes Reported in Camden County	73
Table 53. Other Criminal Activity	74
Table 54. Complaints and Rates of Undisciplined and Delinquent Youth	75
Table 55. Juvenile Justice Outcomes.....	75
Table 56. Sexual Assault Complaint Trend	76
Table 57. Types of Sexual Assaults	76
Table 58. Types of Offenders in Sexual Assaults	77
Table 59. Domestic Violence Complaint Trend.....	77
Table 60. Services Received by Domestic Violence Complainants	78
Table 61. Reports of Child Abuse and Neglect, Camden County	79
Table 62. Demographic Detail of Child Abuse Cases, Camden County	80
Table 63. NC Adult Protective Services Survey Results.....	80
Table 64. Percent of Population without Health Insurance, by Age Group.....	81
Table 65. Health Insurance Coverage.....	82
Table 66. NC Health Choice Enrollment.....	83
Table 67. Camden County Medicaid Eligibles, by Program Area	83
Table 68. Participation in HealthCheck (EPSDT)	84
Table 69. Community Care of NC/Carolina ACCESS Enrollment.....	85
Table 70. Active Health Professionals per 10,000 Population	86
Table 71. Number of Active Health Professionals, by Specialty	87
Table 72. Number of General Hospital Beds ¹	88
Table 73. Licensed Hospitals in Northeastern NC	88
Table 74. Hospitals in Southeastern Virginia.....	89
Table 75. ED Discharges by Gender and Age Group	90
Table 76. ED Discharges by Racial/Ethnic Group	90
Table 77. ED Discharges by Payor Group.....	91
Table 78. IP Discharges by Gender and Age Group	91
Table 79. IP Discharges by Racial/Ethnic Group.....	92
Table 80. IP Discharges by Payor Group	92
Table 81. Reasons for EMS Dispatch, Pasquotank-Camden EMS.....	94
Table 82. Camden County Health Department Service Utilization, by Program.....	98
Table 83. Student to School Nurse Ratio	99
Table 84. School Nurse Activities, Camden County Schools.....	100
Table 85. NC-Licensed Long-Term Care Facilities in Camden County.....	101

Table 86. Number of Nursing Facility Beds	101
Table 87. NC-Licensed Home Care, Home Health and Hospice Service Providers in the ARHS Region	103
Table 88. NC-Licensed Mental Health Facilities (G.S. 122C) in Camden County	105
Table 89. Mental Health Providers Accepting Medicaid or NC Health Choice Patients, Camden County	105
Table 90. Other NC Licensed Healthcare Facilities in the Albemarle Region	106
Table 91. Dialysis Centers in the Albemarle Region.....	106
Table 92. Active NC Licensed Physicians and Physician Assistants in Camden County	107
Table 93. Public Recreational Facilities in Camden County	107
Table 94. Rank of North Carolina in America’s Health Rankings	112
Table 95. County Health Rankings.....	113
Table 96. County Health Rankings Details	114
Table 97. Total Pregnancy, Fertility and Abortion Rates, Ages 15-44.....	115
Figure 15. Overall Pregnancy Rate Trend, Age 15-44.....	116
Table 98. Total Pregnancy, Fertility and Abortion Rates, Ages 15-19.....	117
Figure 16. Overall Pregnancy Rate Trend, Age 15-19.....	117
Table 99. Number of Teen Pregnancies (Ages 15-19)	118
Table 100. Number of Adolescent Pregnancies (Under Age 15)	118
Table 101. High Parity and Short Interval Births.....	119
Table 102. Smoking during Pregnancy Trend	120
Table 103. Early Prenatal Care Trend.....	120
Figure 17. Percent of Camden County Women Receiving Prenatal Care in the First Trimester, by Race.....	121
Figure 18. Low Birth-Weight Births.....	122
Figure 19. Very Low Birth-Weight Births.....	122
Figure 20. Low Birth-Weight Births, Camden County, by Race	123
Figure 21. Very-Low Birth-Weight Births, Camden County, by Race	123
Table 104. Cesarean Section Deliveries.	124
Table 105. Discharges of Newborn Infants, Camden County Resident Mothers.....	124
Table 106. Total Infant Deaths	125
Figure 22. Infant Mortality Rate	126
Table 107. Life Expectancy at Birth, by Gender and Race	127
Table 108. Comparison of Leading Causes of Death, Camden County and NC.....	128
Table 109. Overall Age-Adjusted Mortality Rates for the 15 Leading Causes of Death, Camden County and Comparators	129
Table 110. Emergency Department Discharges for Leading Causes of Death	131
Table 111. Inpatient Hospitalization Discharges for Leading Causes of Death	131
Table 112. Sex-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Camden County and Comparators.....	132
Table 113. Race-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Camden County.....	133
Table 114. Three Leading Causes of Death by Age Group, by Unadjusted Death Rates, Camden County and Comparators.....	134
Table 115. Short-Term Changes in Leading Causes of Death, Camden County	135
Table 116. Long-Term Changes in Leading Causes of Death, Camden County.....	136
Table 117. Heart Disease Hospital Discharge Rate Trend	137
Table 118. Hospital Discharges, Camden County Residents: Heart Disease	137
Figure 23. Overall Heart Disease Mortality Rate Trend	138
Table 119. Race/Ethnicity-Specific Heart Disease Mortality	138
Figure 24. Sex-Specific Heart Disease Mortality Rate Trend, Camden County	139

Table 120. All Malignant Neoplasms Hospital Discharge Rate Trend.....	140
Table 121. Hospital Discharges, Camden County Residents: All Malignant Neoplasms.....	140
Figure 25. Overall Total Cancer Mortality Rate Trend	141
Table 122. Race/Ethnicity-Specific Total Cancer Mortality	141
Figure 26. Sex-Specific Total Cancer Mortality Rate Trend, Camden County.....	142
Figure 27. Overall Total Cancer Incidence Rate Trend.....	143
Figure 28. Mortality Rates for Four Major Site-Specific Cancers	144
Figure 29. Incidence Rates for Four Major Site-Specific Cancers	144
Table 123. Malignant Trachea, Bronchus, Lung Neoplasms Hospital Discharge Rate Trend ..	145
Figure 30. Overall Lung Cancer Mortality Rate Trend	146
Table 124. Race/Ethnicity-Specific Lung Cancer Mortality	146
Figure 31. Sex-Specific Lung Cancer Mortality Rate Trend, Camden County.....	147
Figure 32. Lung Cancer Incidence Rate Trend.....	148
Table 125. Malignant Female Breast Neoplasms Hospital Discharge Rate Trend.....	148
Figure 33. Overall Female Breast Cancer Mortality Rate Trend	149
Table 126. Race/Ethnicity-Specific Female Breast Cancer Mortality	150
Figure 34. Breast Cancer Incidence Rate Trend	150
Table 127. Malignant Prostate Neoplasms Hospital Discharge Rate Trend.....	151
Figure 35. Overall Prostate Cancer Mortality Rate Trend	151
Table 128. Race/Ethnicity-Specific Prostate Cancer Mortality Rate.....	152
Figure 36. Prostate Cancer Incidence Rate Trend	152
Table 129. Malignant Colon, Rectum and Anus Neoplasms Hospital Discharge Rate Trend...	153
Figure 37. Overall Colon Cancer Mortality Rate Trend.....	154
Table 130. Race/Ethnicity-Specific Colon Cancer Mortality	154
Figure 38. Sex-Specific Colorectal Cancer Mortality Rate Trend, Camden County	155
Figure 39. Colon Cancer Incidence Rate Trend	155
Table 131. COPD Hospital Discharge Rate Trend	156
Table 132. Hospital Discharges, Camden County Residents: COPD and Allied Conditions	157
Figure 40. Overall CLRD Mortality Rate Trend.....	157
Table 133. Race/Ethnicity-Specific CLRD Mortality.....	158
Figure 41. Sex-Specific CLRD Mortality Rate Trend, Camden County.....	158
Table 134. Cerebrovascular Disease Hospital Discharge Rate Trend	159
Table 135. Hospital Discharges, Camden County Residents: Cerebrovascular Disease	159
Figure 42. Overall Cerebrovascular Disease Mortality Rate Trend.....	160
Table 136. Race/Ethnicity-Specific Cerebrovascular Disease Mortality.....	161
Figure 43. Sex-Specific Cerebrovascular Disease Mortality Rate Trend, Camden County	161
Table 137. Pneumonia and Influenza Hospital Discharge Rate Trend.....	162
Table 138. Hospital Discharges, Camden County Residents: Pneumonia and Influenza	163
Figure 44. Overall Pneumonia and Influenza Mortality Rate Trend.....	163
Table 139. Race/Ethnicity-Specific Pneumonia and Influenza Mortality	164
Figure 45. Sex-Specific Pneumonia and Influenza Mortality Rate Trend, Camden County.....	164
Figure 46. Overall Alzheimer’s Disease Mortality Rate Trend.....	165
Table 140. Race/Ethnicity-Specific Alzheimer’s Disease Mortality.....	166
Figure 47. Sex-Specific Alzheimer’s Disease Mortality Rate Trend, Camden County.....	166
Table 141. Hospital Discharges, Camden County Residents: Suicide Ideation	167
Figure 48. Overall Suicide Mortality Rate Trend.....	168
Table 142. Race/Ethnicity-Specific Suicide Mortality.....	168
Figure 49. Sex-Specific Suicide Mortality Rate Trend, Camden County	169
Table 143. Nephritis, Nephrosis, Nephrotic Syndrome Hospital Discharge Rate Trend.....	170
Table 144. Hospital Discharges, Camden County Residents: Kidney Diseases	170
Figure 50. Overall Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend.....	171

Table 145. Race/Ethnicity-Specific Nephritis, Nephrotic Syndrome and Nephrosis Mortality ...	172
Figure 51. Sex-Specific Nephritis, Nephrotic Syndrome, Nephrosis Mortality Rate Trend, Camden County	172
Table 146. Diabetes Hospital Discharge Rate Trend.....	173
Table 147. Hospital Discharges, Camden County Residents: Diabetes Mellitus.....	173
Figure 52. Overall Diabetes Mellitus Mortality Rate Trend.....	174
Table 148. Race/Ethnicity-Specific Diabetes Mellitus Mortality.....	175
Figure 53. Sex-Specific Diabetes Mellitus Mortality Rate Trend, Camden County	175
Table 149. Injury and Poisoning Hospital Discharge Rate Trend.....	176
Table 150. Hospital Discharges, Camden County Residents: All Injury and Poisoning.....	177
Figure 54. Overall All Other Unintentional Injury Mortality Rate Trend.....	177
Table 151. Race/Ethnicity-Specific All Other Unintentional Injury Mortality.....	178
Figure 55. Sex-Specific All Other Unintentional Injury Mortality Rate Trend, Camden County.	178
Table 152. Septicemia Hospital Discharge Rate Trend	179
Table 153. Hospital Discharges, Camden County Residents: Septicemia	179
Figure 56. Overall Septicemia Mortality Rate Trend	180
Table 154. Race/Ethnicity-Specific Septicemia Mortality	181
Figure 57. Sex-Specific Septicemia Mortality Rate Trend, Camden County	181
Figure 58. Unintentional Motor Vehicle Injury Mortality Rate Trend	182
Table 155. Race/Ethnicity-Specific Unintentional Motor Vehicle Injury Mortality	183
Figure 59. Sex-Specific Unintentional Motor Vehicle Injury Mortality Rate Trend, Camden County	183
Table 156. Motor Vehicle Injury Mortality, Numbers and Rates, by Age	184
Table 157. Alcohol-Related Traffic Crashes Trend.....	185
Table 158. Outcomes of Alcohol-Related Traffic Crashes	186
Table 159. Chronic Liver Disease and Cirrhosis Hospital Discharge Rate Trend	187
Figure 60. Overall Chronic Liver Disease and Cirrhosis Mortality Rate Trend	188
Table 160. Race/Ethnicity-Specific Chronic Liver Disease and Cirrhosis Mortality	188
Figure 61. Sex-Specific Chronic Liver Disease and Cirrhosis Mortality Rate Trend, Camden County	189
Table 161. AIDS Hospital Discharge Rate Trend	190
Figure 62. Overall AIDS Mortality Rate Trend	191
Table 162. Race/Ethnicity-Specific AIDS Mortality	191
Figure 63. Sex-Specific AIDS Mortality Rate Trend, Camden County	192
Figure 64. Overall Homicide Mortality Rate Trend.....	193
Table 163. Race/Ethnicity-Specific Homicide Mortality.....	194
Figure 65. Sex-Specific Homicide Mortality Rate Trend, Camden County	194
Figure 66. Chlamydia Infection Incidence Trend	196
Figure 67. Gonorrhea Infection Incidence Trend	197
Table 164. Gonorrhea Infection Incidence Rate, Stratified by Race/Ethnicity	197
Table 165. HIV Prevalence: HIV and AIDS Cases Living as of December 31, 2014.....	198
Table 166. NC Hospital Discharges with a Primary Diagnosis of Asthma, Numbers and Rates per 100,000.....	199
Table 167. Hospital Discharges, Camden County Residents, by Race: Asthma.....	199
Table 168. Hospital Discharges, Camden County Residents, by Age Group: Asthma.....	200
Figure 68. Adult Diagnosed Diabetes Prevalence Estimate Trend	201
Figure 69. Adult Diagnosed Obesity Prevalence Estimate Trend	202
Table 169. Prevalence of Obesity and Overweight in Children, Ages 2-4, NC NPASS.....	203
Table 170. Emergency Department Admissions of Camden County Residents for Dental Conditions.....	204
Table 171. Dental Service Utilization by Medicaid Recipients, by Age Group.....	204

Table 172. Child Dental Screening Summary.....	205
Table 173. Persons Served by Mental Health Area Programs/Local Management Entities	207
Table 174. Persons Served in NC State Psychiatric Hospitals	207
Table 175. Persons Served in NC State Developmental Centers.....	208
Table 176. Persons Served in NC Alcohol and Drug Abuse Treatment Centers.....	209
Table 177. ED and IP Discharges of Camden County Residents with Mental Health Diagnoses	209
Table 178. Detailed ED Discharges of Camden County Residents with Mental Health Diagnoses	210
Table 179. Facilities Releasing TRI Chemicals, Camden County.....	211
Table 180. Active Water Systems in Camden County	212
Table 181. National Pollutant Discharge Elimination System (NPDES) Permitted Dischargers, Camden County	214
Table 182. Solid Waste Disposal	215
Table 183. County Waste Disposal Report, Camden County	215
Table 184. Blood Lead Assessment Results	216
Table 185. Food-, Water-, and Vector-Borne Diseases, North Carolina	217
Table 186. Animal Rabies Cases	218
Table 187. Availability of Grocery Stores.....	219
Table 188. Availability of Farmers' Markets.....	220
Table 189. Availability of Fast Food Restaurants	220
Table 190. Availability of Recreation and Fitness Facilities	221
Table 191. Participants in Camden County Small-Group Discussions.....	222
Table 192. Participant-Identified Community Health Problems in Camden County.....	224
Table 193. Home Remedies Reported by Participants	225

INTRODUCTION

Local public health agencies in North Carolina (NC) are required to conduct a comprehensive Community Health Assessment (CHA) at least once every four years. The CHA is required of public health departments in the consolidated agreement between the NC Division of Public Health (NC DPH) 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, non-profit hospitals are also required to conduct a community health needs assessment (CHNA) at least every three years. Recognizing that duplicate assessment efforts are a poor use of community resources, local health departments (LHDs) and non-profit hospitals across the state are developing models for collaboratively conducting the community health assessment process. For the Albemarle region, a partnership between Albemarle Regional Health Services and local hospitals has been a long-standing tradition, and the hospitals have helped fund and participate in previous community health assessments. This health assessment report is the culmination of the most recent partnership between Albemarle Regional Health Services (ARHS) and five regional hospitals: Vidant Bertie Hospital (VBER), Vidant Chowan Hospital (VCHO), Vidant Roanoke-Chowan Hospital (VROA), The Outer Banks Hospital (TOBH), and Sentara Albemarle Medical Center (SAMC).

In communities where there is an active Healthy Carolinians partnership, the CHA activity also usually includes that entity. Healthy Carolinians is “a network of public-private partnerships across North Carolina that shares the common goal of helping all North Carolinians to be healthy.” The members of local partnerships are 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. In Camden County, the local Healthy Carolinians coalition is Healthy Carolinians of the Albemarle, which also includes Currituck, Perquimans and Pasquotank Counties.

The community health assessment, which is both a process and a document, investigates and describes the current health status of the community, the social factors impacting health, 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, 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 CHA serves as the basis for prioritizing the community’s health needs, and culminates in planning to meet those needs.

Albemarle Regional Health Services contracted with Sheila S. Pfaender, Public Health Consultant, and her team to assist in conducting the 2016 CHNA for the seven counties of the ARHS region, 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 CHNA as cited in the December, 2014 Final Rule.

The ARHS Lead Regional CHA Coordinator worked with the consultant to develop a multi-phase plan for conducting the assessment. The phases included: (1) a research phase to identify, collect and analyze secondary demographic, socioeconomic, health and environmental data; (2) a data synthesis and analysis phase; (3) a period of data reporting and discussion among the project partners. In addition to this work, ARHS contracted with another vendor to assist with (4) a community input phase to elicit opinion and ideas regarding the assessment outcomes among community stakeholders. ARHS and its partners, particularly the Healthy Carolinians coalitions within the region worked on a final step: (5) a prioritization and decision-making phase. Upon completion of this work the CHNA partners and the community will have the tools they need to develop plans and activities that will improve the health and well-being of the people living in Camden County.

ASSESSMENT METHODOLOGY

In order to learn about the specific factors affecting the health and quality of life of Camden County residents, the CHNA data consultant tapped numerous readily available secondary data sources. For data on Camden 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 Camden County Department of Social Services; Camden County Schools; and other Camden County agencies and organizations. The consultant 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, Vital Statistics, and Cancer Registry units. Other health data sources included: US Centers for Disease Control and Prevention; NC DPH Epidemiology Section; NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; National Center for Health Statistics; Healthy North Carolina 2020; NC DPH Nutrition Services Branch; UNC Highway Safety Research Center; NC Department of Transportation; and the NC DPH Oral Health Section, as well as other *public domain* sources. *Local* health data from the county Health Department, county schools and emergency management services department were also accessed. Through the current ARHS partnership with the region's five hospitals, the consultant accessed de-identified hospital utilization data (primarily emergency department discharges and in-patient hospitalization discharges) that contributed greatly to the understanding of health issues in Camden County.

Because in any community health assessment it is instructive to relate local data to similar data in other jurisdictions, Camden County data is compared to like data describing the state of NC as a whole, as well as to data from Pamlico County, a state-recommended "peer county". Also used for comparison is data for the average measure of each parameter in the seven counties in the ARHS jurisdiction: Bertie County, Camden County, Chowan County, Currituck County, Gates County, Pasquotank County and Perquimans County. In some cases Camden County data is compared to US-level data, or to Healthy People 2020 goals or other standardized measures. Where appropriate, trend data has been used to show changes in indicators over time, at least since the 2013 Camden County CHA, but sometimes further back than that.

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

As an additional part of the CHNA process, ARHS and its partners its partners also conducted community listening sessions (i.e., *primary data* collection) among members of the public and community leaders. A brief summary of listening session results is provided in this document, but since the listening sessions are not the work of the secondary data consultant, the full description of the methodologies and results of the listening sessions are presented in a separate document.

This report represents a topical synthesis of all the *secondary data* researched in connection with the 2016 ARHS CHNA project. It is intended to serve as the master secondary data resource for guiding community deliberations about the most important health issues in Camden County and how to solve them.

It should be noted at the onset that the secondary data 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. Website URLs, 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 ARHS website at: <http://www.arhs-nc.org/>.

CHAPTER ONE: DEMOGRAPHIC DATA

GEOGRAPHY

Camden County is located in the northeastern part of NC and is part of the Coastal Plain region of the state. The county covers a total of 306 square miles, 241 in land and the remaining 65 in water. The county is primarily characterized by low, flat plains and swamp land which includes the Great Dismal Swamp. Camden County contains miles of waterfront along the Pasquotank River, the North River, and the Albemarle Sound (1,2).

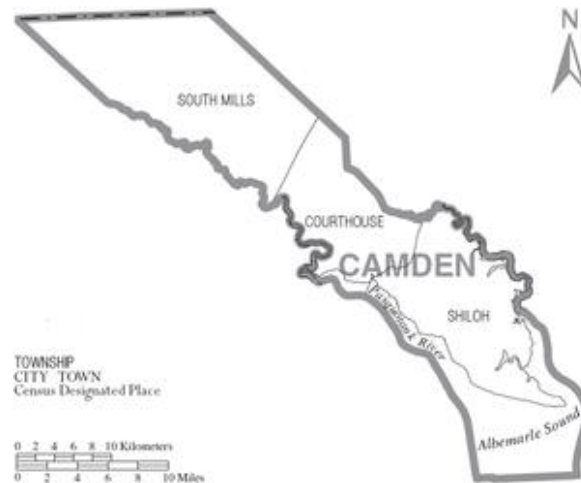
The Town of Camden serves as the county seat. Camden County is adjacent to Pasquotank and Gates counties to the west, Currituck County to the northeast, the Albemarle Sound to the south, and the state of Virginia to the north (1,2).

US Highway 17 runs through the county, connecting to Wilmington, NC to the south and Norfolk, VA to the north. US Highway 158 runs east to west through the county and connects Camden County to the coast. Both highways provide a connection to US Highway 64, the nearest all four-lane highway, which leads to the Outer Banks going east and Raleigh going west (3).

Elizabeth City, in neighboring Pasquotank County, is the nearest Greyhound bus line stop. The nearest Amtrak train station is in Norfolk, VA. The Norfolk International Airport is the nearest commercial airport and is approximately 50 miles from Camden County. The next two closest airports are the Newport News/Williamsburg International Airport in Newport News, VA (approximately 72 miles) and the Pitt-Greenville Airport in Greenville, NC (approximately 106 miles) (2,4,5,6).

The county's elevation ranges from near sea level in the south to 24 feet in the northwestern corner. Camden County has a relatively mild climate with the average high temperature in July being 89 degrees and the average low in January, 32 degrees. The county receives an average of 50 inches of precipitation yearly and has an average of 213 sunny days each year (7).

Figure 1. Map of Camden County



HISTORY

Camden County was formed in 1777 from the northeastern part of Pasquotank County and named for Sir Charles Pratt, the first Earl of Camden and Chief Justice of the Common Pleas Court in British Parliament during the American Revolution. He firmly defended colonial independence and was an admirer of the bravery of the colonies as they stood against the British Crown (2,8).

The earliest Native Americans in the region were the Weapemeoc and Tuscarora, both having influence on Camden County before Europeans arrived to the region. The first colonists to the county were Virginians and other northerners who reached the area by journeying down the Pasquotank River. Many of these colonists took notice of the region's rich soil and recognized the potential for agricultural production. Prominent and prosperous families lived on thriving plantations prior to 1700 and throughout the 18th century. Even in the present day, nearly a third of the county's land is farmland and among the agricultural products to come from this region are cotton, corn, barley, soybeans, and potatoes (8,9).

The original county seat, incorporated as Jonesborough in 1792, had been known as Plank Bridge as early as 1740. The community was known by the name of Camden Court House by 1840 and the name was later shortened to Camden. Other than the Courthouse Township of Camden, the county is also home to South Mills Township and Shiloh Township. Camden County covers approximately 241 square miles and contains a large amount of water and wetlands. It has been speculated that the Great Dismal Swamp is one of the youngest wetlands on the North American continent. Its mysterious allure led to its being referenced by several literary figures in their works (2,8,9,10).

Earning a valuable reputation during the Revolutionary War, Camden County furnished 416 men and officers, more than any other northeastern county in the state. Two of Camden County's residents to serve in the war were Dempsey Burgess and Lemuel Sawyer, also the only men from Camden County who served in the United States Congress. Additionally, Isaac Gregory was a significant figure in the county's history. Gregory was appointed in 1790 by President George Washington to be the first collector of customs for the Port of Camden, a port of entry on Sawyer's Creek. The port was an active one and brought commercial benefits to the entire community. The banks of the creek were dotted with wharves and warehouses, but as ships of heavier tonnage were being built and utilized, the once flourishing trade vanished due to the shallowness of the creek. Gregory's promotion in 1779 to the office of Brigadier General in the state militia made him the highest ranking Revolutionary officer in the Albemarle region. He fought with valor at the Battle of Camden, South Carolina and after the war was elected once to the House of Commons and successively re-elected to the State Senate for the next eight years (2,8,9).

One of the biggest events in Camden County was the construction of the Dismal Swamp Canal, a 22 mile-long canal connecting South Mills (which was then New Lebanon) and Deep Creek, VA. Construction began in 1793 while George Washington still held the presidency and ended in 1805. The canal is the oldest surviving artificial waterway in the United States. It was first used as a trade route with hundreds of flatboats, passenger ships, and freighters plying its waters. The canal is still enjoyed today as a scenic waterway for pleasure craft. Connecting the Chesapeake Bay to the Albemarle Sound, it is now owned by the federal government and makes up a section of the Intracoastal Waterway (2,8,9).

Among the historical sites of the county are The Camden County Courthouse, St. Joseph Episcopal Church, Caleb Grandy House, Milford House, Abbott House, and the Sanderlin-Prichard House. Milford, constructed in 1746 is believed to be the oldest two-story brick house still standing in NC and it is surmised that it was part of a farm or plantation in the 1800s. An unusually large Greek revival plantation house near South Mills, the William Riley Abbott house was built in the 1840s and said to have been used as a hospital for soldiers wounded in the Battle of Sawyer's Lane (2,9).

The Battle of Sawyer's Lane took place in 1862 when Union forces attempted to blow up the canal locks at South Mills in order to impede use of the Dismal Swamp Canal by Southern vessels. Confederate troops, led by a commander who had selected his defensive position with great care, were able to withstand all assaults for three hours before the Federal troops withdrew (9,11).

Two of the early colonial era's most important churches were located in Camden County. Shiloh Baptist Church, the oldest continuous Baptist congregation in NC, was established by Reverend William Burgess on his land in the late 1720s and was known as Burgess' Meeting House until 1812. It went on to become one of the largest churches in the Albemarle colony. McBride Church, established in 1792, was originally an Anglican church in the 1730s. However, after the Revolutionary War Anglican influence decreased and McBride became a Methodist Church. The church was named for Elisha McBride, a member of the General assembly and a community leader who played an important part in the beginning of Methodism in Camden County (8,9).

Today residents of Camden County still take pride in their rural population, school system, and county government. Camden is the first and only consolidated city-county in NC, achieving this status in June 2006. The waters of the county are enjoyed annually by boaters, swimmers, naturalists, and fishermen. Also enjoyed by outdoorsmen for the hunting, Camden County has the largest turkey population in the state. Presently, the Great Dismal Swamp is the most important sanctuary for black bears in the eastern United States as well as a vital breeding ground for songbirds returning from migrations to Central and South America. Among points of interest are the seven silver and black markers provided by the NC Highway Historical Marker Program, representing the Battle of South Mills, the Dismal Swamp Canal, Dempsey Burgess, Isaac Gregory, Lemuel Sawyer, William Reed, and McBride Church. The Dismal Swamp Canal Welcome Center greets highway and boating traffic and visitors can find opportunities there which include hiking, biking, birding, paddling and photography. Dismal Swamp State Park provides a boardwalk into the swamp and over sixteen miles of hiking and mountain biking trails, among other attractions (2,8).

POPULATION CHARACTERISTICS

General Population Characteristics

The following general population characteristics of Camden County and its comparators were based on 2014 US Census data presented in the table below.

- As of the 2014 US Census estimate, the population of Camden County was 10,331.
- The population of Camden County was approximately evenly divided between males and females, which is the typical pattern.
- The overall median age in Camden County was 41.6 years, 2.0 years younger than the median age for the seven-county ARHS region and 9.1 years younger than Pamlico County, an assigned peer county. The median age in Camden County was 3.4 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
Camden County	10,331	5,179	50.1	40.9	5,152	49.9	42.1	41.6
Regional Average	19,258	9,467	49.2	42.0	9,791	50.9	45.1	43.6
Pamlico County	12,948	6,641	51.3	48.5	6,307	48.7	52.6	50.7
State of NC	9,943,964	4,844,593	48.7	36.7	5,099,371	51.3	39.7	38.2

Note: percentages by gender are calculated.

Source: US Census Bureau, American Fact Finder, 2014 Population Estimates. PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2014. (Geographies as noted) <http://factfinder.census.gov>.

Population by Township

Camden County is divided into three townships: Courthouse Township, Shiloh Township, and South Mills Township. The information below was derived from 2010 US Census data presented in the following table.

- Courthouse Township was the largest township by population in Camden County, accounting for 37% of the county's population.
- South Mills Township was the second-largest township in Camden County, with 36% of the county's population.
- Courthouse Township was the youngest township in the county in terms of median age: 38.2 years.
- Shiloh Township was the oldest township in the county, with a median age of 43.3 years.

**Table 2. Population by Township, Camden County
(2014 US Census Bureau Estimate)**

Township	No. of Persons	% of County Population	Median Age
Courthouse Township	3,788	37.4	38.2
Shiloh Township	2,715	26.8	43.3
South Mills Township	3,624	35.8	41.2
Camden County Total	10,127	100.0	41.1

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-years estimates, Table S0101: Age and Sex. Geographies as noted. <http://factfinder.census.gov>.

Population Growth

The next table presents historical population counts and population projections from 1980 through 2030. From this data, it appears that the Camden County population increased in every decade, especially the decade 2000-2010. The county population is projected to continue growing, although at a much slower pace.

**Table 3. Decadal Population Growth
(1980-2030 [Projected])**

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
Camden County	5,829	5,904	1.3	6,885	16.6	9,980	45.0	10,597	6.2	10,818	2.1
<i>Regional Average</i>	13,908	14,941	7.4	16,550	10.8	19,416	17.3	19,673	1.3	20,377	3.6
Pamlico County	10,398	11,368	9.3	12,934	13.8	13,144	1.6	13,293	1.1	13,561	2.0
<i>State of NC</i>	5,880,095	6,632,448	12.8	8,046,485	21.3	9,535,483	18.5	10,573,611	10.9	11,609,883	9.8

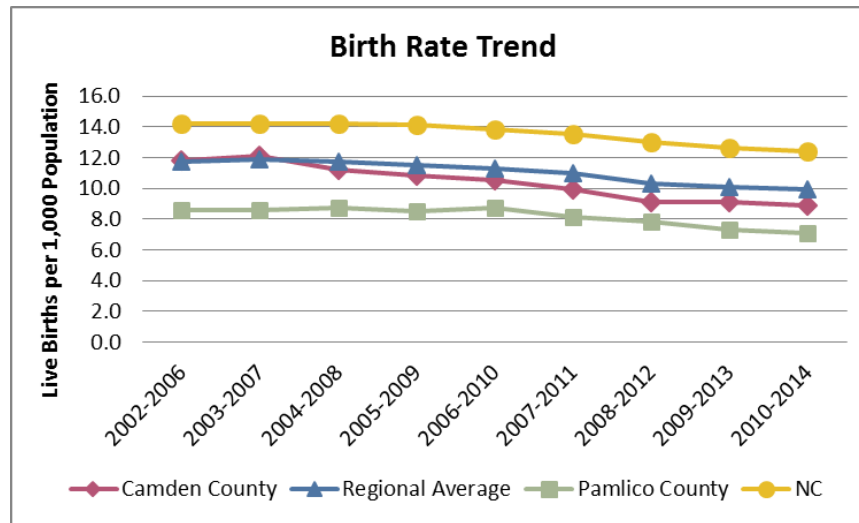
Note: percentage change is calculated.

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 births and in-migration) and decrease (via deaths and out-migration). The following figure illustrates that the birth rate is declining in NC and all three other jurisdictions in the comparison. In Camden County, the birth rate decreased from 11.8 live births per 1,000 population in the 2002-2006 aggregate period to 8.9 live births per 1,000 population in the 2010-2014 aggregate period, a decrease of 25%. The birth rate for NC exceeded the comparable rates in the other jurisdictions for every period cited.

Figure 2. Birth Rate Trend, Live Births per 1,000 Total Population (Five-Year Aggregates, 2002-2006 through 2010-2014)



Source: NC State Center for Health Statistics, Health Data, County Level Data, County Health Databooks 2008 through 2016. <http://www.schs.state.nc.us/schs/data/databook/>.

Population Density

The Camden County population increased in density between 2000 and 2010, but is projected to decrease again as population growth slows.

Table 4. Decadal Population Density (1980-2030 [Projected])

Location	Persons per Square Mile					
	1980	1990	2000	2010 (Estimate)	2020 (Projection)	2030 (Projection)
Camden County	24.24	24.53	28.61	43.19	34.16	34.87
<i>Regional Average</i>	50.91	55.99	62.72	75.55	55.73	57.50
Pamlico County	30.52	33.74	38.39	39.82	23.45	23.93
State of NC	120.39	136.14	165.19	191.93	196.47	215.72

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

Race and Ethnicity

The population of Camden County is less racially diverse than all its comparator jurisdictions. For example, according to 2014 data from the US Census Bureau cited below, the non-white population in Camden County was approximately 18% of the total population, a proportion less than the comparable proportion in NC as a whole (30%) and far less than the comparable proportion for the region (35%). The non-white population in Camden County was even smaller than the non-white population in Pamlico County (23%).

According to data in the following table, in Camden County:

- Whites composed 82.3% of the total population; regionally the comparable figure was 64.8% and statewide the figure was 69.6%.
- Blacks/African Americans composed 13.7% of the total population; regionally the comparable figure was 31.8% and statewide the figure was 21.5%.
- American Indians and Alaskan Natives composed 0.5% of the total population; regionally the comparable figure was 0.3% and statewide the figure was 1.2%.
- Asians, Native Hawaiians and Other Pacific Islanders composed 2.2% of the total population; regionally the comparable figure was 1.0% and statewide the figure was 2.4%.
- Hispanics/Latinos of any race composed 2.4% of the total population; regionally the comparable figure was 3.0% and statewide the figure was 8.7%.

**Table 5. Population Distribution by Race/Ethnicity
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total	Number and Percent													
		White		Black or African-American		American Indian and Alaskan Native		Asian, Native Hawaiian and Other Pacific Islander		Some Other Race		Two or More Races		Hispanic or Latino of Any Race	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Camden County	10,127	8,330	82.3	1,388	13.7	53	0.5	222	2.2	72	0.7	62	0.6	247	2.4
<i>Regional Average</i>	19,334	12,534	64.8	6,146	31.8	64	0.3	192	1.0	92	0.5	306	1.6	584	3.0
Pamlico County	13,062	10,036	76.8	2,497	19.1	132	1.0	108	0.8	36	0.3	253	1.9	428	3.3
State of NC	9,750,405	6,784,901	69.6	2,093,389	21.5	113,798	1.2	237,913	2.4	293,865	3.0	226,539	2.3	848,597	8.7

Source a a b a b a b a b a b a b c b

a - US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B02001: Race. (Geographies as noted).

<http://factfinder.census.gov>

b - Percentages were calculated

c - US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B03003: Hispanic or Latino Origin. (Geographies as noted). <http://factfinder.census.gov>.

Race and Ethnicity by Township

The following information about racial and ethnic population diversity at the township level in Camden County was derived from 2014 US Census data presented in the table below.

- All townships in Camden County were predominately white.
- Courthouse Township was the township with by far the largest *number* of Black/African Americans, 656; this figure represented 6.5% of the total county population and 47.3% of all Black/African American persons in the county.
- Courthouse Township also was the township with the largest *number* of whites, 3,102; this figure represented 30.6% of the total county population and 37.2% of all the white persons in the county.
- South Mills Township was the township with the largest *number* of Hispanics/Latinos, 97; this figure represented 1.0% of the total county population and 39.3% of all Hispanic/Latino persons in the county.

**Table 6. Population by Race/Ethnicity, by Township, Camden County
(US Census Bureau 5-Year Estimate, 2010-2014)**

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.	%
Courthouse Township	3,788	3,102	30.6	656	6.5	9	0.1	6	0.1	5	0.0	15	0.1	61	0.6
Shiloh Township	2,715	2,214	21.9	306	3.0	0	0.0	185	1.8	0	0.0	10	0.1	89	0.9
South Mills Township	3,624	3,014	29.8	426	4.2	44	0.4	31	0.3	72	0.7	37	0.4	97	1.0
Camden County Total	10,127	8,330	82.3	1,388	13.7	53	0.5	222	2.2	77	0.8	62	0.6	247	2.4

Note: percentages are calculated from population figures. Percentage figures describe a racial or ethnic group as a proportion of the overall county population.

Sources: US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B02001: Race. (Geographies as noted). <http://factfinder.census.gov>, and US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B03003: Hispanic or Latino Origin. (Geographies as noted). <http://factfinder.census.gov>.

Age

The following information about the age/gender distribution of the Camden County population was derived from 2014 US Census Bureau estimates presented in the following table.

- In terms of both numbers (880) and percent (8.5%), the largest segment of the population in Camden County was the age group 50-54. In NC as a whole, the segment composing the largest number and percent (7.2%) was age group 20-24.
- Persons 65 years of age or older composed 14.9% of the population in Camden County, and 14.6% of the population of NC.
- Persons 19 years of age and younger composed 26.3% of the population in Camden County, and 12.6% of the population of NC.

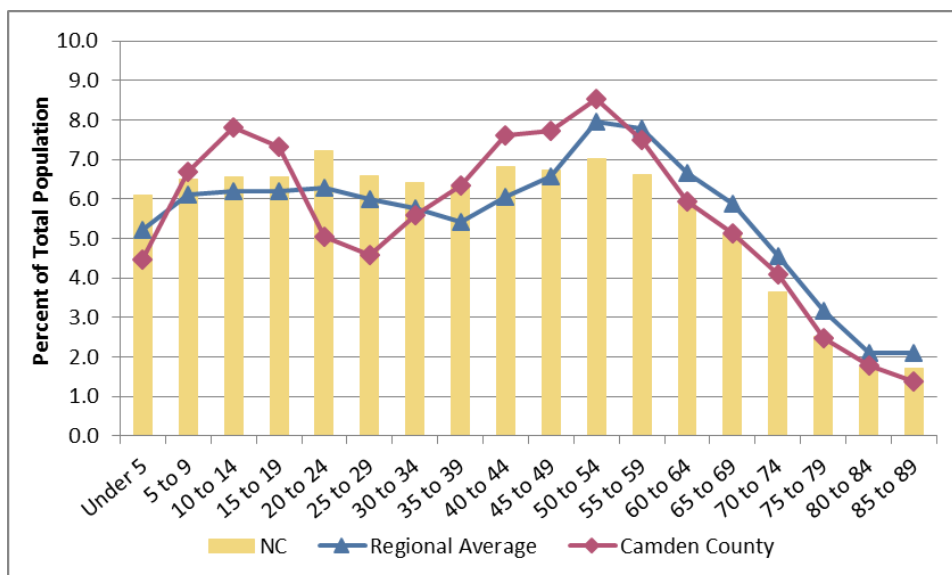
**Table 7. Population Distribution by Age and Gender, Number and Percent
(US Census Bureau Estimate, 2014)**

Age Group	Camden 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	10,331	5,179	5,152	100.0	50.1	49.9	9,943,964	4,844,593	5,099,371	100.0	48.7	51.3
Under 5	462	237	225	4.5	2.3	2.2	607,476	310,355	297,121	6.1	3.1	3.0
5 to 9	692	375	317	6.7	3.6	3.1	644,895	328,815	316,080	6.5	3.3	3.2
10 to 14	806	413	393	7.8	4.0	3.8	651,864	332,271	319,593	6.6	3.3	3.2
15 to 19	756	386	370	7.3	3.7	3.6	652,941	333,645	319,296	6.6	3.4	3.2
20 to 24	521	283	238	5.0	2.7	2.3	718,261	376,049	342,212	7.2	3.8	3.4
25 to 29	474	234	240	4.6	2.3	2.3	654,475	324,122	330,353	6.6	3.3	3.3
30 to 34	578	259	319	5.6	2.5	3.1	637,775	312,509	325,266	6.4	3.1	3.3
35 to 39	655	333	322	6.3	3.2	3.1	625,513	305,953	319,560	6.3	3.1	3.2
40 to 44	786	377	409	7.6	3.6	4.0	677,245	331,038	346,207	6.8	3.3	3.5
45 to 49	799	385	414	7.7	3.7	4.0	668,371	327,819	340,552	6.7	3.3	3.4
50 to 54	880	462	418	8.5	4.5	4.0	699,194	338,657	360,537	7.0	3.4	3.6
55 to 59	774	399	375	7.5	3.9	3.6	658,373	314,339	344,034	6.6	3.2	3.5
60 to 64	612	312	300	5.9	3.0	2.9	584,219	273,695	310,524	5.9	2.8	3.1
65 to 69	529	266	263	5.1	2.6	2.5	505,469	236,107	269,362	5.1	2.4	2.7
70 to 74	424	204	220	4.1	2.0	2.1	362,314	165,643	196,671	3.6	1.7	2.0
75 to 79	257	113	144	2.5	1.1	1.4	251,577	109,253	142,324	2.5	1.1	1.4
80 to 84	184	89	95	1.8	0.9	0.9	173,620	69,325	104,295	1.7	0.7	1.0
85 and older	142	52	90	1.4	0.5	0.9	170,382	54,998	115,384	1.7	0.6	1.2

Source: US Census Bureau, American Fact Finder, 2014 Population Estimates. PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipalities: April 1, 2010 to July 1, 2014. <http://factfinder.census.gov>. (Geographies as noted) <http://factfinder2.census.gov>. Percentages are calculated.

The following figure compares the age distribution of the NC population to the age distribution of the populations in Camden County and the ARHS Region. In Camden County there was a larger proportion of young (age 5-19) persons and middle-aged (age 40-59) persons than demonstrated in the state or regional age distribution profiles.

Figure 3. Population Distribution by Age, Camden County, ARHS Region and NC (US Census Bureau Estimate, 2014)



Source: US Census Bureau, American Fact Finder, 2014 Population Estimates. PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2014. <http://factfinder.census.gov>. (Geographies as noted) <http://factfinder2.census.gov>.

Age by Township

The discussion below is based on the 2014 US Census Bureau Estimates presented in the following table:

- Courthouse Township was the township with the highest proportion of persons under the age of 18 (25.6%).
- Shiloh Township had the highest proportion of persons ages 65 and older (16.8%).

Table 8. Population by Age, by Township, Camden County (US Census Bureau 5-Year Estimate, 2010-2014)

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
Courthouse Township	25.6	11.3	8.0	14.7	15.7	9.4	15.1
Shiloh Township	23.4	6.9	5.4	19.2	12.5	16.0	16.8
South Mills Township	25.4	6.5	11.7	12.6	20.1	12.2	11.5
Camden County Total	24.9	8.4	8.6	15.2	16.4	12.2	14.2

Source: US Census Bureau, American FactFinder, 2014 ACS 5-year Estimates. Table S0101 Age and Sex (geographies as listed); <http://factfinder2.census.gov>. Some age groups calculated.

Elderly Population

Because the proportion of the Camden 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 future health and human service needs of the community.

The following information regarding the elderly population in Camden County was extracted from the multi-part table below, which was developed from 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 every age group in Camden County age 65 and older will increase through the year 2030.
- Though all segments of the elderly population will grow, the segment expected to grow by the largest percentage in the twenty years between 2010 and 2030 is the age group 85 and older, which is predicted to grow by 142% over that period, from 1.2% to 2.9% of the total county population.
- The segment of the population expected to grow by the second largest percentage between 2010 and 2030 is the group aged 75-84 and older, which is predicted to grow by 92% over that period, from 3.9 % to 7.5% of the total county population.
- The segment of the Camden County population age 65 and older is projected to total 2,594 persons by 2030.

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

Location	2000 Census Data								
	Total Population (2000)	# 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+
Camden County	6,885	933	13.6	551	8.0	300	4.4	82	1.2
<i>Regional Total</i>	116,155	17,502	15.1	9,504	8.2	6,011	5.2	1,987	1.7
<i>Regional Average</i>	16,594	2,500	15.3	1,358	8.4	859	5.2	284	1.7
Pamlico County	12,934	2,429	18.8	1,455	11.2	722	5.6	252	1.9
State of NC	8,049,313	969,048	12.0	533,777	6.6	329,810	4.1	105,461	1.3
Source	1	1	1	1	5	1	5	1	5

Location	2010 Census Data								
	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+
Camden County	9,980	1,283	12.9	767	7.7	392	3.9	124	1.2
<i>Regional Total</i>	135,913	21,119	15.5	12,006	8.8	6,579	4.8	2,534	1.9
<i>Regional Average</i>	19,416	3,017	16.1	1,715	9.3	940	4.9	362	1.9
Pamlico County	13,144	2,857	21.7	1,655	12.6	929	7.1	273	2.1
State of NC	9,535,483	1,234,079	12.9	697,567	7.3	389,051	4.1	147,461	1.5
Source	2	2	2	2	5	2	5	2	5

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

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+
Camden County	10,646	1,874	17.6	1,085	10.2	589	5.5	200	1.9
<i>Regional Total</i>	138,650	27,070	19.5	15,597	11.2	8,460	6.1	3,013	2.2
<i>Regional Average</i>	19,807	3,867	20.6	2,228	11.7	1,209	6.6	430	2.4
Pamlico County	13,293	3,955	29.8	2,168	16.3	1,286	9.7	501	3.8
<i>State of NC</i>	10,574,718	1,778,807	16.8	1,056,828	10.0	530,540	5.0	191,439	1.8
Source	3	3	5	3	5	3	5	3	5

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+
Camden County	10,818	2,594	24.0	1,469	13.6	812	7.5	313	2.9
<i>Regional Total</i>	142,641	33,125	23.2	18,048	12.7	11,082	7.8	3,995	2.8
<i>Regional Average</i>	20,377	4,732	24.4	2,578	13.0	1,583	8.3	571	3.2
Pamlico County	13,561	4,442	32.8	2,072	15.3	1,678	12.4	692	5.1
<i>State of NC</i>	11,609,883	2,314,948	19.9	1,256,441	10.8	792,733	6.8	265,774	2.3
Source	4	4	5	4	5	4	5	4	5

1 - US Census Bureau, American FactFinder. Profile of General Demographic Characteristics: 2000 (DP-1), SF1; <http://factfinder2.census.gov>.

2 - US Census Bureau, American FactFinder. Profile of General Population and Housing Characteristics: 2010 (DP-1); website: <http://factfinder2.census.gov>.

3 - NC Office of State Budget and Management, Facts and Figures, County Projections. Age, Race and Sex Projections. Age Groups - Total: July 2020 - Totals. http://www.osbm.nc.gov/demog/countytotals_standardagegroups.

4 - NC Office of State Budget and Management, Facts and Figures, County Projections. Age, Race and Sex Projections. Age Groups - Total: July 2030 - Totals. http://www.osbm.nc.gov/demog/countytotals_standardagegroups.

5 - Percentages are calculated using age group population as numerator and total population as denominator.

Demographic Characteristics of the Elderly Population

The next table summarizes a variety of data describing the educational and financial status of the population age 65 and older. Among the jurisdictions presented for comparison in the table, the elderly population in Camden County had the:

- second-highest proportion with less than a high school diploma or GED (26.9%);
- second-lowest proportion with a graduate or professional degree (16.8%);
- second-lowest proportion living below 100% poverty (6.0%);
- highest proportion living between 100% and 199% poverty (27.6%);
- second-highest proportion living alone (26.0%);
- second-highest proportion in the labor force (15.2%); and
- highest median household income (\$45,500), \$10,476 higher than the NC average.

In addition, according to 2014 US Census Bureau estimates, 39.0% of the Camden County population age 65 or older had some sort of disability (12).

Table 10. Demographic Characteristics of the Population Age 65+ (US Census Bureau Estimate, 2014)

Location	% with Less than HS Diploma	% with Graduate or Professional Degree	% Below 100% Poverty Level	% in 100%-199% Poverty Level	% Homeowners	% Living Alone	% Persons in Labor Force	Median Household Income
Camden County	26.9	16.8	6.0	27.6	97.4	26.0	15.2	\$45,500
<i>Regional Average</i>	28.0	15.0	11.5	26.9	87.3	25.2	14.2	\$36,210
Pamlico County	19.2	21.4	5.9	18.4	88.9	22.3	14.4	\$39,917
<i>State of NC</i>	22.3	21.6	9.9	24.4	81.7	28.0	15.7	\$35,024

Source: NC Division of Aging and Adult Services. Data Reports. County Aging Profiles. https://ncdhs.s3.amazonaws.com/s3fs-public/documents/files/county-aging-profiles_0.pdf.

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 US Census Bureau estimates summarized in the table below:

- There were 448 foreign-born residents residing in Camden County in 2014. Using a base 2014 county population figure of 10,331, foreign-born residents made up 4.3% of the total county population at that time.
- By decade, the largest influx of foreign-born persons in Camden County—231 people, or 52% of the total foreign born population in 2014—arrived before 1990.

Table 11. Growth of the Foreign-Born Population (Before 1990 through 2014)

Location	Number of Persons Arriving				
	Total	Before 1990	1990-1999	2000-2009	After 2010
Camden County	448	231	95	98	24
<i>Regional Total</i>	4,680	2,125	831	1,577	147
<i>Regional Average</i>	669	304	119	225	21
Pamlico County	653	209	198	199	47
<i>State of NC</i>	834,327	225,160	241,832	324,570	42,765

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimates, Table B05005: Year of Entry by Citizenship Status in the United States. <http://factfinder2.census.gov>.

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 2010-2014 five-year US Census Bureau estimates presented in the table below.

- Of the 8,647 persons five years old and older in Camden County in the period cited, an estimated 5.2% (450 persons) spoke a language other than English. Of these non-English speakers, an estimated 64% (288 persons) were linguistically isolated.
- The largest *number* of linguistically isolated persons in Camden County in the period cited occurred within the Spanish-speaking population (n=153), but the highest *proportion* of linguistically isolated persons in the county was noted in the population speaking Asian and Pacific Island languages (70.0%).

**Table 12. Household Language by Linguistic Isolation
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total Population 5 years and older	Spanish Speakers			Other Indo-European Languages			Asian & Pacific Island Languages			Other Languages		
		% of Population	% Speaking English Very Well	% Speaking English Less than Very Well	% of Population	% Speaking English Very Well	% Speaking English Less than Very Well	% of Population	% Speaking English Very Well	% speaking English Less than Very Well	% of Population	% Speaking English Very Well	% Speaking English Less than Very Well
Camden County	8,647	2.7	34.5	65.5	0.4	78.4	21.6	2.1	30.0	70.0	0.0	0.0	0.0
<i>Regional Average</i>	<i>18,095</i>	<i>1.8</i>	<i>47.8</i>	<i>50.8</i>	<i>0.8</i>	<i>87.3</i>	<i>12.7</i>	<i>0.7</i>	<i>33.6</i>	<i>37.9</i>	<i>0.1</i>	<i>57.1</i>	<i>14.3</i>
Pamlico County	12,525	3.8	50.4	49.6	0.9	54.5	45.5	1.0	88.5	11.5	0.3	78.4	21.6
<i>State of NC</i>	<i>9,132,159</i>	<i>7.4</i>	<i>56.5</i>	<i>43.5</i>	<i>1.6</i>	<i>75.6</i>	<i>24.4</i>	<i>1.5</i>	<i>56.7</i>	<i>43.3</i>	<i>0.5</i>	<i>71.8</i>	<i>28.2</i>

Source: US Census Bureau, American Fact Finder, Table B16002: Household Language by Linguistic Isolation, 2014 American Community Survey 5-Year Estimates. <http://factfinder.census.gov>.

Age Distribution of the Latino Population

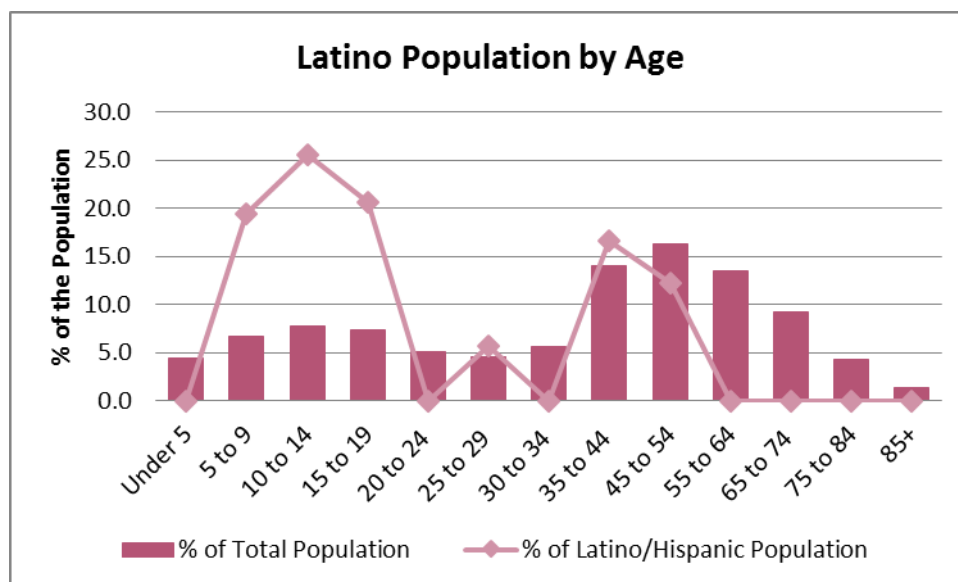
Since the Hispanic/Latino population is the principal linguistically-isolated group in Camden County, further knowledge of the characteristics of this group is helpful in anticipating service needs.

In Camden County, as in other counties in NC, a major impetus for immigration—at least until the economic downturn that began in 2008—was the prospect of employment opportunities. One would expect then that the age groups predominant in this population would be those in their “prime” for work, especially the physical labor-type jobs in construction, agricultural, and fishing industries available to them in the coastal region of the state. The spouses of these workers would be in the midst of their childbearing years, so it might also be expected that this population would have children.

The following figure presents a graphic profile of the 2014 US Census Bureau estimates for population by age group for the total Camden County population compared to the same profile for the Hispanic/Latino population.

- The age profile of the Hispanic/Latino population in Camden County displays peaks in the age groups 5-19 and 35-44, in proportions higher than in the overall county population. This older-aged population of youth appears to fit with the adult Hispanic population peak. There were lower proportions for Hispanics/Latinos than for the general population in all the other age groups.

Figure 4. Age Distribution of Overall and Latino Populations in Camden County, Percent (US Census Bureau 5-Year Estimate, 2010-2014)



Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimates. Table B010011: Sex by Age (Hispanic or Latino) (geographies as noted); <http://factfinder2.census.gov>. Percentages are calculated

Special Populations

Military Veterans

A population group that sometimes needs special health services is military veterans. The following table summarizes information about that population for the aggregate period 2010-2014.

Camden County had the *highest* proportion of military veterans among the jurisdictions under comparison. Veterans composed 18.0% of Camden County's overall adult civilian population in the period cited.

The largest proportion of the Camden County veteran population (53.5%) was in the age group 35-54. This was the highest representation for this age group among all the comparators. Veterans over the age of 65 comprise 25% of the Camden County's veteran population compared to 41% for both the state and the region.

**Table 13. Veteran Status of Population
(US Census Bureau 5-Year Estimate, 2010-2014)**

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
Camden County	7,456	6,115	82.0	1,341	18.0	5.8	53.5	15.6	16.0	9.0
<i>Regional Total</i>	104,388	91,634	87.8	12,754	12.2	n/a	n/a	n/a	n/a	n/a
<i>Regional Average</i>	14,913	13,091	87.5	1,822	12.5	6.4	30.6	22.0	22.8	18.1
Pamlico County	10,810	9,441	87.3	1,369	12.7	3.3	19.6	19.4	30.0	27.7
<i>State of NC</i>	7,380,446	6,670,975	90.4	709,471	9.6	9.0	28.0	22.4	21.7	18.9
<i>National Total</i>	239,305,217	218,604,506	91.3	20,700,711	8.7	8.4	24.7	21.9	22.4	22.7

Source: US Census Bureau, American Fact Finder. Veteran Status, 2014 American Community Survey 5-Year Estimate. Table S2101: Veteran Status; <http://factfinder2.census.gov>.

Blind and Visually-Impaired Persons

The table below presents data on the number of blind or visually-impaired persons in the jurisdictions being compared. In 2011, there were 19 blind or visually-impaired persons living in Camden County, and a total of 463 persons with those disabilities region-wide. Note that no update to this data was available.

**Table 14. Blind and Visually-Impaired Persons
(2011)**

Location	Number Blind/Visually Impaired (2011)
Camden County	19
<i>Regional Total</i>	463
<i>Regional Average</i>	66
Pamlico County	36
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

Camden County shares a Special Needs Registry database with Pasquotank County. The purpose of the registry is to provide emergency responders with important information about people who might need specialized help in an emergency. Situations where this information could be used include, but are not limited to: hurricanes and floods; wide-spread, prolonged power outages; tornado or other severe weather causing significant damage; chemical release; and other community-level emergencies. The Special Needs Registry is a voluntary program; it is not a guarantee of immediate or preferential treatment and is not a substitute for 911. Pasquotank-Camden Emergency Management is responsible for maintaining the registry and various community agencies assist with the circulation of registry applications. The list is updated annually. As of November, 2015 there were 154 total registrants (including persons from both target counties) (13).

CIVIC ENGAGEMENT

Electoral Process

One measure of a population's engagement in community affairs is its participation in the electoral process. The following two tables summarize current voter registration and historical voter turnout data. Note that turnout in any particular election is at least partially determined by the voters' interest and investment in the particular issues on the ballot at that time.

Registered Voters

- According to the State Board of Elections, the proportion of the voting age population registered to vote in Camden County in 2016 was 89.8% (see the footnote to the table, below).
- Approximately 13% were African American, a percentage very close to the proportion this racial group represented in the overall county population (13.7%) in 2014.

Table 15. Registered Voters, by Race/Ethnicity, Number and Percent (As of January, 2016)

Location	Estimated Voting Age Population (2015)	Number and Percent of Voting Age Population Registered to Vote ¹											
		Total		White		Black		American Indian		Other		Hispanic	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Camden County	8,093	7,271	89.8	5,970	73.8	1,077	13.3	12	0.1	212	2.6	31	0.4
<i>Regional Average</i>	15,357	13,476	87.8	8,765	58.7	4,220	26.2	24	0.1	466	2.8	64	0.4
Pamlico County	11,023	9,375	85.0	7,304	66.3	1,772	16.1	29	0.3	270	2.4	51	0.5
<i>State of NC</i>	7,752,543	6,436,922	83.0	4,539,092	58.5	1,443,414	18.6	52,540	0.7	401,876	5.2	130,982	1.7

Source:

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.us/pls/linc/dyn_linc_main.show.

b - NC State Board of Elections, Data and Statistics, Voter Registration Statistics, By Date; http://www.ncsbe.gov/webapps/voter_stats/.

c - Percentages are calculated

Voter Turnout

It is apparent from the data below that voter turnout was higher in every jurisdiction cited in elections that included a presidential race (2004 and every four-years). (Note that this data is no longer available at the source.)

Table 16. Voter Turnout in General Elections (2004-2012)

Location	% Registered Voters that Voted				
	2004	2006	2008	2010	2012
Camden County	63.00	48.00	68.15	43.54	63.67
<i>Regional Average</i>	58.57	35.29	68.67	44.37	65.81
Pamlico County	62.00	44.00	71.66	51.59	71.20
<i>State of NC</i>	64.00	37.00	69.93	43.75	68.42

Source: NC State Board of Elections, Elections Central, Elections Results Data (years as noted), General Elections; <http://www.sboe.state.nc.us/content.aspx?id=69>

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 Camden County as of 2010 (no more recent data was available at the source.) These data, gathered in January 2016, show that in 2010 there was a range of options for exploring faith and religion within the county.

**Table 17. Religious Bodies in Camden County
(2010)**

Religious Bodies	Number of Congregations	Number of Adherents
African Methodist Episcopal Zion Church	2	310
Anglican Church in North America	1	0
Assemblies of God	1	24
Christian Churches and Churches of Christ	2	384
Church of God in Christ	2	558
International Pentecostal Holiness Church	1	11
National Baptist Convention, USA, Inc.	2	372
Southern Baptist Convention	2	866
United Methodist Church	5	775
Vineyard USA	1	56
TOTAL	19	3,356

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

The Camden County Sheriff's Department, headquartered in Camden, serves the entire county, since there are no municipalities with separate police departments.

Fire and Rescue Departments

The 2 fire departments that serve Camden County are listed in the table below.

**Table 18. Fire Departments in Camden County
(October, 2016)**

Department Name	Location
South Camden Fire Department	Camden
South Mills Volunteer Fire Department, Inc.	South Mills

Source: Fire Department Directory, North Carolina, Camden County;
<http://www.firedepartment.net/directory/north-carolina/Camden-county>.

Public Libraries

There is one public library that serves the people of Camden County: the Pasquotank-Camden Public Library, physically located in Elizabeth City (Pasquotank County) (14):

Camden County Senior Center

The Camden County Senior Center provides recreational, social and supportive services for mature adults. Senior adults can visit the Center to explore new experiences, enjoy various activities, gain knowledge, mingle with friends, and exercise.

The senior center is an information and resource medium for seniors and their families. It offers health presentations, spiritual enrichment, entertainment such as bands and performers, arts and crafts projects, and exercise programs. The Center sponsors trips to various places such as shopping at outlets in this area, going to see plays, and visiting residents in nursing homes.

Center services include:

- Congregate meals are offered Monday through Friday for people 60 years of age or older; reservation is required.
- Home-delivered meals are provided to home-bound persons age 60 or older who live within a five mile radius of the Center.
- Fitness center is open weekdays for access by people 55 years of age or older. There is no charge for using the fitness center, but people must be registered with the Senior Center to use the facility.
- Medicaid application assistance is provided by Center staff although applicants must present the application form to the Department of Social Services for processing.

The Center can arrange transportation to and from the center through the Inter-County Public Transportation (ICPTA). There is no cost to join, but registration is required (15).

Other Community Services and Organizations

It is a nearly impossible task to create a print catalogue or listing of community resources that is current beyond its print date. Therefore, this CHA document provides instead *links* to on-line or telephone resources that provide information on community organizations and services available to Camden County residents. These particular community resource directories and guides have been included because they are sponsored and/or maintained by entities likely to remain in existence, and because they cover a range of community resources.

[Note that Health and Health Care Resources, while included in some of the directories and guides cited below, are listed separately in an appendix to this CHA.]

Camden County Community Resource Directories and Guides

Camden County Government Directory of Services

Alphabetical list of live links to services provided by the county.

Portal: <http://www.camdencountync.gov/>.

Albemarle Alliance for Children and Families

Maintains links to support services targeted to families of children throughout the Albemarle Region.

Portal - <http://albemarleacf.org/links.php>.

NC 2-1-1 for Camden County

The United Way sponsors a telephone and/or on-line referral program via which the public can find assistance with housing, food, healthcare, utility payments, and more. Inquiries involve entering the area of need and the target county, city, and/or zip code into the search categories at the website listed below.

For telephone assistance, information seekers can simply call 2-1-1 24 hours a day, 7 days a week to speak with a trained specialist.

Portal - <http://www.unitedwaync.org/nc211>.

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 parameters included in the assignment include unemployment rate, median household income, population growth, and assessed property value per capita. 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 2016, Camden County was assigned a Tier 1 designation and Pamlico County was assigned to Tier 2 (16).

County Revenue Indicators

The state of NC monitors gross collections of state sales and use taxes in counties. While the majority of these taxes go to the state, these collections do provide some of the money available to the county to fund public services. Changes in these collections point to changes in overall economic activity and fiscal confidence in a county, as depicted in the time series of figures presented in the table below.

- For the period covering FY2005-06 through FY2014-15, gross collections of state sales and use taxes in Camden County were only about 4% of the average for all NC counties.
- Camden County collections fell in FY2008-09 but recovered the following year. Collections in the county have fallen annually since FY2011-2012.

Table 19. NC State Sales and Use Tax Gross Collections (FY2005-06 through FY2014-15)

Location	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Camden County	1,642,522	1,589,862	1,626,294	1,432,573	2,439,702	3,003,630	2,456,555	2,378,786	2,302,563	2,276,736
Regional Average	5,235,545	5,294,336	5,066,629	4,936,479	6,981,295	7,998,729	7,314,849	7,651,788	7,379,530	7,730,478
NC County Average	45,605,858	46,004,427	46,029,546	43,169,210	50,252,290	55,679,535	49,906,563	50,164,100	52,548,980	57,312,401

Source: NC Department of Revenue, Tax Publications and Reports, State Sales and Use Tax Reports by Fiscal Year, by County Summary (years as noted); <http://www.dornrc.com/publications/fiscalyearsales.html>.

Camden County government provided additional local financial data to the CHNA team. That data is summarized in the table below.

- Land transfer tax receipts peaked over the period cited in FY2014-2015.
- Collections on Retail Sales peaked in FY2012-2013.
- Occupancy Tax Receipts peaked in FY2013-2014.

**Table 20. Camden County Financial Data
(FY2011-2012 through FY2014-2015)**

Collection Type	Collections (\$)			
	FY2011-2012	FY2012-20213	FY2013-2014	FY2014-2015
Land Transfer Tax Receipts	327,954	267,880	407,233	587,692
Collections on Retail Sales	1,691,527	1,730,192	1,724,300	1,443,824
Occupancy Tax Receipts	31,576	28,736	43,923	23,916

Source: Personal communication, Stephanie Humphries, Camden County Government, to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, November 3, 2015.

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 table below summarizes recent income data for Camden County and its typical comparators. (Note: although US data is included in the table, no comparisons are highlighted here.) Among the traditional comparator jurisdictions:

- Camden County had the highest income figures in every category except retirement income.
- In Camden County, the figure for median household income was over \$15,500 higher than the state figure.
- In Camden County median family income was more than \$13,700 above the state average.
- Per capita personal income in Camden County was \$780 higher than the state average.
- Mean retirement income was highest in Pamlico County. Mean retirement income was second-lowest in Camden County, but the local figure was still \$560 higher than the NC average.

**Table 21. Income Measures
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Household Income		Family Income		Per Capita Income		Retirement Income	
	Median Household Income	Difference from State	Median Family Income	Difference from State	Per Capita Income	Difference from State	Mean Retirement Income	Difference from State
Camden County	\$62,194	\$15,501	\$71,071	\$13,743	\$26,388	\$780	\$22,400	\$560
<i>Regional Average</i>	\$46,909	\$216	\$55,155	-\$2,173	\$22,680	-\$2,928	\$22,488	\$648
Pamlico County	\$44,762	-\$1,931	\$57,513	\$185	\$24,854	-\$754	\$27,382	\$5,542
State of NC ¹	\$46,693	-\$6,789	\$57,328	-\$8,115	\$25,608	-\$2,947	\$21,840	-\$2,255
United States	\$53,482	n/a	\$65,443	n/a	\$28,555	n/a	\$24,095	n/a

Source: US Census Bureau, American Fact Finder, 2014 American Community Survey 5-Year Estimate. Table DP03: Selected Economic Characteristics; <http://factfinder2.census.gov>.

¹ The calculation in the "Difference from State" cell for NC reflects the difference between the State and the Nation.

The next table shows gender-based differences in median earnings.

- Male full-time, year-round workers in all comparator jurisdictions earn significantly more than their female counterparts, and the difference is *largest* in Camden County.

**Table 22. Median Earnings, by Gender
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Median Earnings				
	Male full-time, year-round workers	Difference from State	Female full-time, year-round workers	Difference from State	Difference between Male and Female
Camden County	\$52,770	\$9,333	\$36,991	\$1,519	-\$15,779
<i>Regional Average</i>	\$43,748	\$311	\$34,502	-\$970	-\$9,246
Pamlico County	\$43,280	-\$157	\$31,385	-\$4,087	-\$11,895
State of NC ¹	\$43,437	-\$6,263	\$35,472	-\$3,615	-\$7,965
United States	\$49,700	n/a	\$39,087	n/a	-\$10,613

Source: US Census Bureau, American Fact Finder, 2014 American Community Survey 5-Year Estimate. Table DP03: Selected Economic Characteristics;

<http://factfinder2.census.gov>.

¹ The calculation in the "Difference from State" cell for NC reflects the difference between the State and the Nation.

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 following table details the various categories of industry by sector in Camden County and its three jurisdictional comparators for the 2nd Quarter of 2015, showing the number employed in each sector, the percentage of all employment that that number represents, and the average weekly wage for people employed in each sector.

- The industry in Camden County that employed the largest percentage of the workforce (23.4%) was Educational Services. The average weekly wage per employee in this sector in Camden County was \$664, lower than the NC average of \$796.
- Retail Trade accounted for the second largest percentage of the Camden County workforce, at 12.4% (\$316 average weekly wage, lower than the NC average of \$504). This is the second-lowest paying sector in the county behind Accommodation and Food Services (\$281).
- Public Administration and Administrative and Waste Services each represented 9.8% of the Camden County workforce. The local average weekly wage in the Public Administration sector was \$547 (compared to \$830 at the state level) and the corresponding wage for the Administrative and Waste Services sector was \$990 (higher than the NC average of \$630).
- Statewide, the sector employing the largest percentage of the workforce was Health Care & Social Assistance (14.1%), followed by Retail Trade (11.7%) and Manufacturing (11.0%).

**Table 23. Insured Employment and Wages by Sector
(2nd Quarter, 2015)**

Sector	Camden County			Pamlico County			Regional Average			North Carolina		
	Avg. No. Employed	% Total Employment in Sector ¹	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	Avg. No. Employed	% Total Employment in Sector	Average Weekly Wage per Employee
Agriculture, Forestry, Fishing & Hunting	134	9.4	\$677	63	1.8	\$743	1,166	3.3	\$615	28,946	0.7	\$597
Mining	*	n/a	*	*	n/a	*	0	0.0	n/a	2,780	0.1	\$1,069
Utilities	*	n/a	*	*	n/a	*	0	0.0	n/a	15,238	0.4	\$1,572
Construction	80	5.6	\$59,619	142	4.1	\$652	1,199	3.4	\$10,542	188,858	4.5	\$890
Manufacturing	53	3.7	\$661	132	3.8	\$630	1,314	3.7	\$779	460,067	11.0	\$1,036
Wholesale Trade	32	2.2	\$1,033	13	0.4	\$887	1,192	3.3	\$787	178,902	4.3	\$1,342
Retail Trade	177	12.4	\$316	639	18.5	\$387	5,017	14.0	\$447	487,995	11.7	\$504
Transportation & Warehousing	87	6.1	\$774	68	2.0	\$644	1,304	3.7	\$901	137,793	3.3	\$880
Information	3	0.2	\$1,301	28	0.8	\$345	217	0.6	\$986	76,944	1.8	\$1,344
Finance & Insurance	17	1.2	\$767	42	1.2	\$653	745	2.1	\$890	157,807	3.8	\$1,486
Real Estate & Rental & Leasing	5	0.4	\$477	35	1.0	\$367	704	2.0	\$548	54,949	1.3	\$817
Professional, Scientific & Technical Services	85	6.0	\$1,466	48	1.4	\$957	1,075	3.0	\$915	219,166	5.3	\$1,338
Management of Companies & Enterprises	*	n/a	*	*	n/a	*	35	0.1	\$863	81,596	2.0	\$178
Administrative & Waste Services	140	9.8	\$990	41	1.2	\$805	2,001	5.6	\$552	289,504	6.9	\$630
Educational Services	334	23.4	\$664	488	14.1	\$666	5,475	15.3	\$798	380,457	9.1	\$796
Health Care & Social Assistance	39	2.7	\$661	560	16.2	\$502	5,176	14.5	\$710	587,137	14.1	\$862
Arts, Entertainment & Recreation	*	n/a	*	296	8.6	\$364	499	1.4	\$455	70,577	1.7	\$553
Accommodation & Food Services	43	3.0	\$281	271	7.8	\$231	3,396	9.5	\$291	401,515	9.6	\$306
Other Services	57	4.0	\$733	158	4.6	\$472	1,420	4.0	\$479	106,428	2.6	\$590
Public Administration	140	9.8	\$547	437	12.6	\$599	3,776	10.6	\$638	240,222	5.8	\$830
Unclassified	*	n/a	*	*	n/a	*	0	0.0	n/a	534	0.0	\$746
TOTAL/AVERAGE ALL SECTORS	1,426	100.0	\$4,435	3,461	100.0	\$583	35,711	100.0	\$1,233	4,167,415	100.0	\$875

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.

* Disclosure suppressed

Source - Quarterly Census Employment and Wages (QCEW), 2015. NC Employment Security Commission, Labor & Economic Analysis Division (LEAD), 4D: <http://d4.nccommerce.com/>.

Largest Employers

The table below lists the largest 25 employers in Camden County as of the end of the 2nd Quarter, 2015.

- Only one employer listed—Camden County Board of Education—employed more than 250 people.
- The second largest employer was the County of Camden, followed by CACI Technology, Inc.

**Table 24. Largest 25 Employers in Camden County
(2nd Quarter, 2015)**

Rank	Employer	Industry	No. Employed
1	Camden County Board Of Education	Education & Health Services	250-499
2	County Of Camden	Public Administration	100-249
3	CACI Technology Inc.	Professional & Business Services	50-99
4	Moore's Packing Company Inc.	Natural Resources & Mining	50-99
5	Frog Island Seafood Inc.	Manufacturing	Below 50
6	Swain & Temple Inc.	Natural Resources & Mining	Below 50
7	Seair Transport Services Inc.	Trade, Transportation & Utilities	Below 50
8	Lambs of Camden Inc.	Trade, Transportation & Utilities	Below 50
9	Sxc Health Solutions Inc.	Professional & Business Services	Below 50
10	C & L Concrete Works Inc.	Construction	Below 50
11	Tidewater Agronomics Inc.	Professional & Business Services	Below 50
12	Briarwood Forest Products Inc.	Natural Resources & Mining	Below 50
13	Burkes Outlet Stores SC Inc.	Trade, Transportation & Utilities	Below 50
14	Itza Boutza Pizza	Leisure & Hospitality	Below 50
15	Paychex North American Inc.	Professional & Business Services	Below 50
16	Eastern Carolina Construction	Construction	Below 50
17	Star Services, Inc., DBA Pestar	Professional & Business Services	Below 50
18	Hyman & Robey PC	Professional & Business Services	Below 50
19	Busy Living Cleaning	Professional & Business Services	Below 50
20	K-9 Lawn Care	Professional & Business Services	Below 50
21	John E Ferebee Farming Inc.	Natural Resources & Mining	Below 50
22	Colony Tire Corporation	Trade, Transportation & Utilities	Below 50
23	Prolog Inc.	Trade, Transportation & Utilities	Below 50
24	Elizcity Food Service LLP	Leisure & Hospitality	Below 50
25	Buddy George's Body Shop Inc.	Other Services	Below 50

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. The economic impact of out-of-state employment is that those workers may pay taxes and spend part of their income out of state. The following table summarizes 2010-2014 estimated travel for employment data for Camden County and its comparator jurisdictions.

- A small proportion of Camden County workers—22% of resident workers—were employed within the county.
- Of the 78% of Camden County resident workers who left the county for work, about half worked in another NC county, and half worked out-of-state.
- Statewide, roughly 72% of resident workers worked in their county of residence; 26% worked in another county, and less than 3% worked out-of-state.

**Table 25. Place of Work for Resident Workers Age 16 and Older
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Percent of Residents					
	Total # Workers Over 16	% Working in NC	% Working in County	% Leaving County for Work	% Working out of County	% Working out of State
Camden County	4,441	60.7	21.9	78.1	38.8	39.3
<i>Regional Average</i>	7,979	75.1	43.2	56.8	31.9	24.9
Pamlico County	5,152	98.7	53.1	46.9	45.6	1.3
<i>State of NC</i>	4,280,414	97.5	71.8	28.2	25.7	2.5

Note: percentages are calculated and may include some rounding error.

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimate, Table S0801 Commuting Characteristics by Sex. <http://factfinder.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 2010-2014 US Census Bureau estimate.

- A very small percentage of Camden County workers used public transportation to get to work in either 2000 or 2010-2014. Use of public transportation for getting to work was not common in any of the jurisdictions being compared.
- The proportion of workers who carpooled decreased in all jurisdictions between 2000 and 2010-2014.
- The proportion of Camden County workers who worked at home decreased by 27% between 2000 and 2010-2014. Working-at-home increased by 67% statewide in the same period.

**Table 26. Modes of Transportation to Work
(US Census Bureau, 2000, and 5-Year Estimate, 2010-2014)**

Location	Percent of Workers over 16											
	Total Workers over 16		Drove Alone		Carpooled		Used Public Transportation		Walked		Worked at Home	
	2000	2010-2014	2000	2010-2014	2000	2010-2014	2000	2010-2014	2000	2010-2014	2000	2010-2014
Camden County	3,151	4,441	79.0	86.0	15.7	10.4	0.4	0.1	0.9	0.0	3.0	2.2
<i>Regional Average</i>	6,879	7,979	76.3	82.3	17.1	11.6	0.5	0.3	2.3	1.1	2.7	3.0
Pamlico County	4,939	5,152	74.3	75.9	16.5	13.6	0.7	0.1	3.1	2.8	3.5	5.0
<i>State of NC</i>	3,837,773	4,280,414	79.4	81.2	14.0	10.2	0.9	1.1	1.9	1.8	2.7	4.5

Source:

a - US Census Bureau, American Fact Finder, Data Sets, Summary File 3 for 2000, Detailed Tables, Means of Transportation to Work for Workers 16 Years and Over; <http://factfinder.census.gov>.

b - US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimate, Table S0801: Commuting Characteristics by Sex. <http://factfinder.census.gov>.

Public Transportation in Camden County

Public transportation in Camden County is provided by the Inter-County Public Transportation Authority (ICPTA), operated by Albemarle Regional Health Services, which serves the five-county area of Camden, Chowan, Currituck, Pasquotank and Perquimans counties.

ICPTA's demand-response and subscription services are intended to assist the general public in accessing health and social services such as medical appointments and nutrition sites or attending activities related to daily living such as shopping, education, employment and recreation. Hours of operation are from 4:30 am - 7:30 pm, Monday through Friday, although it is possible to schedule transportation outside of this time frame with approval of management. While much travel is within the region, the service also transports passengers to other locations in NC and the Hampton Roads region of VA.

The ICPTA fleet of buses and vans are equipped with special features to transport the handicapped and the elderly; for example, vehicles are equipped with wheelchair lifts mounted at the rear and at the side for easy and safe loading and off-loading. Drivers are required to participate in road training, on-the-job training, emergency operating training, and periodic safety meetings (17).

The table below presents annual trip data for the ICPTA system for FY 2012 through FY2015.

- The largest number of trips each year cited represented travel for senior services.
- Travel for mental health services composed the second largest ridership in FY2012-2014. Travel on account of DSS Medicaid composed the second largest ridership in FY2015.

**Table 27. ICPTA Ridership Statistics
(FY2012 through FY2015)**

Category of Service	Number Trips Served			
	FY2012	FY2013	FY2014	FY2015
Total Human Service/Community Organization Trips	38,995	41,842	39,694	39,146
Senior Services	17,546	17,611	16,311	15,568
Mental Health	10,938	11,607	11,101	10,046
Department of Social Services - Medicaid	6,317	8,749	9,693	10,627
Department of Social Services – Work First	832	169	47	25
Department of Social Services - Other	0	0	29	4
Vocational Workshop (or equivalent)	2,247	1,868	2,310	2,851
Vocational Rehabilitation	0	9	64	1
Parks and Recreation	811	831	118	7
Nursing Home/Assisted Living Facility	195	122	0	0
Other	109	876	21	17

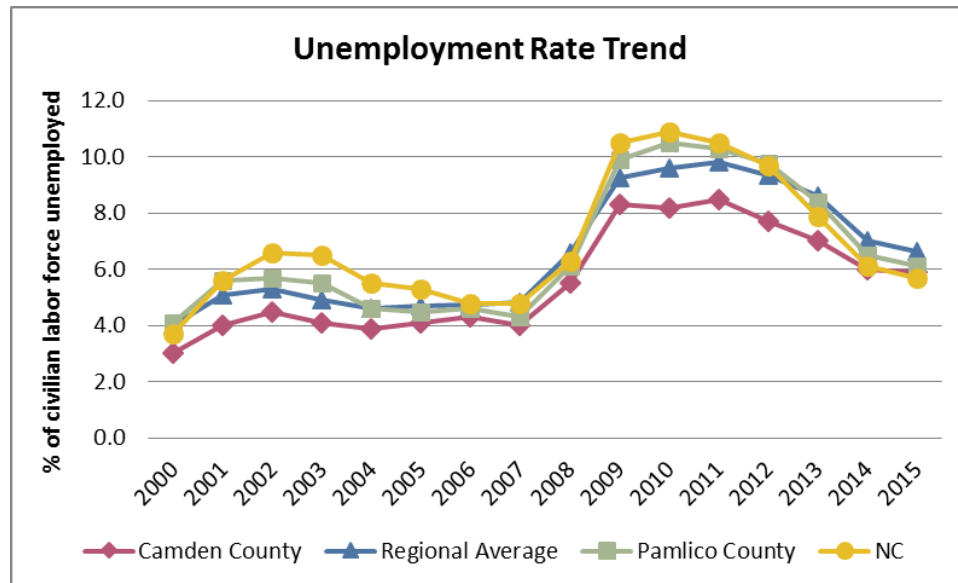
Source: Personal communication from Herb Mullen, Director of Transportation, Inter-County Public Transportation Authority to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, September 1, 2015.

Unemployment

The following figure plots the unemployment rate in Camden County and its jurisdictional comparators for the period 2000 through 2015.

- Beginning with 2008 data, the unemployment rate began to rise sharply in all four jurisdictions, mirroring the onset of the national recession. Unemployment began to decrease in Camden County and the region in 2012; the decrease began in the other jurisdictions one year earlier, in 2011.
- Although post-recession unemployment figures have improved, none have returned to pre-recession levels.
- Throughout the period cited, the unemployment rate in Camden County was the lowest among the four comparators.

Figure 5. Annual Unemployment Rate (2000-2015)



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, Unadjusted. <http://d4.nccommerce.com/LausSelection.aspx>.

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.

Note: 2015 figures represent the average monthly rate from January through November

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 1970-2000 and the estimated poverty rate for five, five-year periods: 2006-2010 through 2010-2014. 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 Camden County, the seven-county ARHS region, Pamlico County and the state of NC, the poverty rate fell each decade from 1970 through 2000. The poverty rate in Camden County continued to fall in each five-year period from 2006-2010 through 2009-2013, before rising again in 2010-2014.
- Camden County had the second-lowest poverty rate among the four jurisdictions for the decades 1970 through 1990 and the lowest poverty rate from 1990 through 2010-2014.

**Table 28. 100%-Level Poverty Rate
(US Census Bureau, Decades 1970-2000; and 5-Year Estimates, 2006-2010 through 2010-2014)**

Location	Percent of All People in Poverty								
	1970	1980	1990	2000	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Camden County	25.4	16.7	16.1	10.1	9.3	8.8	7.4	6.0	6.7
<i>Regional Average</i>	31.8	21.5	18.1	16.5	16.4	17.5	17.3	18.1	17.7
Pamlico County	31.2	20.6	18.9	15.3	10.7	12.2	13.8	13.8	13.3
<i>State of NC</i>	20.3	14.8	13.0	12.3	15.5	16.1	16.8	17.5	17.6

Source: 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 5-Year Estimates (2010 through 2014). Table DP03: Selected Economic Characteristics, County (Geographies as listed); <http://factfinder2.census.gov>.

The next table expands the topic of poverty by presenting decadal poverty data stratified by broad racial group (white/black).

- Across all time periods and in all jurisdictions cited in the table, the poverty rate among blacks was higher than the poverty rate among whites.
- In Camden County over the two decades for which there is data cited, the poverty rate among blacks was from 22% to almost 300% higher than the comparable rate for whites.

**Table 29. Persons in Poverty (100%-Level) by Race, by Decade
(1980-2000)**

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
Camden County	937	16.7	13.8	no data	945	16.1	15.2	18.6	689	10.1	7.5	21.3
<i>Regional Average</i>	2,985	21.5	12.1	37.1	2,775	18.1	10.6	31.6	2,769	16.5	8.9	29.7
Pamlico County	2,142	20.6	13.5	34.9	2,119	18.9	13.7	34.0	1,885	15.3	11.0	29.4
<i>State of NC</i>	839,950	14.8	10.0	30.4	829,858	13.0	8.7	27.1	958,667	12.3	8.5	22.9

a - 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.

The three figures that follow present similar racially-stratified 100%-level poverty data, but as five-year estimates and for an expanded scope of racial groups that includes Hispanics.

- In Camden County, region-wide and statewide, poverty rates among all minority groups are higher compared to white residents.
- In Camden County over the period cited, the poverty rate among blacks was from 4 to 7 times the rate among whites.

Figure 6. Poverty Rate by Race, Camden County
 (US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)

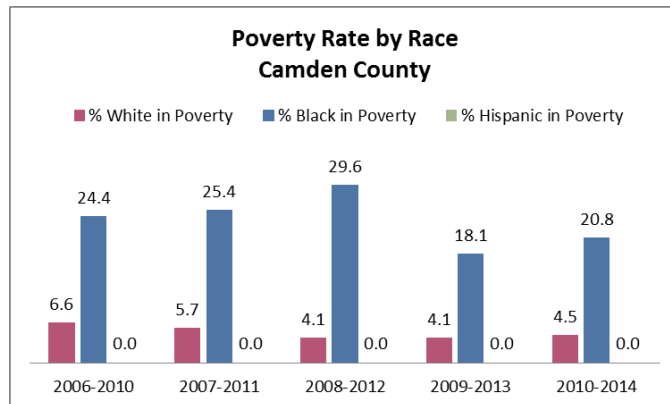


Figure 7. Poverty Rate by Race, ARHS Region
 (US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)

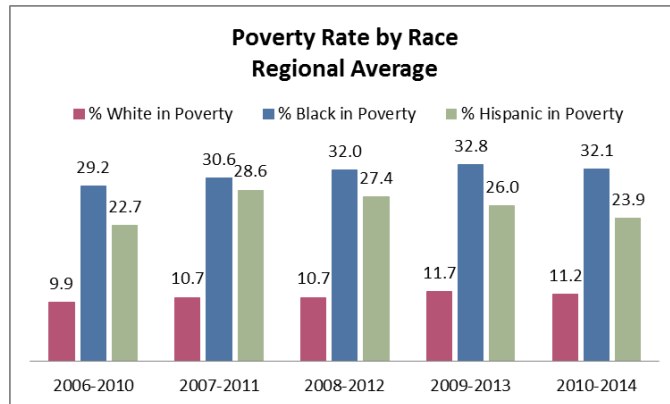
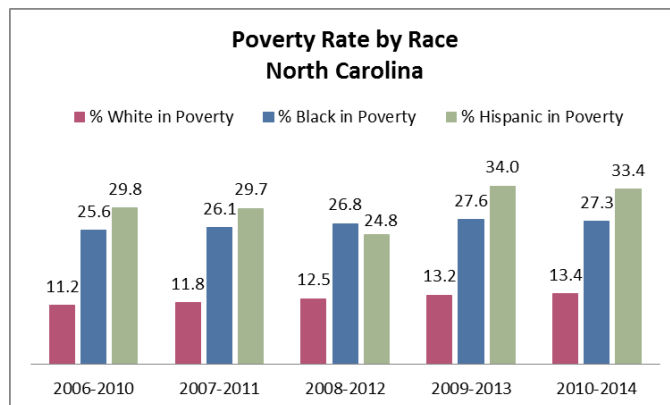


Figure 8. Poverty Rate by Race, North Carolina
 (US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)



Source: US Census Bureau, American Fact Finder, ACS 5-Year Estimates, 2010 through 2014, Table S1701 Poverty Status in the Past 12 Months. <http://factfinder.census.gov/>

The table below further expands the topic of poverty by presenting decadal poverty data stratified by age group. It is clear from these data that children, and especially very young children, suffer disproportionately from poverty.

- In all four jurisdictions in every time period cited in the table, the poverty rate for children under the age of 18 exceeded the overall poverty rate. The variance was greatest for children under six.

Table 30. Persons in Poverty (100%-Level) by Age, by Decade (1980-2000)

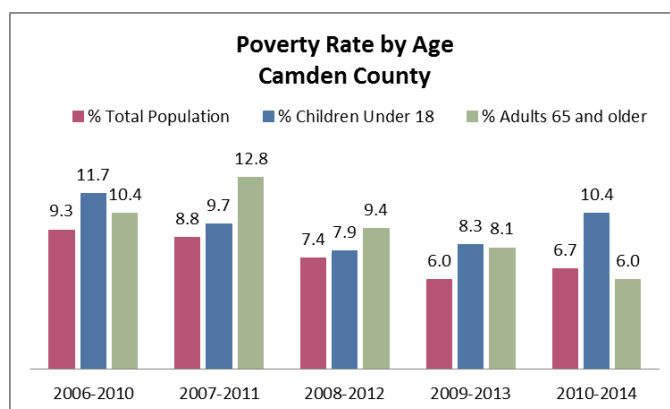
Location	1980				1990				2000			
	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty
Camden County	16.7	17.4	20.2	28.3	16.1	19.5	27.2	18.9	10.1	12.7	16.9	20.3
Regional Average	21.5	26.1	29.8	29.9	18.1	24.7	28.4	21.6	16.5	22.2	24.7	19.2
Pamlico County	20.6	24.5	23.9	35.7	18.9	22.1	27.4	23.3	15.3	24.2	25.7	13.4
State of NC	14.8	18.3	19.7	23.9	13.0	16.9	19.1	19.5	12.3	15.7	17.8	13.2
Source:	a	a	a	a	a	a	a	a	a	a	a	a

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.

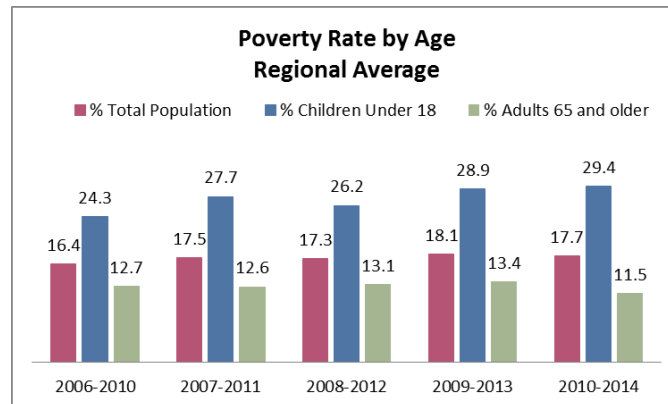
The three figures that follow present similar age-stratified 100%-level poverty data, but as more recent five-year estimates.

- In Camden County, region-wide and statewide, poverty rates among children are higher compared to the overall rate.
- In Camden County over the period cited, the poverty rate among children was from 7% to 55% higher than the total poverty rate.
- The poverty rate among children in Camden County has decreased over time until the 2010-2014 period.

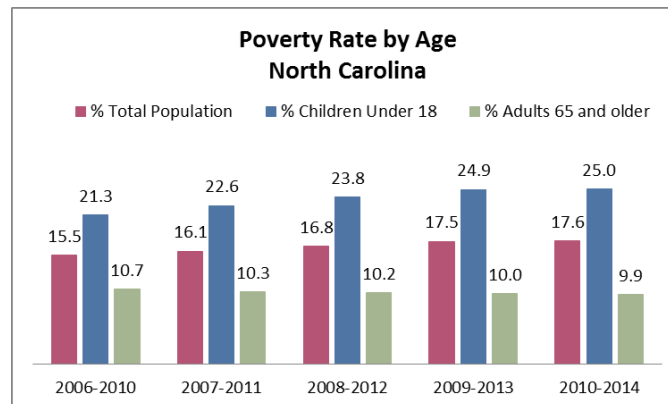
Figure 9. Poverty Rate by Age, Camden County (US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)



**Figure 10. Poverty Rate by Age, ARHS Region
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)**



**Figure 11. Poverty Rate by Age, North Carolina
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)**



Source: US Census Bureau, American Fact Finder, 2010 through 2014 ACS 5-Year Estimate, Table S1701: Poverty Status in the Past 12 Months. <http://factfinder.census.gov>.
Note that the 5-Year Estimates do not present figures for the 5/6 year-old age group.

Children Receiving Free or Reduced-price School Meals

Other data corroborate the impression that children, especially the very young, bear a disproportionate burden of poverty, and that their burden is increasing. One measure of poverty among children is the number and/or percent of school-age children who are eligible for and receive free or reduced-price school meals.

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 following table presents data from the NC Department of Public Instruction showing the *percentage* of students in the named school jurisdiction who have been determined to be “*needy*”, the currently-preferred term describing children who are *eligible* for free-or reduced-price meals.

- The percentage of students in Camden County eligible for free or reduced-price school lunch has varied over time, but was 27% higher in SY2014-15 than in SY2006-07.

Table 31. Percent of Students Eligible for Free or Reduced price School Meals (SY 2006-07 through SY2014-15)

Location	% of Students Determined to be "Needy" (% Eligible for Free- or Reduced-Price Meals)								
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14	SY2014-15
Camden County	25.80	27.96	27.43	31.73	31.22	31.94	36.46	34.90	32.69
<i>Regional Average</i>	53.02	51.97	52.47	55.93	54.82	58.65	58.91	60.22	57.23
Pamlico County	52.58	58.84	53.14	62.00	64.13	64.23	64.20	65.43	44.46
State of NC	48.46	48.39	49.85	53.68	53.86	55.94	56.14	57.56	52.83

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/>.

To help readers grasp the numbers behind the percentages cited above, the following table, also based on data from the NC Department of Public Instruction, shows the *number* of students who *received* either free or reduced-price school lunch in several recent school years.

- The number of students in Camden County receiving free or reduced-price meals rose most years from SY2006-07 through SY2011-12, when the number reached its nine-year high. The number has fallen every school year since SY2011-12.

Table 32. Number of Students Receiving Free or Reduced-price School Meals (SY2006-07 through SY2014-15)

Location	No. Students RECEIVING Free or Reduced-Price Meals								
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14	SY2014-15
Camden County	481	531	517	600	595	1,442	692	659	609
<i>Regional Average</i>	1,624	1,557	1,563	1,627	1,574	1,777	1,664	1,680	1,586
Pamlico County	794	862	745	855	892	878	816	831	566
State of NC	671,831	679,877	703,887	752,708	759,361	793,893	803,302	820,009	753,817

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/>.

County Economic Service Utilization

The Camden County Department of Social Services (DSS) manages a number of programs that provide assistance to low-income people.

The *Food and Nutrition Services* program (formerly known as Food Stamps) helps eligible households buy the food they need for a nutritionally adequate diet. Benefits may be used to purchase most foods at participating stores; they may not be used to purchase tobacco, pet food, paper products, soap products, or alcoholic beverages (18).

Medicaid is a health insurance program for eligible low-income individuals and families who cannot afford health care costs. Medicaid may help pay for certain medical expenses including doctor bills, hospital bills, vision care, dental care, Medicare premiums, nursing home care,

Personal Care Services (PCS), medical equipment, and other Home Health Services, in-home care under the Community Alternatives Program (CAP), mental health care, and most medically necessary services for children under age 21 (19).

WorkFirst is North Carolina's Temporary Assistance for Needy Families (TANF) program, through which parents can get short-term training and other services, including cash supports, to help them become employed and self-sufficient (20).

Camden County DSS did not provide examples of program data to this project.

HOUSING

The following table presents US Census Bureau data on housing by type.

- While approximately 11% of housing units in Camden County were vacant in 2000 and the 2006-2010 period, 12% were vacant in 2010-2014.
- The percentage of owner-occupied housing units in Camden County remained about the same in all periods cited (between 82% and 85%).
- The lowest proportion of mobile homes in most periods was in Camden County.

**Table 33. Housing by Type
(US Census Bureau 2000, and 5-Year Estimates, 2006-2010 and 2010-2014)**

Location	2000										
	Total Housing Units	Vacant Housing Units		Occupied Housing Units		Owner Occupied Units		Renter Occupied Units		Mobile Home Units	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%
Camden County	2,973	311	10.5	2,662	89.5	2,219	83.4	443	16.6	499	16.8
<i>Regional Average</i>	7,696	1,362	16.8	6,334	83.2	4,715	76.9	1,619	23.1	1,781	24.3
Pamlico County	6,781	1,603	23.6	5,178	76.4	4,256	82.2	922	17.8	2,117	31.2
State of NC	3,523,944	391,931	11.1	3,132,013	88.9	2,172,355	69.4	959,658	30.6	577,323	16.4
Source:	a	a	a	a	a	a	a	a	a	b	b

a - US Census Bureau, American FactFinder, 2000 US Census, Summary File 1 (SF-1), 2000 Demographic Profile Data, DP-1, Profile of General Population and Housing Characteristics: 2000 (geographies as listed); <http://factfinder2.census.gov>.

b - US Census Bureau, American FactFinder, 2000 US Census, Summary File 1 (SF-3), 2000 Demographic Profile Data, DP-4, Profile of Selected Housing Characteristics: 2000 (geographies as listed); <http://factfinder2.census.gov>.

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.	%
Camden County	4,104	429	10.5	3,675	89.5	3,019	82.1	656	17.9	531	13.4
<i>Regional Average</i>	9,242	1,786	17.5	7,456	82.5	5,467	75.3	1,989	24.7	1,972	22.9
Pamlico County	7,534	2,044	27.1	5,490	72.9	4,337	79.0	1,153	21.0	2,486	33.4
State of NC	4,327,528	582,373	13.5	3,745,155	86.5	2,497,900	66.7	1,247,255	33.3	605,418	14.3

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

Location	2010-2014 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.	%
Camden County	4,117	508	12.3	3,609	87.7	3,075	85.2	534	14.8	483	11.7
<i>Regional Average</i>	9,285	1,996	19.7	7,289	80.3	5,317	75.3	1,972	24.7	1,773	20.5
Pamlico County	7,561	2,416	32.0	5,145	68.0	4,088	79.5	1,057	20.5	2,333	30.9
State of NC	4,385,668	643,154	14.7	3,742,514	85.3	2,461,741	65.8	1,280,773	34.2	592,859	13.5

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimates, Table DP04: Selected Housing Characteristics (geographies as listed). <http://factfinder2.census.gov>.

The next table presents data on housing costs.

- In both time periods cited, the percentage of *renter-occupied* housing units costing more than 30% of household income was highest among comparators in Camden County, and the county's percentage increased slightly from the first period to the second.
- In Camden County the percentage of *mortgaged* housing units costing more than 30% of household income was the lowest among comparators in 2005-2009 and second-lowest in 2010-2014. The percentage of mortgaged units in Camden County costing more than 30% of household income increased significantly between intervals.

**Table 34. Estimated Housing Cost
(US Census Bureau 5-Year Estimates, 2005-2009 and 2010-2014)**

Location	Renter Occupied Units								
	Total Units	2005-2009			Median Gross Rent	2010-2014			Median Gross Rent
		Units Spending >30% Household Income on Housing		Total Units		Units Spending >30% Household Income on Housing			
		#	%			#	%		
Camden County	597	333	55.8	\$850	483	282	58.4	\$1,143	
<i>Regional Average</i>	1,562	856	54.3	\$671	1,693	969	58.3	\$825	
Pamlico County	751	391	52.1	\$655	761	398	52.3	\$739	
State of NC	1,015,891	486,934	47.9	\$702	1,158,320	590,756	51.0	\$790	
Source	1	1	1	1	2	2	2	2	

Location	Mortgaged Housing Units								
	Total Units	2005-2009			Median Mortgage Cost	2010-2014			Median Mortgage Cost
		Units Spending >30% Household Income on Housing		Total Units		Units Spending >30% Household Income on Housing			
		#	%			#	%		
Camden County	1,927	535	27.7	\$1,323	1,954	812	36.5	\$1,720	
<i>Regional Average</i>	3,285	1,299	37.7	\$1,180	3,301	1,313	38.5	\$1,390	
Pamlico County	2,343	902	38.5	\$1,218	2,162	848	39.3	\$1,233	
State of NC	1,626,652	713,340	31.5	\$1,216	1,617,586	503,743	31.2	\$1,272	
Source	1	1	1	1	2	2	2	2	

1 - US Census Bureau, American FactFinder. 2009 ACS 5-Year Estimates. Table DP04: Selected Housing Characteristics (geographies as listed)...

2 - US Census Bureau, American FactFinder. 2014 ACS 5-Year Estimates. Table DP04: Selected Housing Characteristics (geographies as listed). <http://factfinder2.census.gov>.

The numbers here reflect the housing units for which the GRAPI (gross rent as percentage of household income) or SMOCAPI (selected monthly owner costs as a percentage of household income) can be computed. It does not necessarily include ALL rented or owned housing units.

Affordable Housing

According to information from the NC Rural Economic Development Center based on 2006-2010 US Census data estimates, 30% of housing in Camden County was classified as “unaffordable”, compared to 29% in Pamlico County, and averages of 35% region-wide and 32% statewide (21). 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.

There is no PHA office located in Camden County to assist residents in accessing HUD services. The nearest office is in Elizabeth City (Pasquotank County) (22). At the time this report was developed, there was one HUD-subsidized single-family home available in Camden County, in Camden (23). A search on the HUD affordable apartment website identified one low-rent apartment facility: an ARC facility in Shiloh for developmentally disabled persons (24).

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. In October, 2016 the MFH website listed no qualifying rental properties in Camden County (25).

Homelessness

The NC Coalition to End Homelessness coordinates a statewide *Point-in-Time Count*, an unduplicated count of homeless people, held on one night in the last week of January each year. It is not clear which of the counties in the Albemarle region do or do not participate in this count, but results are available only for Pasquotank County (26).

There is no homeless shelter located in Camden County, but homeless shelters located in neighboring Pasquotank County (in Elizabeth City) typically serve neighboring counties (27):

- Visions of Hope Emergency Shelter and Outreach Center - emergency shelter for women and children
- Tabernacle of Faith Shelter - outreach shelter for women
- New Beginnings Homeless Shelter - sleeps seven, men only

HOUSEHOLDS

The following table describes some of the characteristics of households in the comparator jurisdictions.

- The average number of persons per household in Camden County—2.79—was the highest among comparators.
- The percent of one-person households in Camden County—18.6%—was the lowest proportion among the comparators.

- The percent of households where the resident lived alone *and* was age 65 or older was second-lowest among comparators in Camden County.

**Table 35. Household Characteristics
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total No. Households ¹	Persons per Household	% Households One-person	% Households One-person and Age ≥65
Camden County	3,609	2.79	18.6	10.4
<i>Regional Average</i>	<i>7,289</i>	<i>2.64</i>	<i>24.2</i>	<i>11.0</i>
Pamlico County	5,145	2.41	25.9	13.2
<i>State of NC</i>	<i>3,742,514</i>	<i>2.54</i>	<i>27.9</i>	<i>9.7</i>

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 FactFinder, 2014 ACS 5-year estimates. Table S1101: Households and Families (geographies as noted); <http://factfinder2.census.gov>.

Family Households

The following table describes some characteristics of family households by type of head of household. Note that percentages were calculated from the counts in the table.

- In Camden County in the period cited, 44% of all households (1,248 of 2,807) included children under the age of 18.
- Of the 1,248 households with minor children, 913 (73%) were headed by a married couple. Another 62 (5%) were headed by a male householder, and 273 (22%) were headed by a female householder.

**Table 36. Family Households, by Type of Head of Household
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total Households	Households w/ Children <18	Married-couple Households	Married-couple Households w/ Children <18	Male Householder	Male Householder w/ Children <18	Female Householder	Female Householder w/ Children <18
	Number	Number	Number	Number	Number	Number	Number	Number
Camden County	2,807	1,248	2,226	913	72	62	509	273
<i>Regional Average</i>	<i>5,158</i>	<i>1,970</i>	<i>3,741</i>	<i>1,251</i>	<i>334</i>	<i>147</i>	<i>1,083</i>	<i>571</i>
Pamlico County	3,695	1,021	2,978	632	187	103	530	286
<i>State of NC</i>	<i>2,484,973</i>	<i>1,077,906</i>	<i>1,803,981</i>	<i>699,864</i>	<i>166,170</i>	<i>84,965</i>	<i>514,822</i>	<i>293,077</i>

Source: US Census Bureau, American FactFinder, 2014 American Community Survey 5-Year Estimates. Table: S1101: Households and Families. <http://factfinder2.census.gov>

Grandparents Responsible for Minor Children

The table below 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 of 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 Camden County for the period cited, an estimated 20% of grandparents living with their minor grandchildren were also responsible for their care, the lowest figure among comparators.
- In Camden County, none of the grandparents financially responsible for minor grandchildren were over the age of 60, 37% were disabled, and 24% lived below the poverty level.

**Table 37. Grandparents with Responsibility for Minor Children
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Grandparents Living with own grandchildren under 18	Grandparents Responsible for grandchildren under 18							
		Number	Percent	# Over 60	%Over 60	%White	% African American	% Disabled	% Below Poverty Level
Camden County	207	41	19.8	0	0.0	95.1	4.9	36.6	24.4
<i>Regional Average</i>	561	293	49.1	114	37.6	67.0	33.0	21.8	29.0
Pamlico County	296	222	75.0	79	35.6	70.7	18.9	25.2	27.0
<i>State of NC</i>	209,835	100,472	47.9	34,797	34.6	56.2	36.3	27.6	26.2

Source: US Census Bureau, American FactFinder, 2014 American Community Survey 5-Year Estimates. Table: S1002: Grandparents. <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 (28).

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.

According to data in the table that follows:

- Of the four licensed child care centers in Camden County at the time of this report, two (50%) were five-star facilities and none were four-star facilities.
- Of the two licensed family child care homes in Camden County, none was a five-star facility but both were four-star facilities.

**Table 38. NC-Licensed Child Care Facilities in Camden County
(February, 2016)**

Type of Facility	Number
Child Care Centers (4)	
Five-star	2
Four-star	0
Three-star	1
Two-star	0
One-star	1
GS 110-106 (Church-affiliated)	0
Temporary	0
Family Child Care Homes (2)	
Five-star	0
Four-star	2
Three-star	0
Two-star	0
One-star	0

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 table below presents total enrollment summaries for child care facilities. This data is old, but had not been updated at the source by the time of this report.

**Table 39. 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
Camden County	118	104	130	151	12	12	11	9
<i>Regional Average</i>	<i>347</i>	<i>355</i>	<i>351</i>	<i>428</i>	<i>45</i>	<i>45</i>	<i>45</i>	<i>41</i>
Pamlico County	158	186	174	141	37	33	43	45
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>.

The WorkFirst Employment Program discussed previously includes child care subsidies for families that qualify. The following table also contains old data on the number of children in each jurisdiction that received WorkFirst Working Connections Child Care Subsidies.

- The number of children in Camden County that received a WorkFirst child care subsidy decreased steadily after 2008, as for the most part did the comparable figures for the comparators.
- In each jurisdiction, including the state of NC, the figures were their lowest of the entire period in 2010.

**Table 40. Number of Children Receiving WorkFirst Child Care Subsidy
(2007-2010)**

Location	2007	2008	2009	2010
Camden County	33	49	34	28
<i>Regional Average</i>	110	118	91	77
Pamlico County	70	68	46	33
State of NC	41,075	43,124	42,944	39,341

Note: the number of children is based on the number of children under 18 receiving Work First benefits for the month of December for a particular year.
Source: Annie E. Casey Foundation, Kids Count Data Center, Community Level Data, North Carolina Indicators;

<http://datacenter.kidscount.org/data/bystate/chooseindicator.aspx?state=NC>.

EDUCATION

Higher Education

There are no four-year colleges or universities physically located in Camden County, but there are several in the ARHS region accessible to Camden County residents. One community college—Martin Community College—operates a satellite campus physically located in Windsor, in Camden County.

College of the Albemarle

The College of The Albemarle (COA) is a community college that serves northeastern NC with sites in several locations throughout the region, including a campus in Edenton, one in Elizabeth City, and a third in Manteo. A comprehensive community college, COA offers two-year degrees in college transfer and career programs, basic skills programs, continuing education classes for personal enrichment as well as credit, customized business and industry training, and cultural enrichment opportunities including an annual summer program called College for Kids. The COA is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees (29).

Roanoke-Chowan Community College

Roanoke-Chowan Community College (RCCC) is a regional community college located in Ahoskie, NC (Hertford County). The College currently has about 20 curricular programs in which students may seek degrees, diplomas and short term skills-based certificates. RCCC recently added an Associate of Fine Arts Degree in Visual Arts, in addition to diplomas in high demand occupational training in Building Construction, Plumbing and other construction-related technologies. The College offers a Lateral Entry Teacher Certificate tailored to meet the need of public schools within the region to fully credential educators who have entered the classroom without the advantage of full unrestricted licensure.

RCCC has established formal transfer agreements with the 16-member University of North Carolina System and several private colleges to provide transfer opportunities for students to pursue higher-level degrees. RCCC has expanded its distance learning studies to include Internet-based courses, and has increased efforts with area school systems to provide more opportunities for high school students to take college courses, either on the RCCC campus or at their respective high schools.

The RCCC Continuing Education and Workforce Development Division meets business needs by establishing basic or occupation-related classes within local industries and by developing Focused Industrial Training (FIT) opportunities. Its Small Business component works on a one-on-one basis with individuals and small companies wanting to start and or enhance a small business enterprise. The Hertford County JobLink Career Center is also located on the RCCC Campus (30).

Chowan University

Chowan University is a small (~1,300 students) four-year liberal arts university located in Murfreesboro, NC (Hertford County). Chowan University is affiliated with the Southern Baptist Association. The university offers over 63 academic programs and the recently-opened School

of Graduate Studies provides students the opportunity to earn Masters Degrees. Currently, Chowan offers the Master of Education (M.Ed.) degree with advanced teacher license.

Chowan University enrolls about 30 adult students in the Adult Degree Completion Program. Through this program, adult students take classes at Halifax Community College in Weldon, NC, at the main campus in Murfreesboro, NC, and online.

The Chowan University student/faculty ratio is 16:1, with an average class size of 15. The university has a campus-wide fiber-optic network and Blackboard communication system, computer labs, "smart" multimedia classrooms, hardware and software discounts, in-house technical support, and 24/7 high-speed Internet access (31).

Martin Community College

Martin Community College (MCC) is a regional community college located in Williamston, NC (Martin County) with a satellite campus located in Windsor. MCC provides adult basic education, adult high school education, extension classes, and selected curriculum courses in 20 vocational and technical areas. MCC also offers an Associate in Arts College Transfer Program and a Transfer Core Diploma. The college offers online curricular and continuing education classes via a system called *ed2go* (32).

Elizabeth City State University

Elizabeth City State University (ECSU) is a four-year state university located in Elizabeth City, NC (Pasquotank County). Originally an institution for African-American students, the university now has an increasingly multicultural student body. In the fall of 2012, ECSU had a total enrollment of 2878. A constituent institution of The University of North Carolina System, ECSU offers 37 baccalaureate degrees and four master's degrees in four academic schools: Arts and Humanities; Business and Economics; Education and Psychology; and Mathematics, Science and Technology. The university has academic programs that appeal to various interests and fields of study, including the honors program, military science, study abroad, Viking Fellows for education majors, and "signature" programs in aviation and pharmacy (33).

East Carolina University

East Carolina University (ECU) is a large, four-year state university located in Greenville, NC (Pitt County). ECU is a constituent member of the UNC System founded in 1907 to alleviate the desperate shortage of teachers in the eastern part of NC. Since then, the ECU College of Education has been joined by programs of high distinction in health care and the fine and performing arts. Today the university offers over 100 bachelor's degree programs, more than 70 master's degree programs, four specialist degree programs, an MD program, and 16 doctoral programs. The university is the largest educator of nurses in NC, and its Brody School of Medicine is consistently ranked among the top medical schools in the nation that emphasize primary care. The school was recently ranked second in the nation by the American Academy of Family Physicians for productivity of family physicians.

ECU is the state's leader in distance education, offering more than 60 degrees and certificate programs in subjects such as business, education, health care, and technology. Two of the top

distance-education programs in the nation are run by ECU's colleges of nursing and education (34).

Primary and Secondary Education

Schools and Enrollment

The following several tables focus on data pertaining to primary and secondary (mostly public) schools in Camden County (as well as its comparator jurisdictions where appropriate).

- There are five public schools in the Camden County school district: one elementary school, two middle schools, and two secondary schools. There are no private schools in the county.

**Table 41. Number of Schools
(SY2012-13 or as Noted)**

Location	Public (SY2012-13)				Private (SY2014-15)			
	Elementary (PK-8)	Middle (4-8)	Secondary (9-12)	Combined	K-10/11/12	Middle School	K-5	Other
Camden County Schools	1	2	2	0	0	0	0	0
<i>Regional Total</i>	25	10	12	1	6	3	1	2
Source:	a	a	a	a	b	b	b	b

a - NC Department of Public Instruction, NC School Report Cards, Search by School District. <http://www.ncreportcards.org/src/>.

b - NC Division of Non-Public Education, Resources and Statistics, NC Directory of Non-Public Schools. <http://www.ncdnpe.org/documents/14-15-CS-Directory.pdf>.

- Grandy Primary School in Camden was the largest school in the district, with a SY2012-13 enrollment of 558. Camden Intermediate School, also in Camden, was the second largest school in the district, with a SY2012-13 enrollment of 465.

**Table 42. Camden County Public Schools (Not Including Charter Schools)
(SY2012-13)**

School	Location	School Type/Calendar	Grade Range	Enrollment SY2012-13
CamTech High	Camden	Regular School, Traditional Calendar	9-12	152
Camden County High	Camden	Regular School, Traditional Calendar	9-12	420
Camden Intermediate	Camden	Regular School, Traditional Calendar	4-6	465
Camden Middle	Camden	Regular School, Traditional Calendar	7-8	303
Grandy Primary	Camden	Regular School, Traditional Calendar	K-3	558

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards, School Year 2009-10; <http://www.ncschoolreportcards.org/src>.

There are no charter schools in Camden County.

- K-12 public school enrollment in Camden County has been relatively static over the past eight years, with a brief enrollment “spurt” in SY2011-2012.

**Table 43. K-12 Public School Enrollment
(SY2007-08 through SY2014-15)**

Location	Number of Students							
	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14	SY2014-15
Camden County Schools	1,958	1,959	1,955	1,986	2,013	1,956	1,973	1,943
<i>Regional Average</i>	3,150	3,101	3,038	3,017	3,122	2,933	2,905	2,902
<i>State of NC</i>	1,458,156	1,456,558	1,446,650	1,450,435	1,458,572	1,467,297	1,493,980	1,498,654

Note: this data excludes charter school enrollment.

Source: NC Department of Public Instruction, Data and Statistics, Education Data: NC Statistical Profile. NC Statistical Profile Online: Local Education Agencies Information, Pupil Accounting. Table A1: Final Pupils by Year and Grade.

<http://apps.schools.nc.gov/pls/apex/f?p=1:1:497147721913602>.

Educational Attainment

The following table presents data on several measures of educational attainment.

Compared to the NC average, in 2014 or SY2014-15 Camden County had:

- A 1% higher proportion of residents with *less than* a high school education;
- A 31% lower proportion of residents with a bachelor’s degree or higher;
- Higher proficiency on both math and reading EOG tests among 3rd and 8th graders. Less than 50% of Camden County 8th grade students were grade-level proficient in math in SY2014-15; figures for comparator jurisdictions were similarly low.
- A slightly lower rate of participation in the SAT and slightly lower average scores.

**Table 44. Educational Attainment
(Years as Noted)**

Location	% Population High School Graduate or Higher	% Population Bachelor's Degree or Higher	% 3rd Graders Grade Level Proficient, EOG Reading Test	% 3rd Graders Grade Level Proficient, EOG Math Test	% 8th Graders Grade Level Proficient, EOG Reading Test	% 8th Graders Grade Level Proficient, EOG Math Test	SAT Participation Rate	Average Total SAT Scores
	2014	2014	SY2014-15	SY2014-15	SY2014-15	SY2014-15	SY2014-15	SY2014-15
Camden County	86.6	19.3	80.1	83.8	60.1	43.4	52%	977
<i>Regional Average</i>	82.8	16.9	55.3	64.8	51.5	35.6	60%	918
Pamlico County	86.7	19.9	55.8	58.4	45.3	45.3	60%	963
<i>State of NC</i>	85.4	27.8	59.0	61.7	53.4	43.2	54%	989

Source:

a - US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimate. Table S1501: Educational Attainment (Geographies as noted). <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/>.

Educational Expenditures

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

- In SY2014-15 the total per pupil expenditure (the sum of Federal, state and local investments) in Camden County (\$9,206) was 10% lower than the average for the ARHS region (\$10,208), but 5% higher than the average for the state as a whole (\$8,734).

- In all jurisdictions, the state contributed the highest proportion to the total per-pupil expenditure: 76% in Camden County, an average of 69% region-wide, and an average of 64% statewide.

Table 45. Educational Expenditures (SY2014-15)

Location	Per-Pupil Expenditure			
	Local	State	Federal	Total
Camden County Schools	\$1,675	\$7,005	\$526	\$9,206
<i>Regional Average</i>	\$2,064	\$7,020	\$1,124	\$10,208
<i>State of NC</i>	\$2,137	\$5,624	\$973	\$8,734

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile. <http://www.ncpublicschools.org/src/>.

High School Drop-Out Rate

The following table 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.

- The high school drop-out rate in Camden County fluctuated over the period cited in the table, but was highest (4.30) in SY2007-08 and lowest (1.35) in SY2012-13.
- In the most recent period the drop-out rate in Camden County was lower than either the regional or state averages.

Table 46. High School Drop-Out Rate (SY2006-07 through SY2013-14)

Location	Drop-Out Rate							
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14
Camden County Schools	2.61	4.30	2.83	3.44	3.26	2.81	1.35	1.96
<i>Regional Average</i>	4.38	4.78	3.65	3.42	3.53	2.70	2.18	2.19
<i>State of NC</i>	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. Consolidated Report: Table D5: high School Dropout Counts and Rates; <http://www.ncpublicschools.org/research/dropout/reports/>.

Graduation Rate

The four-year cohort graduation rates for subpopulations of 9th graders entering high school in SY2011-12 and graduating in SY2014-15 are presented in the table below.

- Among comparators, the overall graduation rate, the graduation rate for males, the graduation rate for females, and the graduation rate for the economically disadvantaged were highest in Camden County Schools.

**Table 47. Four Year Cohort Graduation Rate
(9th Graders Entering SY2011-12 and Graduating SY2014-15 or Earlier)**

Location	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
Camden County Schools	157	140	89.2	75	65	86.7	82	75	91.5	38	33	86.8
Regional Average	218	188	86.7	110	90	83.1	109	98	90.3	91	75	83.9
State of NC	110,473	94,544	85.6	56,294	46,288	82.2	54,179	48,256	89.1	44,047	35,076	79.6

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 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 liberty 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 next table summarizes acts of school crime and violence catalogued by the NC Department of Public Instruction.

- The number and rate of acts of school crime and violence in Camden County Schools and the other jurisdictions fluctuated dramatically over the period cited. Only the statewide average showed any stability, likely due to the large size of the sample. The state rate decreased in the three most recent school years cited.

**Table 48. School Crime and Violence Trend
(SY2006-07 through SY2013-14)**

Location	SY2006-07		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	No. Acts	Rate
Camden County Schools	6	3.2	9	4.7	4	2.1	4	2.1	0	0.0	10	5.3	3	1.6	9	4.8
<i>Regional Average</i>	17	5.5	21	7.6	19	6.0	14	5.0	16	4.6	16.7	6.3	15.3	4.9	15.9	5.8
Pamlico County Schools	33	21.9	20	14.3	12	8.6	7	5.1	6	4.3	13	9.5	15	11.8	9	7.1
<i>State of NC</i>	11,013	7.8	11,276	7.9	11,116	7.6	11,608	8.0	11,657	8.0	11,161	7.6	10,630	7.2	10,132	6.8
Source	a	a	b	b	b	b	b	b	b	b	b	b	b	b	b	b

¹ For list of reportable acts see accompanying text

² Rate is number of acts per 1,000 students

a - NC Department of Public Instruction, Research and Evaluation, Discipline Data, Annual Reports, Annual Reports of School Crime and Violence (years as noted); <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

b - NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports. Crime & Violence Table C-5. <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

The following table displays locally-provided detail on the acts of crime and violence committed in Camden County Schools in SY2011-12 through SY2013-14.

- According to this data, the most common offenses in Camden County Schools were possession of a controlled substance, accounting for 14 reportable acts over the three years cited, and possession of a weapon, accounting for 6 reportable acts.

**Table 49. School Crime and Violence in Camden County Schools, by Type of Offense
(SY2011-12 through SY2013-14)**

Offense	Number of Acts		
	SY2011-12	SY2012-13	SY2013-14
Assault resulting in serious injury	0	0	0
Assault involving use of weapon	0	0	0
Assault of school personnel	0	0	0
Bomb threat	0	0	0
Burning of school building	0	0	0
Death by other natural causes	0	0	0
Kidnapping	0	0	0
Possession of alcoholic beverage	2	0	0
Possession of controlled substance	5	2	7
Possession of firearm	0	0	0
Possession of weapon	3	1	2
Rape	0	0	0
Robbery with a dangerous weapon	0	0	0
Sexual assault	0	0	0
Sexual offense	0	0	0
Taking liberties with a minor	0	0	0
Total Reportable Acts	10	3	9
Average Daily Membership	1,891	1,898	1,888
Acts per 1,000 Students	5.3	1.6	4.8

Source: NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports. Crime & Violence Table C-5, years as noted. <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

The final table in this section presents data summarizing disciplinary activity in the public schools. Since the data represent counts of activity of school systems of different sizes, direct comparisons are problematic.

- In all the school systems under comparison the most common disciplinary activity was the short-term suspension, and expulsions were rare.

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

School System	SY2010-11			SY2011-12			SY2012-13			SY2013-14		
	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions
Camden County Schools	100	3	0	78	1	0	53	0	0	77	0	0
<i>Regional Average</i>	570	6	0	615	2	0	590	4	0	450	2	0
Pamlico County Schools	286	1	0	316	1	0	229	3	0	288	2	0
State of NC	262,858	2,586	59	258,197	1,609	30	247,919	1,423	37	198,254	1,088	37

¹ A short-term suspension is up to 10 days.

² 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 table below presents the rates for index crime, violent crime, and property crime for the period from 2010 through 2014.

- The largest component of index crime in all four jurisdictions was property crime.

Table 51. Crime Rates, Crimes per 100,000 Population (2010-2014)

Location	Crimes per 100,000 Population														
	2010			2011			2012			2013			2014		
	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
Camden County	929.7	62.0	867.7	1,315.9	70.3	1,245.6	1,265.7	121.5	1,144.2	647.9	39.9	608.1	904.1	30.1	873.9
<i>Regional Average</i>	2,191.1	211.0	1,980.1	2,512.8	196.6	2,316.2	2,326.2	229.9	2,096.4	2,108.7	197.8	1,909.5	2,006.2	214.5	1,808.4
Pamlico County	2,320.3	166.9	2,153.4	2,296.5	220.7	2,075.8	2,632.2	219.4	2,412.9	2,829.3	374.0	2,455.3	2,423.6	304.0	2,119.6
State of NC	3,955.7	374.4	3,581.4	3,919.8	354.6	3,565.2	3,770.6	358.9	3,411.7	3,518.7	340.4	3,178.3	3,287.2	333.0	2,954.1

* - Indicates incomplete or missing data.

Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year). County Rates Ten Year Trend and Statewide Offenses and Rates, Ten Year Trend; <http://crimereporting.ncsbi.gov/Reports.aspx>.

The following three figures present long-term (2006-2014) trend data for index, violent and property crime.

- The index crime rate in Camden County was significantly lower than the comparable regional and NC averages in every year cited. In 2014 the Camden County index crime rate was 904.1 crimes committed per 100,000 population, compared to 2006.2 in the ARHS region and 3,287.2 statewide.
- The violent crime rate in the county was significantly lower than the comparable rates in the region and statewide for the entire period cited. In 2014 the Camden County violent crime rate was 30.1 compared to a Regional rate of 214.5 and a state rate of 333.0.
- The property crime rate in Camden County also was significantly lower than the comparable rates in the region and statewide over the entire period cited. In 2014 the property crime rate in Camden County was 873.9, compared to 1,808.4 region-wide and 2,954.1 statewide.

Figure 12. Index Crime Rate Trend

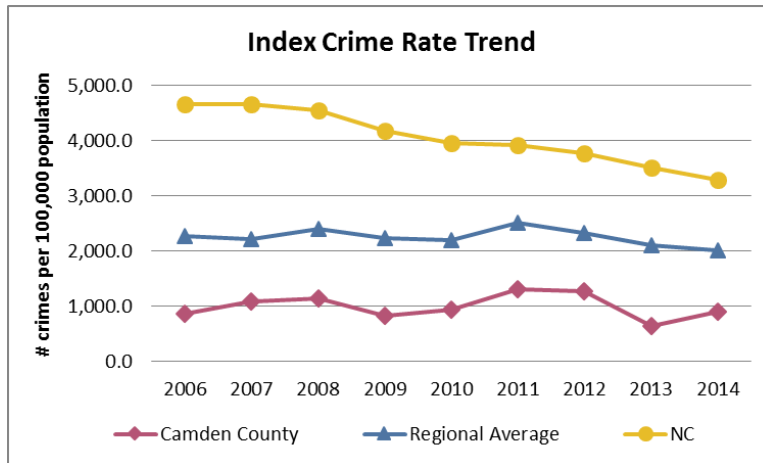


Figure 13. Violent Crime Rate Trend

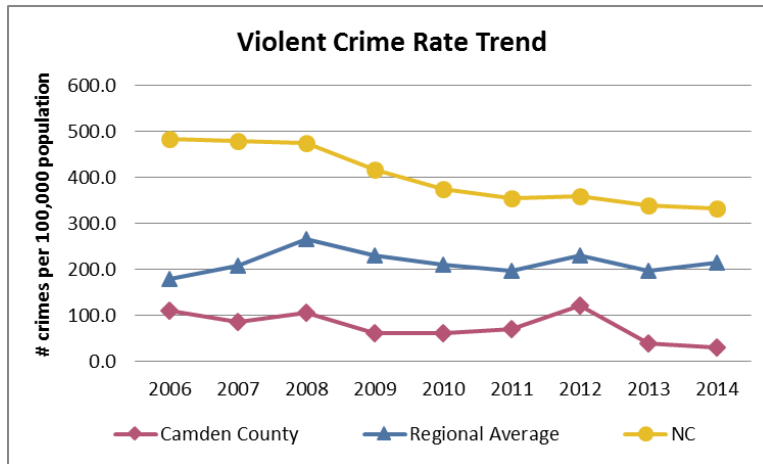
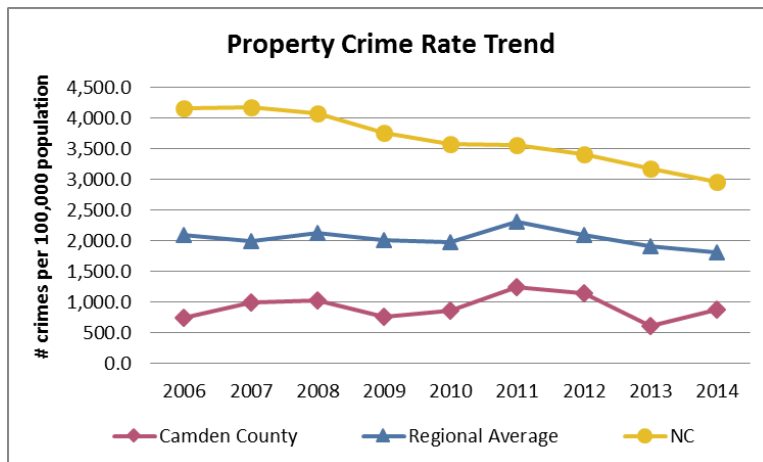


Figure 14. Property Crime Rate Trend



Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year). County Rates Ten Year Trend and Statewide Offenses and Rates, Ten Year Trend; <http://crimereporting.ncsbi.gov/Reports.aspx>.

The next table presents detail on index crime committed in Camden County from 2006 through 2014. 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.
- Larceny was the predominant property crime reported in every year except 2006, when there were more reports of burglary than of larceny.

Table 52. Types of Crimes Reported in Camden County (2006-2014)

Type of Crime	Number of Crimes								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Violent Crime									
<i>Murder</i>	2	0	0	0	0	0	0	0	0
<i>Rape</i>	2	3	2	0	0	0	1	0	0
<i>Robbery</i>	1	0	1	1	2	0	2	2	2
<i>Aggravated Assault</i>	5	5	7	5	4	7	9	2	1
Property Crime									
<i>Burglary</i>	33	23	30	24	28	48	40	17	29
<i>Larceny</i>	29	69	65	48	55	75	70	43	57
<i>Motor Vehicle Theft</i>	5	0	3	2	1	1	3	1	1
Total Index Crimes	77	100	108	80	90	131	125	65	90

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

Other Criminal Activities

The following table summarizes data on other types of criminal activities.

- As of February 4, 2016 there were 16 registered sex offenders in Camden County, compared to 25 in Pamlico County. The average for counties in the region was 38.
- According to the NC Governor's Crime Commission, in 2013 there were no gangs in Camden County or Pamlico County. The same year, the Crime Commission sited a total of 982 gangs statewide.
- According to the NC State Bureau of Investigation, there were no methamphetamine drug lab busts in Camden County during the period from 2005 through 2013. Over the same period, 2,685 meth lab busts were recorded statewide.

Table 53. Other Criminal Activity

Location	No. Registered Sex Offenders (2/4/16)	No. Gangs	No. Methamphetamine Lab Busts								
			2013	2005	2006	2007	2008	2009	2010	2011	2012
Camden County	16	0	0	0	0	0	0	0	0	0	0
<i>Regional Average</i>	38	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Pamlico County	25	0	0	0	1	0	0	0	0	0	0
State of NC	n/a	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.ncsbi.gov/>.

b - NC Department of Crime Control and Public Safety, Governor's Crime Commission, Publications. Gangs in North Carolina 2013 (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 following tables present a summary of juvenile justice complaints and rates:

- Between 2010 and 2014 the *number* of complaints of *undisciplined* youth in Camden County increased minimally from 3 to 4, and the *rate* of *undisciplined* youth increased from 2.15 to 2.32.
- Over the same period the *number* of complaints of *delinquent* youth in Camden County increased from 8 to 13, and the *rate* of *delinquent* youth increased from 7.14 to 8.98.

**Table 54. Complaints and Rates of Undisciplined and Delinquent Youth
(2010 through 2014)**

Location	Complaints									
	No. Undisciplined					Rate Undisciplined (Complaints per 1,000 Ages 6 to 17)				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Camden County	3	3	1	1	4	2.15	1.68	0.57	0.58	2.32
<i>Regional Average</i>	10	9	8	6	5	2.92	2.89	2.73	1.95	1.78
Pamlico County	4	3	2	0	2	2.64	1.86	1.23	0.00	1.28
<i>State of NC</i>	4,285	3,603	3,194	2,556	2,277	2.94	2.34	2.50	1.66	1.47

Location	Complaints									
	No. Delinquent					Rate Delinquent (Complaints per 1,000 Age 6 to 15)				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Camden County	8	8	4	6	13	7.14	5.37	2.74	4.15	8.98
<i>Regional Average</i>	83	66	52	58	77	29.06	24.99	19.54	20.69	27.05
Pamlico County	31	28	41	21	28	24.8	21.18	30.8	15.84	21.57
<i>State of NC</i>	33,299	33,556	31,575	29,535	29,288	27.55	26.08	24.70	22.91	22.52

Source: NC Department of Public Safety. Juvenile Justice, Data/Statistics/Reports, County Databooks (Search by Year); <https://www.ncdps.gov/Index2.cfm?a=000003.002476.002487>.

The next table summarizes the outcomes of complaints of undisciplined and delinquent youth.

- In three of the five years cited, a total of three Camden County juveniles were sent to secure detention.
- No Camden County juveniles were sent to youth development centers over the period cited, and none were transferred to Superior Court.

**Table 55. Juvenile Justice Outcomes
(2010 through 2014)**

Location	Outcomes														
	No. Sent to Secure Detention					No. Sent to Youth Development Center					No. Transferred to Superior Court				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Camden County	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
<i>Regional Average</i>	9	10	6	6	7	0	0	0	0	0	0	0	0	0	0
Pamlico County	5	3	2	1	5	0	0	0	0	0	0	0	0	0	0
<i>State of NC</i>	4,297	3,558	2,767	2,352	2,244	357	307	216	219	202	30	28	36	28	14

Source: NC Department of Public Safety. Juvenile Justice, Data/Statistics/Reports, County Databooks (Search by Year); <https://www.ncdps.gov/Index2.cfm?a=000003.002476.002487>

Sexual Assault

The following table summarizes data from the Domestic Violence Commission of the NC Council for Women on the number of individuals who filed complaints of sexual assault. (See Camden County Sociodemographic Data Workbook for an explanation of the NC Council for Women's data collection methodology.)

- Since the figures are counts and not rates, they cannot be definitively compared from one jurisdiction to another.
- The annual number of complaints varied without a clear pattern in all four jurisdictions over the period covered.

**Table 56. Sexual Assault Complaint Trend
(FY2007-08 through FY2014-15)**

Location	No. of Individuals Filing Complaints ("Clients")							
	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Camden County	n/a	n/a	49	18	41	38	31	27
<i>Regional Average</i>	17	58	66	51	64	54	71	60
Pamlico County	n/a	n/a	n/a	n/a	n/a	n/a	30	30*
<i>State of NC</i>	6,527	8,494	13,392	13,881	13,214	12,971	13,736	13,655

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 FY2014-15.

- In Camden County, 74.1% of the sexual assaults catalogued in FY2014-15 involved complaints by adult survivors of child sexual assault; 11.1% involved complaints of adult rape.
- Region-wide the largest proportion of sexual assault complaints (38.6%) was by adult survivors of child sexual assault, and the second highest proportion (26.9%) was for adult rape.
- Statewide the largest proportion of sexual assault complaints (27.3%) involved child sexual offense; the second largest proportion (21.5%) involved adult rape.

**Table 57. Types of Sexual Assaults
(FY2014-15)**

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.	%
Camden County	27	3	11.1	0	0.0	20	74.1	1	3.7	1	3.7	0	0.0	2	7.4
<i>Regional Average</i>	60	11	26.9	1	1.3	26	38.6	8	13.6	4	4.8	0	0.3	9	14.3
Pamlico County**	30	5	16.7	2	6.7	7	23.3	4	13.3	4	13.3	3	10.0	5	16.7
<i>State of NC</i>	13,655	2,940	21.5	892	6.5	2,194	16.1	824	6.0	3,721	27.3	782	5.7	2,302	16.9

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2014-2015 County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>.

The following table details the types of offenders involved in sexual assaults in FY2014-15.

- In Camden County the most common offender in sexual assault complaints was a relative (74.1%), followed by “Unknown” (11.1%).
- Region-wide, the most common offender was a relative (52.7%), followed by an acquaintance (20.4%).
- Statewide the most common offender was a relative (32.6%), followed by an acquaintance (27.9%).

Table 58. Types of Offenders in Sexual Assaults (FY2014-15)

Location	Total Offenders	Type of Offender											
		Relative		Acquaintance		Boy/Girl Friend		Stranger		Unknown		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Camden County	27	20	74.1	2	7.4	2	7.4	0	0.0	3	11.1	0	0.0
<i>Regional Average</i>	60	34	52.7	13	20.4	5	5.4	3	11.8	5	9.7	0	0.0
Pamlico County **	20	8	40.0	7	35.0	2	10.0	2	10.0	1	5.0	0	0.0
<i>State of NC</i>	<i>13,720</i>	<i>4,474</i>	<i>32.6</i>	<i>3,823</i>	<i>27.9</i>	<i>1,604</i>	<i>11.7</i>	<i>655</i>	<i>4.8</i>	<i>3,119</i>	<i>22.7</i>	<i>45</i>	<i>0.3</i>

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2014-2015 County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>.

Domestic Violence

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 domestic violence. (See Camden County Sociodemographic Data Workbook for an explanation of the NC Council for Women’s data collection methodology.)

- Since the figures are counts and not rates, they are difficult to compare from one jurisdiction to another.
- In Camden County the annual numbers of complaints were highest in FY2013-14 and lowest in FY2008-09.

Table 59. Domestic Violence Complaint Trend (FY2007-08 through FY2014-15)

Location	No. of Individuals Filing Complaints ("Clients")							
	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Camden County	77	49	135	97	148	120	199	125
<i>Regional Average</i>	<i>134</i>	<i>163</i>	<i>252</i>	<i>216</i>	<i>209</i>	<i>279</i>	<i>372</i>	<i>328</i>
Pamlico County	301	93	86	50	35	30	32	88
<i>State of NC</i>	<i>41,787</i>	<i>51,873</i>	<i>66,320</i>	<i>61,283</i>	<i>51,563</i>	<i>57,345</i>	<i>55,274</i>	<i>53,875</i>

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 table below provides details on the services received by domestic violence complainants.

- The 125 clients complaining of domestic violence in Camden County in FY2014-15 were provided a total of 822 services.
- The largest numbers of services received by domestic violence complainants in Camden County were for information (218) followed by counseling (212) and advocacy (185).
- There is no domestic violence shelter in Camden County at the present time. Shelters and agencies that work with Camden County domestic violence victims include: Visions of Hope Emergency Shelter and Outreach Center (Elizabeth City), Tabernacle of Faith Shelter (Elizabeth City) and Albemarle Hopeline (see below) (35).

Table 60. Services Received by Domestic Violence Complainants (FY2014-15)

Location	Total Domestic Violence Clients	Services Received									Days Local Shelter was Full
		Total	Information	Advocacy	Referral	Transport	Counseling	Hospital	Court	Other	
Camden County	125	822	218	185	134	17	212	0	56	0	32
<i>Regional Average</i>	328	2,929	814	890	400	62	528	1	228	6	27
Pamlico County	88	933	385	122	218	16	116	6	50	20	0
<i>State of NC</i>	53,875	480,730	148,363	86,475	73,979	34,413	47,942	844	37,247	51,467	8,281

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2014-15 County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>.

Albemarle Hopeline

This agency serves victims of family violence, sexual assault and teen dating violence in Camden, Chowan, Currituck, Gates, Perquimans and Pasquotank counties. Hopeline offers free individual and group counseling and emergency shelter, a 24-hour crisis counseling telephone line, and educational programs, courtroom advocacy and volunteer training. All services are provided free of charge (36).

Main telephone: (252) 338-5335

24-Hour Crisis Line: (252) 338-3011

Address: PO Box 2064, Elizabeth City, NC 27906

Albemarle Hopeline provided the following service utilization statistics for the period July 1, 2014 through June 30, 2015. These data are specific to services provided to Camden County clients (37).

- Victims served – 152
- Shelter nights – 33
- Counseling sessions – 289
- Advocacy services – 293
- Court services – 60
- Crisis calls – 223
- Prevention education and outreach programs conducted - 141

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 table below presents child protective services data from the state's Child Welfare website for the period from FY2007-08 through FY2014-15.

- The total number of findings of child abuse, neglect or dependency in Camden County fluctuated annually without a clear pattern. For the period cited, the highest number of findings was 59 in FY2010-11, and the lowest was 17 in FY2011-12. The average number of reports of child abuse, neglect or dependency per year throughout the period cited was 37.
- Neglect-only cases composed the most common type of child maltreatment in Camden County in most years. In 2014-15 seven of the ten substantiated cases involved findings of neglect.

**Table 61. Reports of Child Abuse and Neglect, Camden County
(FY2007-08 through FY2014-15)**

Category	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total No. of Findings of Abuse, Neglect, Dependency	36	30	36	59	17	36	41	41
No. Substantiated ¹ Findings of Abuse and Neglect	1	0	0	0	0	1	0	0
No. Substantiated Findings of Abuse	0	0	0	0	0	0	0	3
No. Substantiated Findings of Neglect	5	3	1	5	1	4	6	7
Services Recommended	0	0	0	6	1	0	1	0
No. Unsubstantiated Findings	29	27	22	38	11	23	26	29
Services Not Recommended	1	0	12	8	4	4	3	0

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=Camden&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 cases in Camden County described for FY2014-15.

- All of the ten substantiated cases of neglect or abuse involved white children.
- Five of the ten substantiated cases of maltreatment involved female children, and five involved male children.
- Four of the ten involved children age 5 and younger; the remaining six cases involved children ages 6-12. No substantiated cases involved teenagers.

Table 62. Demographic Detail of Child Abuse Cases, Camden County (FY2014-15)

Finding	Total	White	African-American	American Indian/Alaskan	Other Races	Hispanic	Non-Hispanic	Male	Female	Ages 0-5	Ages 6-12	Ages 13-17	Missing Age Information
Abuse	3	3	0	0	0	0	3	2	1	1	2	0	0
Neglect	7	7	0	0	0	0	7	3	4	3	4	0	0
Services Needed	1	0	1	0	0	0	1	1	0	0	1	0	0
Services Provided, No Longer Needed	1	1	0	0	0	0	1	0	1	0	1	0	0
Unsubstantiated	29	27	2	0	0	0	29	15	14	12	14	3	0

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.

Adult Maltreatment

Adults who are elderly, frail, or mentally challenged are also subject to abuse, neglect and exploitation. County DSS Adult Protective Services units screen, investigate and evaluate reports of what may broadly be referred to as adult maltreatment. The table below presents state-cataloged adult protective service survey data for 2009 and 2011. Note that no update to this old data is available at the source.

- Note that reports “screened out” do not meet the legal definition of potential maltreatment and are not investigated further.
- In Camden County the proportion of reports screened in for further investigation and services was 100% in 2009 and 86% in 2011.

Table 63. NC Adult Protective Services Survey Results (2009 and 2011)

Location	2009										
	Reports Received	Reports Screened In	Reports Screened Out	Information and Referral	Outreach	Law Enforcement	DHSR or Home Specialist	District Attorney	Veterans Admin	Division of Medical Assistance	Social Security
Camden County	4	4	0	0	0	0	0	0	0	0	0
<i>Regional Average</i>	31	16	14	4	6	1	1	1	0	0	0
Pamlico County	27	9	18	1	9	0	0	0	0	0	0
State of NC	17,073	9,835	7,239	2,443	2,640	471	568	488	34	42	134

Location	2011										
	Reports Received	Reports Screened In	Reports Screened Out	Information and Referral	Outreach	Law Enforcement	DHSR or Home Specialist	District Attorney	Veterans Admin	Division of Medical Assistance	Social Security
Camden County	7	6	1	0	0	0	0	0	0	0	0
<i>Regional Average</i>	35	21	14	3	7	1	1	1	0	0	0
Pamlico County	11	4	7	4	4	0	0	0	0	0	0
State of NC	19,635	10,929	8,706	2,665	2,736	725	475	651	33	30	152

Source: NC DHHS. Division of Aging and Adult Services. Adult Protective Services. APS Survey Data, 2009 and 2011; http://www.ncdhhs.gov/aging/adultsvcs/afs_aps.htm

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 next table presents data on the proportion of the population (by age group) without health insurance of any kind. (Note that the age distribution presented stops at age 65, when persons become eligible for Medicare.) 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.

- The percent of the total Camden County population (age 0-64) without health insurance fluctuated but changed little over the period cited. The percent uninsured in 2013 was the same as in 2009.
- Children (age <19) tend to have a lower percentage of uninsured than the adult population age (18-64) due primarily to coverage of children through NC Health Choice. In Camden County the average percent uninsured among children during the five-year period cited was 8.6%; the comparable average for adults age 18-64 was 18.8%.
- The percent of uninsured children in Camden County increased from 8.3% in 2009 to 8.6% in 2013.

Table 64. Percent of Population without Health Insurance, by Age Group (2009-2013)

Location	2009			2010			2011			2012			2013		
	<19	18-64	<65	<19	18-64	<65	<19	18-64	<65	<19	18-64	<65	<19	18-64	<65
Camden County	8.3	19.0	15.7	8.2	19.4	16.0	9.0	18.8	15.9	8.8	18.3	15.5	8.6	18.7	15.7
Regional Avg.	9.2	21.5	17.9	8.1	21.5	17.7	8.2	21.0	17.4	8.0	21.2	17.6	7.4	20.7	17.1
Pamlico County	10.0	21.8	18.9	10.0	22.8	19.6	10.3	21.5	18.7	10.2	22.4	19.3	10.8	22.9	19.9
State of NC	8.7	21.9	18.0	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, 2009 [and other 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.

Note on Source: The Small Area Health Insurance Estimates (SAHIE) program was created to develop model-based estimates of health insurance coverage for counties and states. The SAHIE program models health insurance coverage by combining survey data from several sources, including the American Community Survey (ACS), demographic population estimates, aggregated federal tax returns, participation in SNAP, County Business Patterns, Medicaid, CHIP and Census 2010 (<http://www.census.gov/did/www/sahie/about/index.html>).

The table below presents different US Census Bureau data on health insurance coverage for the single aggregate period 2010-2014. This data reflects the civilian, non-institutionalized population only.

- According to this data, 9.4 percent of the total defined population in Camden County lacked health insurance over the five-year period cited.
- Of the approximately 91% of the Camden County population that was insured, more than three-quarters had private insurance.

**Table 65. Health Insurance Coverage
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	With Health Insurance						With No Health Insurance			
	Total		With Private Insurance		With Public Coverage		Total		Under 18	
	#	%	#	%	#	%	#	%	#	%
Camden County	9,046	90.6	7,594	76.1	2,950	29.6	937	9.4	70	2.8
<i>Regional Average</i>	<i>15,891</i>	<i>85</i>	<i>11,667</i>	<i>63</i>	<i>6,871</i>	<i>37</i>	<i>2,905</i>	<i>15</i>	<i>289</i>	<i>6</i>
Pamlico County	10,386	83.4	7,761	62.4	5,307	42.6	2,060	16.6	306	13.6
State of NC ¹	8,072,475	84.5	6,131,516	64.2	3,039,062	31.8	1,479,285	15.5	155,453	6.8
United States	265,204,127	85.8	203,328,517	65.8	96,075,708	31.1	43,878,131	14.2	5,217,055	7.1

Source: US Census Bureau, American Fact Finder. 2014 American Community Survey 5-Year Estimate. Table DP03: Selected Economic Characteristics; <http://factfinder2.census.gov>

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 (38).

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 (39).

The following table presents enrollment figures for NCHC for 2010 through 2013. It should be noted that enrollment is directly related to the funding available, which may change at either the Federal or state level.

- In Camden County the *number* of children eligible for the program fluctuated from a low of 112 to a high of 138 over the period cited. The percent of eligible children enrolled fluctuated also, from a low of 68.8 in 2011 to a high of 84.8 in 2013.
- Statewide, the percent of eligible children enrolled in the program increased 16% over the same period, and surpassed the percent achieved in Camden County in each year cited.

**Table 66. NC Health Choice Enrollment
(As of January, 2010 through 2013)**

Location	January, 2010			January, 2011			January, 2012			January, 2013		
	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled
Camden County	136	102	75.0	112	77	68.8	138	109	79.0	125	106	84.8
<i>Regional Average</i>	<i>261</i>	<i>216</i>	<i>77.0</i>	<i>255</i>	<i>258</i>	<i>79.8</i>	<i>267</i>	<i>236</i>	<i>85.3</i>	<i>266</i>	<i>237</i>	<i>86.4</i>
Pamlico County	167	147	88.0	180	158	87.8	196	190	96.9	193	193	100.0
State of NC	131,499	108,533	83.0	137,825	122,536	88.9	1,455,992	1,35,076	92.5	151,262	145,363	96.1

Source: NC Division of Medical Assistance, Statistics and Reports, N.C. Health Choice Monthly Enrollment/Exemption Reports, 2010-2013; <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 following table summarizes the number of Camden County residents eligible for Medicaid, by program area, for the period 2008 through October 2015.

- Using the estimated population figure for the county of 10,331, it appears that 11% of Camden County residents were eligible for Medicaid in 2014.
- The total number of people in Camden County eligible for Medicaid increased by 213 between 2008 and 2014.
- The Medicaid programs for which the largest numbers of Camden County residents were eligible were (1) Infants and Children, (2) AFDC, and (3) Disabled.

**Table 67. Camden County Medicaid Eligibles, by Program Area
(2008 through October 2015)**

Year	Number of Eligibles, as of December 31 each year													
	Aged	Blind	Disabled	AFDC	Foster Care	Pregnant Women	Family Planning Waiver	Infants & Children	Medicaid CHIP	Medicare Catastrophic	Comprehensive Medicare-Aid (MQBQ-B-E)	Refugees Aliens	BCC	Total Eligibles
2008	87	4	148	261	4	21	n/a	324	33	24	n/a	0	0	906
2009	77	4	150	321	4	13	n/a	360	40	31	n/a	0	0	1,000
2010	73	3	164	312	2	19	n/a	404	32	33	n/a	0	0	1,041
2011	68	3	172	285	3	11	n/a	435	23	40	n/a	0	0	1,040
2012	74	4	178	261	3	21	n/a	433	31	44	n/a	0	0	1,049
2013	83	4	169	267	1	17	n/a	442	35	48	n/a	0	0	1,066
2014	77	4	183	272	0	6	68	377	86	n/a	44	1	1	1,119
October, 2015	77	3	187	350	1	6	83	266	66	n/a	45	0	1	1,087

Sources: 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) and NC Division of Medical Assistance, Statistics and Reports, Medicaid Data: Authorized Eligibles by County and Program Aid Category. State Fiscal Year Reports: SFY 2015 Monthly Medicaid/Health Choice Enrollees -- County Totals. <http://www2.ncdhhs.gov/dmA/elig/index.htm>.

AFDC - Medicaid Aid to Families with Dependent Children

BCC - Breast and Cervical Cancer Program

HealthCheck 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, HealthCheck EPSDT covers complete medical and dental check-ups, provides vision and hearing screenings, and referrals for treatment (40).

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

- The HealthCheck *participation ratio* for Camden County children in FY2011-12 was 28% lower than the participation ratio in FY2008-09. During this same time interval the *number* of eligible Camden County children decreased 11%.
- The HealthCheck participation ratio in Camden County was below the comparable state ratio during each fiscal year cited.

**Table 68. Participation in HealthCheck (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
Camden County	705	379	76.5	767	622	52.9	819	636	50.6	786	640	55.0
Regional Average	2,235	1,211	71.8	2,282	1,955	47.2	2,296	1,896	46.1	2,264	1,922	52.1
Pamlico County	1,413	747	96.9	1,487	1,278	60.6	1,492	1,269	55.2	1,398	1,219	59.6
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>.

Medicaid Managed Care

The goal of Medicaid managed care is to create community health networks to achieve long-term quality, cost, access, and utilization objectives.

Overview

As of July 2011, over 80 percent of Medicaid beneficiaries were enrolled in some form of managed care. North Carolina operated a small risk-based, capitated managed care program called Health Care Connection, which began in 1986 in one county, but that program was terminated in 2006. The state currently operates managed care only through a primary care case management (PCCM) model. The state's PCCM program, called Carolina ACCESS (CA), began in 1991 in five counties and provided beneficiaries with a designated medical home and primary care provider to coordinate care. Children, non-elderly individuals with disabilities and low-income caretaker adults are enrolled on a mandatory basis, while older adults, American Indian/Alaska Natives, Foster Care Children, dual eligibles, pregnant women, and special needs children have the option to enroll. By 1997, the program expanded statewide. In 1998, the state developed an enhanced case management program to support Carolina ACCESS primary care practices. It was originally called Access II and III but now referred to as Community Care of North Carolina (CCNC), which pays 14 community health networks a monthly fee to provide case management, data analysis, and quality improvement and training activities for primary

care practices participating in CCNC/Carolina Access. In 2008, CCNC’s care management model was expanded to Medicare-Medicaid dual enrollees and to Medicaid-only individuals with long-term care needs.

Since 2005, North Carolina has operated a limited benefit, pre-paid program under its 1915(b)/(c) Waiver for Mental Health (MH), Developmental Disability (DD), and Substance Abuse (SA) Services. The program began as a five-county pilot in the Piedmont region but was scheduled to be adopted statewide in 2013. The 1915(b)/(c) waiver uses public Local Management Entities (LMEs) to manage behavioral health and developmental disabilities services for most Medicaid beneficiaries with behavioral health needs on a mandatory basis. North Carolina also offers a Program for All-Inclusive Care for the Elderly (PACE), which provides all Medicare and Medicaid services to individuals over age 55 that require a nursing home level of care.

Participating Plans, Plan Selection, and Rate Setting

Under the CCNC program, North Carolina contracts with 14 community networks, which are each paid a per-member per-month fee to coordinate patient care. Networks are paid a higher fee to coordinate the needs of aged, blind, and disabled beneficiaries. All medical services delivered to beneficiaries are still reimbursed on a fee-for-service basis. For the 1915(b)/(c) waiver program, North Carolina contracts with three local, non-profit LMEs (Piedmont Behavioral Health, Highlands, and East Carolina Behavioral Health) to provide behavioral health services on a capitated basis.

Quality and Performance Incentives

CCNC/CA uses an elaborate Quality Measurement and Feedback (QMAF) program that collects a variety of chart review measures and claims-based measures, including HEDIS. Quality measures are reported to the primary care practices in order to encourage improvement relative to CCNC and NCQA, HEDIS and IPIP benchmarks. CCNC also conducts a CAHPS survey every three years for both adults and children. The MH/DD/SAS waiver does not collect quality measures but instead uses a variety performance measures to oversee the program (41).

The following table summarizes CCNC/CA enrollment data for the period from 2010-2013.

- The percent of Medicaid eligible persons in Camden County enrolled in CCNC/CA increased 17% over the period cited, from 69.0% in 2010 to 80.9% in 2013.
- Statewide, the percent of Medicaid eligible persons enrolled in CCNC/CA increased 11% over the same period, from 83.0% in 2010 to 92.0% in 2013.

Table 69. Community Care of NC/Carolina ACCESS Enrollment (2010-2013)

Location	December, 2010			December, 2011			December, 2012			December, 2013		
	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled
Camden County	981	677	69.0	979	735	75.1	998	796	79.8	993	803	80.9
<i>Regional Average</i>	3,013	2,495	80.1	3,057	2,605	83.0	3,078	2,755	87.6	3,030	2,742	88.6
Pamlico County	2,008	1,561	77.7	1,906	1,630	85.5	1,913	1,769	92.5	1,912	1,799	94.1
<i>State of NC</i>	1,362,207	1,130,474	83.0	1,427,273	1,236,638	86.6	1,475,108	1,335,393	90.5	1,473,219	1,355,483	92.0

Source: NC Division of Medical Assistance, Statistics and Reports, CCNA/CA: Medicaid Monthly Enrollment Reports. Years as Noted. <https://www2.ncdhhs.gov/dma/ca/enroll/index.htm>

HEALTH CARE PROVIDERS

Practitioners

One way to judge the supply of health professionals in a jurisdiction is to calculate the ratio of the number of health care providers to the number of persons in the population of that jurisdiction. 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 Camden County, Pamlico County, the Albemarle Region, the state of NC and the US for five key categories of health care professionals: physicians, primary care physicians, registered nurses, dentists and pharmacists.

- 2012 ratios of active health professionals per 10,000 population were *lower* in Camden County than in all the other jurisdictions for all categories of providers cited in the table.
- The Camden County ratios for all categories of health professionals except RNs equaled zero at some point over the period cited.

Table 70. Active Health Professionals per 10,000 Population (2010-2012)

Location	2010					2011					2012				
	MDs	Primary Care MDs	DDSs	RNs	Pharms	MDs	Primary Care MDs	DDS	RNs	Pharms	MDs	Primary Care MDs	DDS	RNs	Pharms
Camden County	1.0	1.0	0.0	18.0	0.0	1.0	1.0	0.0	18.1	0.0	0.0	0.0	0.0	17.13	2.02
<i>Regional Average</i>	8.6	4.6	1.6	49.7	4.2	8.6	3.9	1.7	49.4	4.0	8.3	3.7	1.6	50.3	4.3
Pamlico County	4.6	3.8	3.8	34.2	5.3	6.1	4.5	3.8	38.6	6.1	5.31	4.55	3.79	38.67	6.07
State of NC	21.7	9.4	4.4	97.3	9.2	22.1	7.8	4.4	98.6	9.5	22.31	7.58	4.51	99.56	10.06
United States	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	8.2	5.7	92	8.3

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 (2010, 2011, 2012); <http://www.shepscenter.unc.edu/hp/publications.htm>.

Since the health professional ratio for dentists in Camden County is so low to begin with, accessing dental care may be a tremendous problem for Medicaid enrollees. According to the NC Division of Medical Assistance Medicaid *Find a Doctor* website, as of February 2016 there were no dentists physically located in Camden County that accepted Medicaid patients. According to local information, there were five in the ARHS region that did: the ECU School of Dental Medicine in Elizabeth City, and one private practitioner each in Chowan, Currituck, Perquimans and Pasquotank County (42).

The following table lists the number of active health professionals in Camden County and the ARHS region, by specialty, for 2012:

- In the period cited the only categories of health professionals active in Camden County were dental hygienists, registered nurses, LPNs, occupational therapists, pharmacists, and physical therapists.
- At the regional level there were no general practitioners and only one podiatrist listed in 2012.

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

Category of Professionals	Camden County	Regional Total
Physicians		
Primary Care Physicians	0	63
<i>Family Practice</i>	0	23
<i>General Practice</i>	0	0
<i>Internal Medicine</i>	0	19
<i>Obstetrics/Gynecology</i>	0	8
<i>Pediatrics</i>	0	13
Other Specialities	0	94
Dentists and Dental Hygienists		
Dentists	0	25
Dental Hygienists	3	32
Nurses		
Registered Nurses	17	835
<i>Nurse Practitioners</i>	0	29
<i>Certified Nurse Midwives</i>	0	3
Licensed Practical Nurses	3	299
Other Health Professionals		
Chiropractors	0	11
Occupational Therapists	2	20
Occupational Therapy Assistants	0	14
Optometrists	0	6
Pharmacists	2	72
Physical Therapists	1	37
Physical Therapy Assistants	0	40
Physician Assistants	0	36
Podiatrists	0	1
Practicing Psychologists	0	12
Psychological Assistants	0	8
Respiratory Therapists	0	32

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. 2012 North Carolina Health Professions Databook;

http://www.shepscenter.unc.edu/hp/publications/2012_HPDS_DataBook.pdf.

Hospitals

The next table lists the number of general hospital beds in the comparator jurisdictions. There is no hospital in either Camden or Pamlico County.

**Table 72. Number of General Hospital Beds¹
(2010-2015)**

Location	2010	2011	2012	2013	2014	2015
Camden County	0	0	0	0	0	0
<i>Regional Average</i>	34	34	34	34	34	34
Pamlico County	0	0	0	0	0	0
State of NC	20,699	20,649	20,757	20,799	20,919	21,370

¹ Defined as "general acute care beds" in hospitals; that is, beds which are designated for short-stay use. Excluded are beds in service for dedicated clinical research, substance abuse, psychiatry, rehabilitation, hospice, and long-term care. Also excluded are beds in all federal hospitals and state hospitals.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 524); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Other Hospitals

The following table lists the eight hospitals in northeastern NC that are accessed by Camden County residents. Of these, only Vidant Medical Center in Greenville offers a Trauma Center (rated for Level I care).

**Table 73. Licensed Hospitals in Northeastern NC
(February, 2016)**

Facility Name	Location	No. Beds	Operating Rooms
Bertie County			
Vidant Bertie Hospital	Windsor	General - 6	Shared inpatient/ambulatory surgery - 2
Chowan County			
Vidant Chowan Hospital	Edenton	General - 49	Shared inpatient/ambulatory surgery - 3
		Nursing Home - 40	Endoscopy - 1
Dare County			
The Outer Banks Hospital, Inc.	Nags Head	General - 21	C-section - 1
			Shared inpatient/ambulatory surgery - 2
			Endoscopy - 2
Hertford County			
Vidant Roanoke-Chowan Hospital	Ahoskie	General - 86	C-section - 1
		Psychiatric - 28	Shared inpatient/ambulatory surgery - 5
			Endoscopy - 1
Martin County			
Martin General Hospital	Williamston	General - 49	Shared inpatient/ambulatory surgery - 2
			Endoscopy - 1
Pasquotank County			
Albemarle Hospital	Elizabeth City	General - 182	C-section - 2
			Shared inpatient/ambulatory surgery - 8
			Endoscopy - 3
Pitt County			
Vidant Medical Center	Greenville	General - 782	C-section - 4
		Rehabilitation - 75	Shared inpatient/ambulatory surgery - 26
		Psychiatric - 52	Endoscopy - 2
			Other inpatient - 3
Washington County			
Washington County Hospital	Plymouth	General - 49	Shared inpatient/ambulatory surgery - 2

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

Residents of Camden County also may seek medical services in southeastern VA, primarily in the area referred to as the *Tidewater Region*. The following table lists hospitals in the cities in this region.

**Table 74. Hospitals in Southeastern Virginia
(February, 2013)**

Hospital	Location
Chesapeake General Hospital	Chesapeake
Hampton VA Medical Center	Hampton
Riverside Behavioral Health Center	Hampton
Sentara Careplex Hospital	Hampton
Mary Immaculate Hospital	Newport News
Riverside Memorial Medical Center	Newport News
Riverside Rehabilitation Institute	Newport News
Children's Hospital of the Kings Daughters	Norfolk
DePaul Medical Center	Norfolk
Lake Taylor Hospital	Norfolk
Sentara Heart Hospital	Norfolk
Sentara Leigh Hospital	Norfolk
Sentara Norfolk General Hospital	Norfolk
Tidewater Psychiatric Institute	Norfolk
Maryview Medical Center	Portsmouth
Naval Medical Center	Portsmouth
Sentara Obici Hospital	Suffolk
Sentara Bayside Hospital	Virginia Beach
Sentara Princess Anne Hospital	Virginia Beach
Sentara Virginia Beach General Hospital	Virginia Beach
Virginia Beach Psychiatric Center	Virginia Beach

Source: The Agape Center, Virginia Hospitals;
<http://www.theagapecenter.com/Hospitals/Virginia.htm>.

Hospital Utilization

The five hospitals partnering in the development of this CHA—Vidant Bertie Hospital (VBER), Vidant Chowan Hospital (VCHO), Vidant Roanoke-Chowan Hospital (VROA), The Outer Banks Hospital (TOBH) and Sentara Albemarle Medical Center (SAMC)—have made available extensive utilization data, some of which will be examined in conjunction with health statistics in a later section of this report. Detailed hospital utilization data is available in a county-specific Excel workbook available as a companion to this report.

Presented below are hospital utilization summaries for the population of Camden County residents who (1) were patients in the emergency department, and (2) were hospitalized as inpatients at any of the five hospitals in 2013 and 2014. The data are stratified demographically by gender, age group and race/ethnicity; in addition, data also is categorized according to the primary payor groups associated with the utilization records.

By convention, the analyst included patient counts from a hospital only in cases where the total number of patients at that hospital over the two-year period cited exceeded a threshold of 20. For that reason, data from fewer than five hospitals are included in some tables.

Notes relevant for the discussion of each table appear *after* the table.

Emergency Department (ED) Utilization

The emergency departments (EDs) of hospitals have become providers of convenience, urgency, or last resort for many healthcare consumers, and an examination of ED utilization patterns can reveal much about the healthcare resource status of a community.

Table 75. ED Discharges by Gender and Age Group

Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Female	Male	< 18	18-64	≥ 65	
2013	1,954	1,543	769	2,259	469	3,497
2014	1,911	1,480	781	2,132	478	3,391
Total	3,865	3,023	1,550	4,391	947	6,888

- The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Females accounted for 56% of all ED discharges over the two-year period cited. Females compose 50% of the total Camden County population
- Males accounted for 44% of all ED discharges over the same period. Males compose 50% of the total Camden County population.
- Minors under the age of 18 (“pediatric” patients) accounted for 23% of all ED discharges over the two-year period cited. This age group composes a total of 23% of the total Camden County population.
- Persons between the ages of 18 and 64 (“adult” patients) accounted for 64% of all ED discharges over the same period. This age group composes a total of 62% of the total Camden County population.
- Persons age 65 and older (“geriatric” patients) accounted for 14% of all ED discharges over the same three-year period. This age group composes a total of 15% of the total Camden County population.

Table 76. ED Discharges by Racial/Ethnic Group

Fiscal Year	Am Ind/ Alaskan	Asian	Black	Hispanic	Other	Unknown	White	Total No. Discharges
2013	2	11	742	38	21	9	2,674	3,497
2014	0	19	687	36	14	14	2,621	3,391
Total	2	30	1,429	74	35	23	5,295	6,888

- The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Blacks accounted for 21% of all ED discharges over the two-year period cited. Blacks compose 14% of the total Camden County population
- Whites accounted for 77% of all ED discharges over the same period. Whites compose 82% of the total Camden County population.
- Hispanics accounted for 1.1% of all ED discharges over the same period. Hispanics compose 2.4% of the total Camden County population. (Keep in mind that in US Census terms, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals tend to consider Hispanic ethnicity to be a separate racial category.)

Table 77. ED Discharges by Payor Group

Fiscal Year	Comm	M-aid	M-aid Mgd Care	M-care	M-care Mgd Care	Self-Pay	Military	Other	Total No. Discharges
2013	781	180	600	570	0	707	478	181	3,497
2014	735	213	502	591	8	671	500	171	3,391
Total	1,516	393	1,102	1,161	8	1,378	978	352	6,888
Group as % of Total	22.0	5.7	16.0	16.9	0.1	20.0	14.2	5.1	100%

- The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Note that Sentara Albemarle Medical Center categorizes payor groups differently than do the Vidant Hospitals. For that reason, in order to allow direct comparisons payor groups have been compressed to Commercial, Medicaid, Medicaid Managed Care, Medicare, Medicare Managed Care, Self-Pay, Military, and the broad category “Other”. The category “Other” includes (but is not limited to) Medcost, other managed care payors, Workers Compensation, and other less frequent payors.
- The most common ED payor groups, in descending order, were:
 - Commercial (22.0%)
 - Self-Pay (20.0%)
 - Medicare (16.9%)
 - Medicaid Managed Care (16.0%)
 - Military (14.2%)

Inpatient (IP) Hospital Utilization

Inpatient hospitalizations may be the result of illness, injury, or sometimes elective procedure.

Table 78. IP Discharges by Gender and Age Group

Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Female	Male	< 18	18-64	≥ 65	
2013	286	226	71	213	228	512
2014	265	203	63	220	185	468
Total	551	429	134	413	413	980

- The hospitals qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited is Sentara Albemarle Medical Center only.
- Females accounted for 56% of all IP discharges over the two-year period cited. Females compose 50% of the total Camden County population.
- Males accounted for 44% of all IP discharges over the same period. Males compose 50% of the total Camden County population.
- Minors under the age of 18 (“pediatric” patients) accounted for 14% of all IP discharges over the three-year period cited. This age group composes a total of 23% of the total Camden County population.
- Persons between the ages of 18 and 64 (“adult” patients) accounted for 42% of all IP discharges over the same period. This age group composes a total of 62% of the total Camden County population.

- Persons age 65 and older (“geriatric” patients) accounted for 42% of all IP discharges over the same three-year period. This age group composes a total of 15% of the total Camden County population. Note that the proportion of geriatric (>65) IP discharges is almost three times the proportion of persons > 65 in the Camden County population.

Table 79. IP Discharges by Racial/Ethnic Group

Fiscal Year	Am Ind/Alaskan	Asian	Black	Hispanic	Other	Unknown	White	Total No. Discharges
2013	0	3	105	4	2	6	392	512
2014	0	3	91	1	4	2	367	468
Total	0	6	196	5	6	8	759	980

- The hospital qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited is: Sentara Albemarle Medical Center only.
- Blacks accounted for 20% of all IP discharges over the two-year period cited. Blacks compose 14% of the total Camden County population.
- Whites accounted for 77% of all IP discharges over the same period. Whites compose 82% of the total Camden County population.
- Hispanics accounted for 0.5% of all IP discharges over the same period. Hispanics compose 2.4% of the total Camden County population. (Keep in mind that in US Census terms, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals tend to consider Hispanic ethnicity to be a separate racial category.)

Table 80. IP Discharges by Payor Group

Fiscal Year	Comm	M-aid	M-aid Mgd Care	M-care	M-care Mgd Care	Self-Pay	Military	Other	Total No. Discharges
2013	89	55	37	241	0	41	28	21	512
2014	126	36	12	206	5	30	33	20	468
Total	215	91	49	447	5	71	61	41	980
Group as % of Total	21.9	9.3	5.0	45.6	0.5	7.2	6.2	4.2	100%

- The hospital qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited is: Sentara Albemarle Medical Center only.
- Note that Sentara Albemarle Medical Center categorizes payor groups differently than do the Vidant Hospitals. For that reason, in order to allow direct comparisons payor groups have been compressed to Commercial, Medicaid, Medicaid Managed Care, Medicare, Medicare Managed Care, Self-Pay, Military, and the broad category “Other”. The category “Other” includes (but is not limited to) Medcost, other managed care payors, Workers Compensation, and other less frequent payors.
- The most common IP payor groups, in descending order, were:
 - Medicare (45.6%)
 - Commercial (21.9%)
 - Medicaid (9.3%)
 - Self-Pay (7.2%)

County Emergency Medical Services

Camden County partners with Pasquotank County to deliver EMS services, so the EMS data from the two counties is co-mingled. Below is a summary report of the reasons for Pasquotank-Camden EMS dispatches over the three fiscal year period from July 1, 2012 through June 30, 2015.

- Convalescent transport generated the largest percentage of all EMS dispatches in the period cited: almost 35%

Of the specified, medical reasons for EMS dispatch, the largest proportions were generated by:

- Sick persons (2,505 dispatches, or approximately 8% of the total dispatches)
- Falls (2,100 dispatches, or almost 7% of the total)
- Breathing problems (1,922 dispatches, or approximately 6% of the total)
- Motor vehicle accidents (1,630 dispatches, or approximately 5% of the total)
- Chest pain/discomfort (1,249 dispatches, or approximately 4% of the total)

**Table 81. Reasons for EMS Dispatch, Pasquotank-Camden EMS
FY2013 through FY2015**

Description	Count	Percent	Description	Count	Percent
No entry	239	0.76	Gunshot wound/Stabbing	45	0.14
Behavioral/Psychiatric	3	0.01	Headache	123	0.39
Cardiac rhythm disturbance	2	0.01	Heart problems	81	0.26
Pregnancy/OB delivery	78	0.25	Hemorrhage/Laceration	102	0.32
Head injury unspecified	3	0.01	Hemorrhage/Bleeding	316	1.01
Stings/venomous bites	1	0.00	Hemorrhage unspecified	1	0.00
Electrocution	3	0.01	Heat exhaustion	1	0.00
Abdominal pain/problems	681	2.17	Hypoglycemia	6	0.02
Alcohol abuse unspecified	3	0.01	Hypotension	7	0.02
Allergic reaction	133	0.42	Hypertension	7	0.02
Altered level of consciousness	21	0.07	Interfacility transport	1140	3.63
Altered mental status	9	0.03	Irregular heart rate	1	0.00
Anxiety	2	0.01	Laceration	2	0.01
Asthma	3	0.01	Lethargic	2	0.01
Assault	290	0.92	Mass causality incident	6	0.02
Animal bite	28	0.09	Motor vehicle accident	1630	5.19
Breathing problems	1922	6.12	Motor vehicle accident w. pedestrian	3	0.01
Burn unspecified	24	0.08	Nausea with vomiting	14	0.04
Cancer	1	0.00	Nosebleed	1	0.00
Cardiac arrest	214	0.68	Numbness/Tingling sensation	3	0.01
Carbon monoxide poisoning	1	0.00	Overdose	10	0.03
Care unspecified	27	0.09	Pain - back	328	1.04
Chest pain (other)	2	0.01	Pain - generalized	29	0.09
Choking	70	0.22	Panic attack	2	0.01
Chest pain/Discomfort	1249	3.98	Pain - neck	2	0.01
CH Resp Altered LOC	1	0.00	Pneumonia	1	0.00
Cold/Heat Exposure	18	0.06	Psychiatric problem	174	0.55
Complication unpecific device	2	0.01	Rash/Itching	3	0.01
Confusion	1	0.00	Respiratory distress	4	0.01
Constipation	1	0.00	Sickle-cell crisis	6	0.02
Doctor consultation	1	0.00	Seizure	689	2.19
Convalescence unspecified	3	0.01	Sick person	2505	7.98
Cough with hemorrhage	1	0.00	Smoke inhalation	1	0.00
CVA/Stroke	384	1.22	Shortness of breath	3	0.01
Death	3	0.01	Standby	879	2.80
Dehydration	1	0.00	Suicide unspecified	5	0.02
Delirium tremens	1	0.00	Suicidal ideation	4	0.01
Diabetic Problem/Symptoms	543	1.73	Syncope/Fainting	15	0.05
Diarrhea	2	0.01	Tachycardia	1	0.00
Difficulty breathing	12	0.04	Transport - convalescent	10879	34.65
Difficulty walking	1	0.00	Transport only	7	0.02
Dizziness	15	0.05	Trapped/Inaccessible incident	8	0.03
Drainage/Discharge	1	0.00	Trauma injury	390	1.24
Drowning Submersion	9	0.03	Trauma - blunt	1	0.00
Drug ingestion/Poisoning	177	0.56	Unconscious/Fainting	1005	3.20
Edema/Swelling	2	0.01	Unknown problem	1395	4.44
Emergency transport	1191	3.79	Unresponsive patient	11	0.04
Eye problem	30	0.10	Unspecified evaluation	3	0.01
Fall	2100	6.69	Vomiting blood	4	0.01
Fever	13	0.04	Vomiting alone	6	0.02
Fractured bone closed	2	0.01	Weakness - generalized	11	0.04
G-Tube problems	2	0.01	TOTAL	31398	100.00

Source: Personal communication Jerry Newell, EMT-P, Director, Pasquotank-Camden EMS to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, November 10, 2015

Public Health Department: Albemarle Regional Health Services

Albemarle Regional Health Services (ARHS) is a regional Public Health agency in rural, northeastern NC serving the seven counties of Bertie, Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans.

ARHS programs include children's developmental services, home care and hospice, adult day health, clinical services, immunizations, women, infants, and children, diabetes management, health promotion and health education, disaster planning and response, transportation, environmental health, and waste management. Specific services may vary from county-to-county within the service region.

Regionally, ARHS administers the Children's Developmental Service Agency (CDSA), the Albemarle Regional Solid Waste Management Authority, the Inter-County Public Transportation Authority (ICPTA), and the Perquimans-Chowan-Gates (PCG) Landfill and Convenience Sites (43).

Camden County Health Department

The Camden County Health Department is physically located in Camden. ARHS programs offered in Camden County include:

AgriSafe of the Albemarle

AgriSafe is a program designed to make life on the farm safer and healthier by making healthcare more accessible for farmers, their families and workers. The program strives to provide health and safety resources to increase access to preventive services for farm families and the agricultural community. Services are provided on the farm, at agricultural events, and other locations convenient to farm families. Health screenings and farm health/safety information are currently provided at no cost. Screenings include respirator fit testing, blood pressure checks, blood sugar monitoring, pulmonary function testing (spirometry), and hearing and vision screenings.

Clinical Services

- **Child Health Services** - Primary child health services are provided in an effort to detect problems so that appropriate interventions can begin as early as possible. The focus of child health is the total well-being of the child; emotional, social, health, and environmental. Local agencies work as a team to ensure that optimal level of care for the child is achieved. An additional program goal is to guarantee that Medicaid-eligible children receive all recommended child health services.
- **Immunizations.** Immunizations are provided to children and adults in an effort to prevent communicable diseases such as: polio, pertussis, tetanus, mumps, measles, rubella, diphtheria, and hepatitis. The goal is to have all children fully immunized by two years of age and then to receive recommended booster doses. Adult immunizations include the annual influenza and pneumonia campaign, in addition to all recommended adult immunizations.
- **WIC/Nutrition.** Women, Infants, and Children (WIC) is a nutrition education and food supplement program for children birth to five and women who are pregnant or breastfeeding. All clients must meet medical and financial eligibility requirements.

- **General Communicable Disease Control.** Surveillance of various communicable diseases including educational counseling for individuals is accomplished. Bioterrorism educational materials are available to communities related to preparedness. Presentations and overviews of potential biological, chemical, and nuclear agents can be given by the ARHS Team.
- **Sexually Transmitted Diseases.** STD and HIV diagnosis, treatment, and counseling is available. An appointment may be required. There are no fees associated with STD services.
- **Women's Preventive Health.** Family Planning helps women and men maintain optimal reproductive health and assists families in determining the number, timing, and spacing of their children.
- **Maternal Health.** Primary Prenatal Health Care services are provided in an effort to reduce infant mortality and ensure that all pregnant women receive the highest level of health care. The health department maintains a close working relationship with the area's private physicians and local hospitals for the provision of deliveries, emergency and specialized care. High Risk Perinatal Clinic was established to improve the pregnancy outcomes of women with pregnancy complications. In addition to comprehensive health care, patients receive nutrition education, medical social work intervention, and childbirth preparation and parenting education. Case management services are also offered and are an integral component of the maternal patient's health care services to ensure that all health, social, mental, and environmental needs are met.
- **Adult Health.** Comprehensive physical assessments and clinical services are provided for all adults in an effort to detect and prevent chronic diseases, which may cause disability or premature mortality. The Breast and Cervical Cancer Control Program (BCCCP) provides access to screening services for financially and medically eligible women.
- **Diabetes Care Program.** Due to the prevalence of diabetes within the region, ARHS provides a comprehensive Diabetes Care Center for individuals living with diabetes and their families. Individualized counseling, follow-up, nutrition education, and disease management are integral components.

Women, Infants, and Children (WIC)

WIC is a federal program designed to provide food to low-income pregnant, postpartum and breastfeeding women, infants and children until the age of five. The program provides a combination of nutrition education, supplemental foods, breastfeeding promotion and support, and referrals for health care. WIC has proven effective in preventing and improving nutrition related health problems within its population.

Albemarle Regional Diabetes Care

Dedicated to providing education and support to individuals living with diabetes, the Albemarle Regional Diabetes Care Program works to counsel patients on blood sugar monitoring, physical activity, and proper nutrition. This program incorporates a team approach to diabetes care, working collaboratively with regional referring physicians and medical providers and focusing on medical care, education, and health promotion. The Albemarle Regional Diabetes Care Program is recognized by the American Diabetes Association for Quality Self-Management Education.

Health Education and Promotion

- **Health Education.** The Health Education Team begins with the assessment and identification of community health issues and problems. While identifying diseases as significant health problems that cause disability, mortality, premature death, and morbidity. Health Education Specialists utilize tools and expertise to analyze demographics and socioeconomic status data of the individual client within the community.
- **Healthy Communities.** Health promotion programming increases opportunities for healthy eating and physical activity opportunities in the schools, worksites, and communities. The environmental and policy changes promote a healthy lifestyle for all community members in the region and works to make it easier for people to eat healthy food and be physically active.

Environmental Health

ARHS Environmental Health ensures the health and safety of residents while reducing the threat of the spread of communicable diseases through evaluation and education of environmental health policies and regulations. EH activities include:

- Private Drinking Well Inspections
- Swimming Pool Inspections
- Communicable Disease Investigations
- Food & Lodging Inspections
- Management Entity
- Lead Investigations
- On-Site Wastewater

Inter-County Public Transportation Authority

The intent of ICPTA is to provide high quality transportation services to the people who live in or visit the five-county service area of: Pasquotank, Perquimans, Camden, Chowan and Currituck. ICPTA services are intended to transport the general public to nutrition sites, medical appointments and other locations in order to access services or attend activities related to daily living, while promoting improved quality of life.

Preparedness and Response

The ARHS Public Health Preparedness and Response (PHP&R) program works with the communities in the region and local emergency management partners and response agencies to keep everyone safe and prepared for any disaster, but especially the hurricanes that frequent the region.

Children's Developmental Service Agency

The catchment area for this program includes 10 counties in the northeastern corner of the state. Program personnel are physically housed in the counties of Dare, Hertford, Washington and Pasquotank. The CDSA serves children age birth to three years of age suspected of having developmental delays, and their families. Evaluations for the purpose of determining eligibility and planning, assurance of quality service provision and case management services are provided in partnerships with parents and community providers.

Health Department Utilization Data

ARHS has provided data on the utilization of agency services at the county level. The following table summarizes the number of unduplicated patients and total visits at the Camden County Health Department, by program area.

- The programs seeing the largest number of patients at the Camden County Health Department in Camden over the three years cited were, in descending order, immunization, family planning, and adult health.

Table 82. Camden County Health Department Service Utilization, by Program (FY2013-FY2015)

Program	Unduplicated Patient Count							
	FY2013		FY2014		FY2015		Total	
	Patients	Visits	Patients	Visits	Patients	Visits	Patients	Visits
Adult Health	125	204	75	101	91	133	291	438
Child Health	8	8	3	3	7	7	18	18
Communicable Disease	0	0	0	0	3	3	3	3
Dental Health	324	414	0	0	0	0	324	414
Family Planning	132	256	117	248	109	217	358	721
Health Check Child Health Physicals	51	57	33	37	24	25	108	119
High Risk	0	0	0	0	0	0	0	0
Immunization	539	598	236	254	319	345	1,094	1,197
Maternal Health	13	59	21	48	27	92	61	199
Other Services	12	12	10	10	8	8	30	30
STD	40	48	35	42	17	17	92	107
Tuberculosis	3	4	0	0	0	0	3	4
TOTAL	1,247	1,660	530	743	605	847	2,382	3,250

Source: Albemarle Regional Health Services

Federally-Qualified Health Centers

The Federally-Qualified Health Center (FQHC) benefit under Medicare was added effective October 1, 1991, when the Social Security Act was amended to qualify "safety net" providers such as community health centers, public housing centers, outpatient health programs funded by the Indian Health Service, and programs serving migrants and the homeless to receive enhanced reimbursement from Medicare and Medicaid, as well as other benefits.

The main purpose of the FQHC Program is to enhance the provision of primary care services in underserved urban and rural communities. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. Certain tribal organizations and FQHC Look-Alikes (an organization that meets PHS Section 330 eligibility requirements, but

does not receive grant funding) also may receive special Medicare and Medicaid reimbursement (44).

As of October 20, 2016 the US Health Resources and Services Administration (HRSA) listed one FQHC facility within 25 miles of Camden, the county seat of Camden County; this facility, Gateway Community Health Center, was physically located in Elizabeth City (Pasquotank County) (45):

School Health

School nurses facilitate health services such as immunizations, follow-up, communicable disease control, vision and hearing screening and follow-up, health assessments and referrals, health counseling and information for students and families. School nurses actively collaborate with school personnel, students and parents to create health plans and to administer medication. In addition, they provide prevention, crisis, and conflict resolution. At the time this report was prepared, Camden County Schools employed three nurses who together served Camden County High School and Cam Tech High, Grandy Primary School and Camden Intermediate School, and Camden Middle School (46).

Student-to-School Nurse Ratio

The table below presents student to school nurse ratios for the four jurisdictions being compared.

- The average student-to-school nurse ratio in Camden County for the most recent-period cited was 633:1, better than the recommended maximum of 750:1.

**Table 83. Student to School Nurse Ratio
SY2009-10 through SY2012-13)**

Location	Student to School Nurse Ratio			
	SY2009-2010	SY2010-2011	SY2011-2012	SY2012-2013
Camden County	630	635	635	633
<i>Regional Average</i>	713	712	712	652
Pamlico County	272	316	316	318
<i>State of NC</i>	1,185	1,201	1,179	1,177

Source - NC DHHS, DPH, Women's and Children's Health, Facts & Figures, Data Reports & Publications. Annual School Health Services Reports, End-of-Year-Reports, years as listed. <http://www.ncdhhs.gov/dph/wch/stats/>.

School Nurse Reports

The table on the following page offers excerpts from the SY2014-2015 End-of-Year School Health Nursing Survey and Program Summary for Camden County Schools.

- The health conditions identified most frequently among Camden County students included ADD/ADHD, asthma, and autistic disorders including Asperger's Syndrome.

**Table 84. School Nurse Activities, Camden County Schools
(SY2014-2015)**

Nature of Activity	Services Provided/ Students Served	Nature of Activity	Services Provided/ Students Served
Health Counseling - Individual Session		Health Care Procedures Administered (continued)	
ADD/ADHD	17	Reinsertion of feeding tube	4
Asthma	34	Vagal Nerve Stimulator	1
Child abuse/neglect	5	Other	0
Chronic illness not otherwise listed	1	Identified Health Conditions among Students	
Depression (situational or chronic)	26	ADD/ADHD	192
Diabetes	15	Allergies (severe)	28
Hygiene	9	Asthma	169
Illness/injury recovery	1	Autistic disorders, including Asperger's Syndrome	45
Mental health issues not otherwise listed	20	Blood disorders not listed elsewhere	5
Nutrition	10	Cancer, including leukemia	4
Pregnancy	1	Cardiac condition	11
Puberty, reproductive health	18	Chromosomal/genetic conditions not otherwise listed	1
Seizure disorders	6	Chronic encopresis	6
Severe allergies	15	Concussion	5
Sickle cell	0	Cystic fibrosis	2
Substance abuse (including tobacco, prescription drugs, etc.)	12	Diabetes Type I	5
Suicidal ideation	14	Diabetes Type II	2
Violence/bullying	23	Eating disorders	3
Student Medications		Emotional/behavioral/psychiatric disorder not otherwise listed	7
Students on long-term medications	23	Gastrointestinal disorders (Crohn's, celiac disease, IBS, etc.)	19
Students on short-term medications	19	Hearing loss	4
Students on PRN (non-emergency) medications	52	Hemophilia	1
Students on emergency medications	179	Hydrocephalus	1
Health Care Procedures Administered		Hypertension	8
Blood glucose monitoring	6	Hypo/Hyperthyroidism	5
Clean intermittent catheterization	1	Metabolic conditions or endocrine disorders not otherwise listed	2
Central venous line monitoring	0	Migraine headache	32
Dressing change/Wound Care	0	Obesity >95%ile BMI	6
Epinephrine auto injector	0	Orthopedic disability (permanent)	5
Insulin injection	2	Other neurological condition not otherwise listed	2
Insulin pump	3	Other neuromuscular condition not otherwise listed	1
Glucagon injection	0	Renal/adrenal/kidney conditions including Addison's disease	13
Nebulizer treatment	7	Rheumatological conditions	1
Oxygen therapy	0	Seizure disorder/epilepsy	13
Pulse oximeter	0	Sickle Cell Anemia	1
Respirator care	0	Sickle Cell Trait (only)	2
Shunt care	0	Spina Bifida (myelomeningocele)	0
Tracheal suctioning (including tracheostomy care)	0	Traumatic brain injury	1
Stoma care (other than tracheal)	4	Visually impaired (uncorrectable)	7
Tube feeding	4		

Source: Personal communication from Laura Watson, School Nurse, Camden County Schools, to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, November 13, 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, family care homes, and adult care homes. Each category of long-term care is discussed subsequently, but the following table lists all the county facilities by name.

- There was a total of 30 long-term beds in Camden County as of February, 2016. Using the 2014 US Census estimate of the population age 65 and older (1,536) the ratio of long term care beds to the population age 65 and older was 1:51.

**Table 85. NC-Licensed Long-Term Care Facilities in Camden County
(February, 2016)**

Facility Type/Name	Location	# Beds SNF (ACH) ¹	Star Rating (If applicable)
Adult Care Homes/Homes for the Aged			
Needham Adult Care Home	Shiloh	24	3
Family Care Homes			
Needham Family Care Home	Shiloh	6	3
Nursing Homes/Homes for the Aged			
None			

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 (47).

The table below presents the number of nursing facility beds in the jurisdictions being compared. Note that the local figures have not changed in seven years.

- At the time this report was prepared, there were no nursing homes in Camden County.

**Table 86. Number of Nursing Facility Beds
(2005-2015)**

Location	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Camden County	0	0	0	0	0	0	0	0	0	0	0
<i>Regional Average</i>	118	118	118	118	118	118	118	112	112	112	111
Pamlico County	96	96	96	96	96	96	96	96	96	96	96
State of NC	43,987	44,248	44,210	44,234	44,315	45,143	45,382	43,470	43,606	43,955	43,857

Note: this count includes beds licensed as nursing facility beds, meaning those offering a level of care less than that offered in an acute care hospital, but providing licensed nursing coverage 24 hours a day, seven days a week.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 513); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Adult 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 (48).

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.

- As cited previously, at the time this report was prepared there was one state-licensed adult care home in Camden County: Needham Adult Care Home in Shiloh (24 beds).
- In addition, there was one state-licensed family care home in Camden County, Needham Family Care Home, with six beds.

In January, 2009, NC Division of Health Services Regulation introduced a “Star Rated Certificate” program to provide consumers with more information about the quality of care offered by the state’s adult care homes and family care homes. The Star Rated Certificate program is based on an inspections-related point scale, and ratings range from zero to four stars (49).

- The one adult care home and family care home in Camden County are each rated three stars.

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. The table below lists the home care, home health, and hospice providers in the ARHS Region, including those serving Bertie County. Note that there may be additional providers that refer to themselves as “home health service (or care) providers”; the table below lists only those licensed by the state.

Table 87. NC-Licensed Home Care, Home Health and Hospice Service Providers in the ARHS Region (As of December, 2016)

Facility Name	County	City	Licensed for	Accredited
Albemarle Home Care and Hospice	Bertie	Windsor	Home Care, Home Health	yes
Definitive Touch Home Care	Bertie	Aulander	Home Care	no
Home Life Care Inc	Bertie	Windsor	Home Care	no
Positive Step Home Care Agency	Bertie	Windsor	Home Care	no
Quality Home Staffing, Inc	Bertie	Windsor	Home Care	no
Sure Care Health Services	Bertie	Kelford	Home Care	no
Vidant Home Health and Hospice	Bertie	Windsor	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Camden	Camden	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Chowan	Edenton	Home Care, Home Health	yes
Continuum Home Care of Edenton	Chowan	Edenton	Home Care	no
Continuum Home Care and Hospice of Edenton	Chowan	Edenton	Hospice facilities	no
Health Care Options	Chowan	Edenton	Home Care	no
Home Life Care Inc	Chowan	Edenton	Home Care	no
Albemarle Home Care and Hospice	Currituck	Poplar Branch	Home Care, Home Health	yes
Outer Banks Home Care	Currituck	Harbinger	Home Care	no
Hertford-Gates Home Health Agency	Gates	Gatesville	Home Care, Home Health	no
Albemarle Home Care and Hospice	Pasquotank	Elizabeth City	Home Care, Home Health, Hospice facilities	yes
Carolina East Home Care Agency	Pasquotank	Elizabeth City	Home Care	no
Coastal Rehabilitation, Inc	Pasquotank	Elizabeth City	Home Care	no
Community Home Care and Hospice	Pasquotank	Elizabeth City	Hospice facilities	yes
East Carolina Home Care Inc	Pasquotank	Elizabeth City	Home Care	no
Home Life Care Inc	Pasquotank	Elizabeth City	Home Care	no
Lincare, Inc	Pasquotank	Elizabeth City	Home Care	no
Quality Home Staffing, Inc	Pasquotank	Elizabeth City	Home Care	no
ResCare HomeCare	Pasquotank	Elizabeth City	Home Care	no
Sentara Home Care Services	Pasquotank	Elizabeth City	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Perquimans	Hertford	Home Care, Home Health	yes

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

Adult Day Care/Adult Day Health Centers

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 (50).

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 (51).

The NCDAAS did not list any adult day care/adult day health centers for Camden County at the time this report was developed. However, *DayBreak Adult Day Health Center*, a program of Albemarle Home Care, provides care and support for adults who, due to frailty or physical disability, require assistance during the day. Daybreak provides a range of activities designed to promote social, physical, and emotional well-being. The agency's facility is located in Elizabeth City (52).

Mental Health Services and Facilities

Local LME/MCO

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 governmental 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 also 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 Camden County was Trillium Health Resources (THR). THR serves a total of 24 counties in eastern NC, including all seven counties served by ARHS (53). THR's responsibility is to connect individuals and families to the help they need when they need it. It also is responsible for managing state and federally funded services for people who receive Medicaid, are uninsured or cannot afford services.

Trillium does not provide direct care. Instead, partnering with agencies and licensed therapists in its Provider Network to offer services and supports to people in need in or near their own communities. It also works collaboratively with local non-profits, other governmental agencies, medical providers, and hospitals to create a holistic system of total patient care that recognizes all needs of an individual (54).

Services offered include: diagnostic assessment, outpatient therapy, multi-systemic therapy, psychosocial rehabilitation, developmental therapy, intensive in-home services, medication management, substance abuse residential care, day treatment, community respite, group living, supportive living, supportive employment, substance abuse treatment (outpatient and residential), day activity and vocational program for the developmentally disabled, personal assistance, and targeted case management.

THR provides an on-line "Find a Provider" tool on its website (<http://www.trilliumhealthresources.org/en/For-Providers/Provider-Directory/>) that consumers can use to find agencies and group practices, hospitals or licensed independent practitioners who contract with this LME/MCO. The THR Network Provider Directory is updated on a regular basis. THR can also assist clients with services and supports through direct contact with the Trillium Health Resources Call Center at 1-877-685-2415. Since it is subject to change, the list of Camden County mental health providers in the THR network is not presented in this document.

In-County Mental Health Facilities

There is a list of NC-licensed mental health facilities (not providers) physically located in Camden County, as shown in the following table. The listed facility, located in Shiloh, provides supervised living services for the developmentally disabled.

Table 88. NC-Licensed Mental Health Facilities (G.S. 122C) in Camden County (February, 2016)

Operator/Name of Facility	Location	Category	Capacity
Life, Inc. Wickham Road Facility	Shiloh	Supervised living, developmentally disabled adult	6

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>.

Accessing mental health services is sometimes a significant problem for patients whose medical insurance is provided by Medicaid or NC Health Choice. To help them, the NC Division of Medical Assistance maintains a list of mental health *providers* who accept patients with Medicaid or NC Health Choice. A recent listing for Camden County appears in the table below.

- At the time this list was assembled, there were two such providers in Camden County.

Table 89. Mental Health Providers Accepting Medicaid or NC Health Choice Patients, Camden County (September 2015)

Provider Name	Provider Type	Specialty	Location
Internal Family Relations	Group Provider	Mental Health Multi-Speciality Group	Camden
Lynn M. Olsefski	Individual Provider	Licensed Clinical Social Worker	Camden

Source: NC Division of Medical Assistance, Medicaid, Find a Doctor, NC Mental Health Providers; <http://dma.ncdhhs.gov/find-a-doctor/mental-health-providers>.

Other Healthcare Resources

The following table lists other healthcare facilities in the Albemarle Region that are licensed by the state of NC. Note that none were physically located in Camden County

- As of February, 2016 there were no NC-licensed ambulatory surgical facilities or nursing pools in the Albemarle Region.
- There were two NC-licensed cardiac rehabilitation facilities in the region: the Cardiopulmonary Rehabilitation Program at Sentara Albemarle Medical Center in Elizabeth City, and HealthSteps in Edenton.

**Table 90. Other NC Licensed Healthcare Facilities in the Albemarle Region
(As of February, 2016)**

Type and Name of Facility	County	Location
Licensed Ambulatory Surgical Facilities		
None		
Licensed Cardiac Rehabilitation Facilities		
Sentara Albemarle Medical Center	Pasquotank	Elizabeth City
HealthSteps (East Carolina Health - Chowan Inc)	Chowan	Edenton
Licensed Nursing Pools		
None		

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

Dialysis Centers

The table below lists dialysis centers in the Albemarle Region, none of which were physically located in Camden County.

**Table 91. Dialysis Centers in the Albemarle Region
(2012)**

Name of Facility	County	Location	Features
BMA of Windsor	Bertie	Windsor	20 hemodialysis stations, no evening hours
Edenton Dialysis	Chowan	Edenton	17 hemodialysis stations; no evening hours
Elizabeth City Dialysis	Pasquotank	Elizabeth City	24 hemodialysis stations; no evening hours

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

Urgent Care Centers

There are no free-standing urgent care centers listed for Camden County, but Internet searches identify urgent care centers in Washington, NC and Elizabeth City, NC. Camden County residents with urgent (and evening, weekend and holiday) health issues are most likely to report to Sentara Albemarle Medical Center in Elizabeth City, or another nearby hospital.

Other Camden County Medical Practitioners

The following table lists active, NC Medical Board-licensed physicians and physician assistants in Camden County as of October 20, 2016.

- There was only one active physician listed for Camden County. Interestingly, the NC Medical Board data system lists six *inactive* physicians in Camden County.

**Table 92. Active NC Licensed Physicians and Physician Assistants in Camden County
(As of October 20, 2016)**

Physician Name	Location	Specialty	Practice Affiliation
Mohammad, Budour Nasri	South Mills, NC	Not listed	Not listed

Source: Licensee Information. NC Medical Board,
<http://www.wapps.ncmedboard.org/Clients/NCBOM/Public/LicenseeInformationSearch.aspx>.

Recreational Facilities

The table below lists some of the public parks and recreational centers in Camden County.

Table 93. Public Recreational Facilities in Camden County

Category/Name	Location	Facilities/Programs
Camden County Parks and Recreation Athletics	Camden	Girls volleyball; youth basketball; soccer
Camden Youth League Baseball/Softball	Camden	youth baseball and softball
Shiloh Sharks Football	Shiloh	Youth football and cheer league
Subdivision Walking Routes	Various in-county locations	The county provides aerial maps and measured walking routes for 15 Camden County subdivisions
Dismal Swamp Canal	South Mills, NC to Chesapeake, VA	Eco-tourism opportunities including hiking, biking, birding, paddling and photography
Dismal Swamp State Park	South Mills	Interactive visitor center; boardwalk into the swamp; hiking and mountain biking trails; mountain bike and kayak rentals
Camden County Historic Jailhouse	Camden	Home to the Camden County Museum

Sources: Camden County Government website. Departments: Parks and Recreation.
<http://www.camdencountync.gov/departments/parks-recreation>; and Camden County Government website. About: Points of Interest.
<http://www.camdencountync.gov/about/points-of-interest>.

For a broader listing of community resources, including health resources, please consult the Appendix to this report.

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 of time by the population size in the same period. Mortality typically is described as a rate, usually presented as a 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:

$$\text{(number of deaths due to a cause/population)} \times 100,000 = \text{deaths per 100,000 people.}$$

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:

$$\text{(number of new cases/population)} \times 100,000 = \text{new cases per 100,000 people}$$

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 smaller jurisdictions 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)

Camden County residents, as well as those living in the other six counties of the ARHS region, participate in the state’s annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of an aggregate 41-county sample that encompasses the entire eastern third of the state (“Eastern North Carolina”). It is not possible to isolate survey responses from any ARHS county’s 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 any one of the ARHS counties. 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 a sampling date far in the past, 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 North Carolina stood in the 2014 overall rankings relative to the “best” and “worst” states, where number one is “best”.

- North Carolina was ranked 37th overall in the US. Hawaii was ranked 1st and Mississippi was ranked 50th (last).

Table 94. Rank of North Carolina in America's Health Rankings (2014)

Location	National Rank (Out of 50) ¹		
	Overall	Determinants	Outcomes
Hawaii	1	3	1
North Carolina	37	36	40
Mississippi	50	50	50

Source: United Health Foundation. America's Health Rankings. Our Reports, 2014 Annual Report.

<http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/Americas%20Health%20Rankings%202014%20Edition.pdf>.

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 Camden County, the ARHS regional average and Pamlico County in terms of health outcomes and health factors.

- Camden County ranked 3rd overall in NC, chiefly due to high rankings for social and economic factors (3rd), health behaviors (5th), length of life (15th) and physical environment (19th).

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 and different parameters are measured in different time periods.

**Table 95. County Health Rankings
(2015)**

Location	County Rank (Out of 100) ¹						Overall
	Health Outcomes		Health Factors				
	Length of Life	Quality of Life	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment	
Camden County	15	37	5	37	3	19	3
<i>Regional Average</i>	<i>46</i>	<i>58</i>	<i>61</i>	<i>40</i>	<i>49</i>	<i>30</i>	<i>48</i>
Pamlico County	30	22	35	9	63	89	21

County Health Rankings and Roadmaps, 2015. University of Wisconsin Population Health Institute;
<http://www.countyhealthrankings.org/app/north-carolina/2013/rankings/outcomes/overall/by-rank>.

The table below presents additional detail for these jurisdictions as well as the average for NC and national benchmarks.

**Table 96. County Health Rankings Details
(2015)**

Health Factor	Camden County	ARHS Regional Average	Pamlico County	NC County Average	National Median
Health Outcomes	19	51	21		
Length of Life	15	46	30		
Premature deaths	6,664	7,856	7,279	7,212	7,681
Quality of Life	37	58	22		
Poor or fair health	20%	22%		18%	17%
Poor physical health days	4.8	4.2	2.1	3.6	3.7
Poor mental health days	2.2	2.9		3.4	3.5
Low birthweight	8.5%	9.9%	8.8%	9.1%	8.0%
Health Factors	4	49	35		
Health Behaviors	5	61	35		
Adult smoking	17%	25%		20%	21%
Adult obesity	31%	33%	30%	29%	31%
Food environment index	8.4%	7%	7.5	6.6	7.3
Physical inactivity	25%	28%	27%	25%	27%
Access to exercise opportunities	46%	53%	31%	76%	65%
Excessive drinking		21%		13%	16%
Alcohol-impaired driving deaths	0%	27%	15%	33%	31%
Sexually transmitted infections	159	468	260	519	291
Teen birth rate	24	40	49	42	41
Clinical Care	37	40	9		
Uninsured	16%	18%	19%	19%	17%
Primary Care physicians (ratio:1)	10,090	5,510	2,615	1,448	2,015
Dentists (ratio:1)		7,616	3,238	1,970	2,670
Mental health providers (ratio:1)	1,698	3,094	1,850	472	1,128
Preventable hospital stays	57	56	34	57	65.3
Diabetic monitoring	82%	86%	92%	89%	85%
Mammography screening	69.3%	69%	78.9%	68.2%	61%
Social & Economic Factors	3	49	63		
High school graduation	88%	83%	88%	81%	85%
Some college	71%	55%	54%	64%	56%
Unemployment	7.6%	8.7%	8.9%	8.0%	7.0%
Children in poverty	14%	29%	35%	25%	24%
Income inequality	3.7	467%	4.4	4.8	4.4
Children in single-parent households	23%	36%	37%	36%	31%
Social associations	10.9	14.5	9.2%	11.7%	12.6%
Violent crime rate	83	198	186	355	199
Injury deaths	48	67	104	64	73.8
Physical Environment	19	30	89		
Air pollution - particulate matter	11.6	12	11.6	12.3	11.9
Drinking water violations	0%	0%	47%	4%	1%
Severe housing problems	14%	0	17%	16%	14
Driving alone to work	85%	82%	79%	81%	80%
Long commute - driving alone	49%	45%	42%	30%	29%
Source	1	1	1	2	2

1 - County Health Rankings and Roadmaps, 2015. University of Wisconsin Population Health Institute;

<http://www.countyhealthrankings.org/app/north-carolina/2015/rankings/outcomes/overall>.

2 - State Health Gap Reports, 2015. University of Wisconsin Population Health Institute;

http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2015_NC_0.pdf.

Note: Blank values ("n/a") reflect unreliable or missing data.

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 following table presents total annual pregnancy, fertility and abortion rates for women age 15-44 for the period from 2010-2014.

- The 2014 pregnancy rate was 56.9 in Camden County, compared to 66.3 in the Region and 72.1 in NC.
- Discussion of racially stratified pregnancy rates is complicated by unstable and suppressed rates as well as changes in the way the SCHS has handled racial identity. For example, due to rate suppression, there are no pregnancy rates for any minority group in Camden County in 2013 or 2014 and no abortion rates for *any* racial group.

Table 97. Total Pregnancy, Fertility and Abortion Rates, Ages 15-44 (Single Years, 2010-2014)

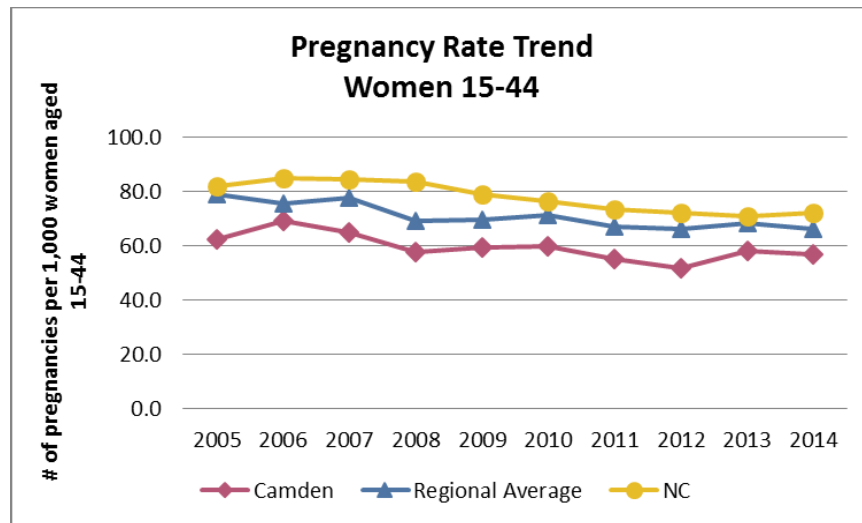
Location	Females Ages 15-44															
	2010			2011			2012			2013			2014			
	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	
Camden County	Total	59.9	50.1	9.8	55.2	45.1	10.1	51.6	45.1	*	58.3	50.3	*	56.9	51.6	*
	White, Non-Hispanic	56.5	48.0	8.4	56.1	47.0	9.1	49.6	44.4	*	57.3	50.9	*	54.8	51.0	*
	African American, Non-Hispanic	84.1	65.4	18.7	32.9	24.7	8.2	*	*	*	*	*	*	*	*	*
	American Indian, Non-Hispanic									*	*	*	*	*	*	*
	Other, Non-Hispanic	73.2	73.2	0.0	216.2	162.2	54.1	*	*	*	*	*	*	*	*	*
	Hispanic	48.8	24.4	24.4	13.9	13.9	0.0	*	*	*	*	*	*	*	*	*
Regional Average	Total	71.5	57.9	13.3	67.2	56.7	10.2	66.3	55.9	20.6	68.2	58.7	9.6	66.3	57.0	10.7
	White, Non-Hispanic	67.1	58.0	8.5	61.3	54.5	6.6	62.5	55.9	9.5	67.4	59.3	7.2	63.6	57.3	7.6
	African American, Non-Hispanic	79.8	58.1	21.5	70.8	54.7	15.7	74.4	57.2	18.4	68.3	61.4	14.3	69.9	55.0	15.8
	American Indian, Non-Hispanic										*	*	*	*	*	*
	Other, Non-Hispanic	61.3	60.4	0.9	73.2	63.8	9.4	*	*	*	*	*	*	*	*	*
	Hispanic	65.6	52.1	13.1	82.1	76.2	5.9	78.0	71.3	*	121.8	113.2	*	56.0	54.0	*
Pamlico County	Total	71.5	57.6	11.7	59.3	49.3	10.0	63.0	55.6	*	52.6	45.6	*	61.9	52.2	*
	White, Non-Hispanic	69.1	55.8	11.8	59.3	48.9	10.4	59.0	54.4	*	49.0	45.1	*	61.9	54.1	*
	African American, Non-Hispanic	80.2	61.7	15.4	38.2	32.4	5.9	73.6	*	*	*	*	*	62.7	*	*
	American Indian, Non-Hispanic									*	*	*	*	*	*	*
	Other, Non-Hispanic	0.0	0.0	0.0	69.0	69.0	0.0	*	*	*	*	*	*	*	*	*
	Hispanic	98.8	86.4	0.0	141.2	117.6	23.5	*	*	*	*	*	*	*	*	*
State of NC	Total	76.4	62.7	13.2	73.3	61.5	11.4	72.1	61.0	10.7	70.8	60.3	10.1	72.1	61.0	10.7
	White, Non-Hispanic	65.6	57.1	8.2	63.6	56.4	7.0	63.0	56.1	6.6	61.8	55.4	6.1	63.5	56.5	6.6
	African American, Non-Hispanic	86.1	61.0	24.4	81.5	59.7	21.1	79.6	59.1	19.8	79.0	59.7	18.6	79.5	59.4	19.4
	American Indian, Non-Hispanic										71.5	62.9	8.2	69.9	61.1	8.5
	Other, Non-Hispanic	84.5	71.3	12.8	80.6	69.4	10.9	79.7	69.7	9.5	79.4	69.5	9.5	82.4	72.0	10.1
	Hispanic	114.0	99.0	14.7	106.6	94.0	12.2	102.6	91.4	10.8	98.6	87.9	10.3	98.4	87.0	10.9

Note: Bold type indicates an unstable rate based on a small number (fewer than 10 cases). An asterisk signifies a suppressed rate. Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, and Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/data/vital/pregnancies/>.

The following figure plots the overall pregnancy rate for the comparators (minus Pamlico County) for a period that spans 2005 through 2014. Note that the graph includes unstable rates.

- The total pregnancy rate in Camden County fluctuates on a yearly basis but has demonstrated a general decline over the period cited.
- The total pregnancy rates in both the ARHS Region and NC have fallen overall since 2007.

Figure 15. Overall Pregnancy Rate Trend, Age 15-44 (2005-2014)



Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, and Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/data/vital/pregnancies/>

Pregnancy, Fertility and Abortion Rates, Women Age 15-19

The table below presents total annual pregnancy, fertility and abortion rates for women age 15-19 (“teens”) for the period from 2010-2014.

- In 2011 (the last year in which a Camden County teen pregnancy rate was released) the teen pregnancy rate was 20.4 in Camden County, compared to 41.5 for the Region and 43.8 for the state.
- Due to rate suppression, there are no teen pregnancy rates or teen abortion rates for any racial group in Camden County after 2011, and the 2010 and 2011 rates that were released were all unstable.

Table 98. Total Pregnancy, Fertility and Abortion Rates, Ages 15-19 (Single Years, 2010-2014)

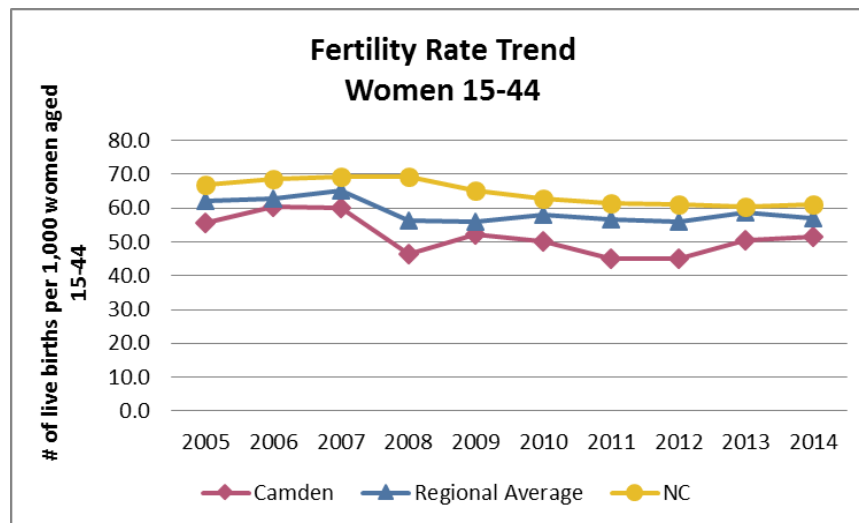
Location	Females Ages 15-19														
	2010			2011			2012			2013			2014		
	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Camden County	34.1	27.9	6.2	20.4	5.8	14.6	*	*	*	*	*	*	*	*	*
White, Non-Hispanic	25.5	21.8	3.6	24.7	7.1	17.7	*	*	*	*	*	*	*	*	*
African American, Non-Hispanic	105.3	78.9	26.3	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
American Indian, Non-Hispanic							*	*	*	*	*	*	*	*	*
Other, Non-Hispanic	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Hispanic	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Regional Average	47.7	37.9	11.4	41.5	30.7	9.7	45.9	35.6	*	47.6	40.6	*	26.4	21.7	*
White, Non-Hispanic	44.6	34.3	9.7	29.2	21.6	7.6	40.2	*	*	37.7	34.3	*	*	*	*
African American, Non-Hispanic	60.8	44.0	16.4	51.1	38.0	12.8	40.7	*	*	52.8	44.4	*	30.2	*	*
American Indian, Non-Hispanic										*	*	*	*	*	*
Other, Non-Hispanic	8.4	0.0	8.4	20.4	20.4	0.0	*	*	*	*	*	*	*	*	*
Hispanic	0.0	0.0	0.0	55.2	49.8	5.4	*	*	*	*	*	*	*	*	*
Pamlico County	82.2	62.3	17.0	59.3	41.5	17.8	*	*	*	*	*	*	*	*	*
White, Non-Hispanic	77.8	55.6	18.5	61.0	40.7	20.3	*	*	*	*	*	*	*	*	*
African American, Non-Hispanic	92.3	76.9	15.4	41.1	41.1	0.0	*	*	*	*	*	*	*	*	*
American Indian, Non-Hispanic							*	*	*	*	*	*	*	*	*
Other, Non-Hispanic	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Hispanic	125.0	125.0	0.0	125.0	62.5	62.5	*	*	*	*	*	*	*	*	*
State of NC	49.7	38.3	11.0	43.8	34.8	8.7	39.6	31.8	7.6	35.2	28.4	6.6	32.3	25.9	6.2
Minority															
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	23.1	19.0	4.0
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	44.0	33.1	10.5
American Indian, Non-Hispanic										52.6	46.4	6.0	44.9	40.3	*
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	19.0	14.3	4.7
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	52.8	45.9	6.5

Note: Bold type indicates an unstable rate based on a small number (fewer than 10 cases). An asterisk signifies a suppressed rate. Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, and Abortion Rates per 1,000 Population, by Race, by Age. <http://www.schs.state.nc.us/data/vital/pregnancies/>.

The figure below plots the overall teen pregnancy rate for the comparators (minus Pamlico County) for a period that spans 2005 through 2014.

- Teen pregnancy rates in Camden County have decreased since 2007, and they were consistently lower than the state rates. Note that all the county and regional rates are technically unstable.

Figure 16. Overall Pregnancy Rate Trend, Age 15-19 (2005-2014)



Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, & Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/data/vital/pregnancies/2014/>.

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

The table below presents trend data on the number of teen pregnancies in each jurisdiction from 2003-2013.

- The number of teen (women aged 15-19) pregnancies in Camden County fluctuated annually, but appear to have been lower in 2011 through 2013 than in most earlier periods cited.

**Table 99. Number of Teen Pregnancies (Ages 15-19)
(Single Years, 2003-2013)**

Location	Number of Pregnancies, Ages 15-19										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Camden County	16	9	9	18	9	8	15	11	7	7	8
<i>Regional Average</i>	36	38	47	46	43	37	38	31	28	23	23
Pamlico County	21	24	26	23	18	29	23	29	20	14	9
State of NC	17,390	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. Year: 2003-2013. (Counties and age groups as indicated); <http://www.schs.state.nc.us/SCHS/data/preg/preg.cfm>.

The following table presents trend data on the number of adolescent pregnancies in each jurisdiction from 2003-2013.

- Between 2003 and 2013 there was one pregnancy among Camden County adolescent girls (age 14 and younger).

**Table 100. Number of Adolescent Pregnancies (Under Age 15)
(Single Years, 2003-2013)**

Location	Number of Pregnancies, Age 14 and Younger										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Camden County	1	0	0	0	0	0	0	0	0	0	0
Pamlico County	0	0	1	0	0	1	0	0	0	0	0
State of NC	443	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. Year: 2003-2013. (Counties and age groups as indicated); <http://www.schs.state.nc.us/SCHS/data/preg/preg.cfm>.

Pregnancy Risk Factors

High Parity and Short Interval Births

According to the NC SCHS, 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 next table presents data on high-parity and short interval births for the aggregate period 2010-2014.

- The percentage of high-parity births among women under age 30 in Camden County (10.2%) was lower than the comparable average for the region (14.8%) or the state (15.2%). Among women age 30 or older the rate in Camden County (22.8%) was higher than the regional rate (21.0%) and higher than the state average (21.9%).
- The percentage of short-interval births in Camden County (14.9%) was the highest among the comparators.

**Table 101. High Parity and Short Interval Births
(Single Five-Year Aggregate Period, 2010-2014)**

Location	High Parity Births				Short Interval Births	
	Mothers < 30		Mothers ≥ 30		No. ³	% ⁴
	No. ¹	% ²	No. ¹	% ²		
Camden County	27	10.2	43	22.8	46	14.9
<i>Regional Average</i>	<i>107.0</i>	<i>14.8</i>	<i>64.6</i>	<i>21.0</i>	<i>83.9</i>	<i>13.3</i>
Pamlico County	57	17.5	30	22.2	30	10.0
State of NC	27,216	15.2	49,588	21.9	48,837	12.3
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 (2016), Pregnancy and Births, 2010-2014 Number At Risk NC Live Births due to High Parity by County of Residence; <http://www.schs.state.nc.us/SCHS/data/data>.

b - NC State Center for Health Statistics, County-level Data, County Health Data Book (2016), Pregnancy and Births, 2010-2014 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 (55).

The table below presents trend data on smoking during pregnancy for 2011 through 2014.

- The percentage of Camden County women who smoked during pregnancy increased significantly from 7.1% in 2011 to 11.2% in 2014 and was higher than the state in 2014.

**Table 102. Smoking during Pregnancy Trend
(2011-2014)**

Location	Number and Percent of Births to Mothers Who Smoked Prenatally							
	2011		2012		2013		2014	
	No.	%	No.	%	No.	%	No.	%
Camden County	6	7.1	8	9.6	9	9.5	11	11.2
<i>Regional Average</i>	23	11.3	18	10.4	21	10.6	26	13.6
Pamlico County	23	25.8	18	18.4	14	17.7	12	13.2
State of NC	13,159	10.9	12,727	10.6	12,242	10.3	11,896	9.8

Source: NC State Center for Health Statistics, Vital Statistics: North Carolina Vital Statistics, Volume 1 (years as noted).
<http://www.schs.state.nc.us/data/vital/volume1/>

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 four jurisdictions included in this report.

- Until 2014 the percentage of women receiving early prenatal care was lower in Camden County than statewide.
- The percentage of Camden County women receiving prenatal care in the first trimester increased from 47.0% in 2012 to 74.5% in 2014.

**Table 103. Early Prenatal Care Trend
(2011-2014)**

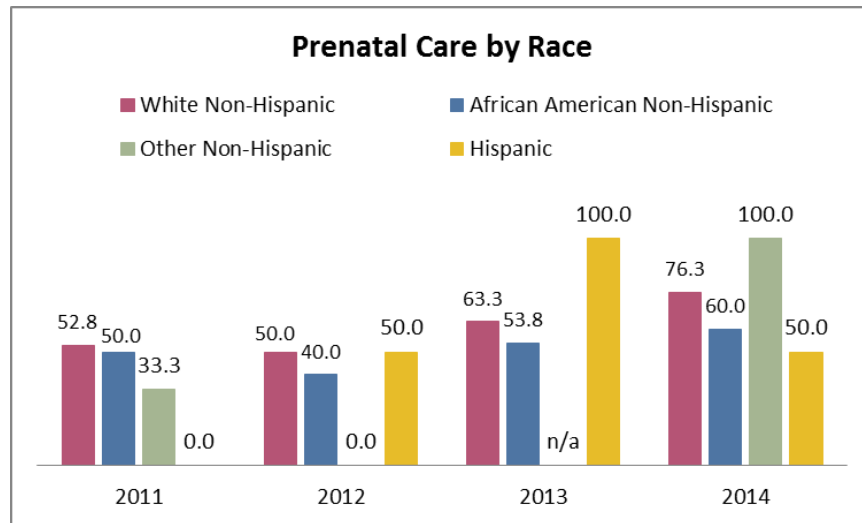
Location	Percent Women Receiving Prenatal care in the First Trimester			
	2011	2012	2013	2014
Camden County	60.0	47.0	61.1	74.5
Regional Average	53.3	49.0	55.6	70.5
Pamlico County	69.7	75.5	63.3	63.7
State of NC	71.2	71.3	70.3	68.2

Source: NC State Center for Health Statistics, Vital Statistics, Basic Automated Birth Yearbook (BABYBOOK) 2011-2014. Calculated from numbers in Table 6. <http://www.schs.state.nc.us/data/vital.cfm>.

The following figure plots the prenatal care trend, stratified by race, for Camden County women for the same period covered in the table above.

- A definitive discussion of prenatal care among racial groups in Camden County is complicated by rates that move from stable to unstable and back to stable. This variability is a function of numbers of cases fluctuating around the threshold for stability.

Figure 17. Percent of Camden County Women Receiving Prenatal Care in the First Trimester, by Race (2011-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Basic Automated Birth Yearbook (BABYBOOK) 2011-2014. Calculated from numbers in Table 6.
<http://www.schs.state.nc.us/data/vital.cfm>.

Pregnancy Outcomes

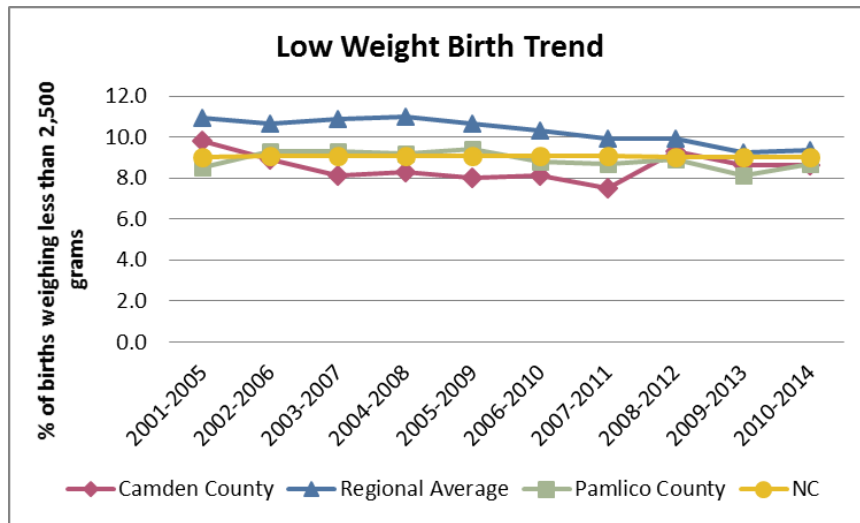
Low Birth Weight and Very Low Birth Weight

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 (56).

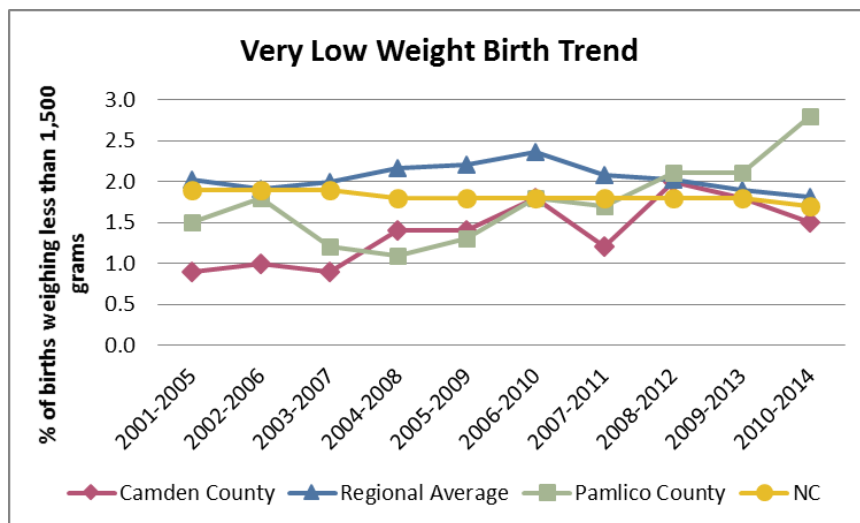
The two figures that follow plot data for low birth-weight births: infants weighing 2,500 grams (5.5 pounds) or less, and very low birth-weight births: infants weighing 1,500 grams (3.3 pounds) or less.

- Low-weight birth outcomes in Camden County were less frequent than regional and state averages throughout most the period 2001-2005 through 2010-2014.
- The percentage of low birth-weight births in Camden County decreased slightly overall between 2001-2005 and 2007-2011 before increasing again afterward.
- The percentage of very low birth-weight births in Camden County was highly variable over the period cited, likely due to small numbers of events, but appears to have increased overall between 2001-2005 and 2010-2014.

**Figure 18. Low Birth-Weight Births
(2001-2005 through 2010-2014)**



**Figure 19. Very Low Birth-Weight Births
(2001-2005 through 2010-2014)**



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Pregnancy and Births, Low and Very Low Weight Births, Black Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The following two figures plot data on low- and very-low birth-weight births in Camden County stratified by race.

- All the racially-stratified birth weight frequencies reported in the tables below were unstable, except for *some* frequencies calculated for white women.

Figure 20. Low Birth-Weight Births, Camden County, by Race (2006-2010 through 2010-2014)

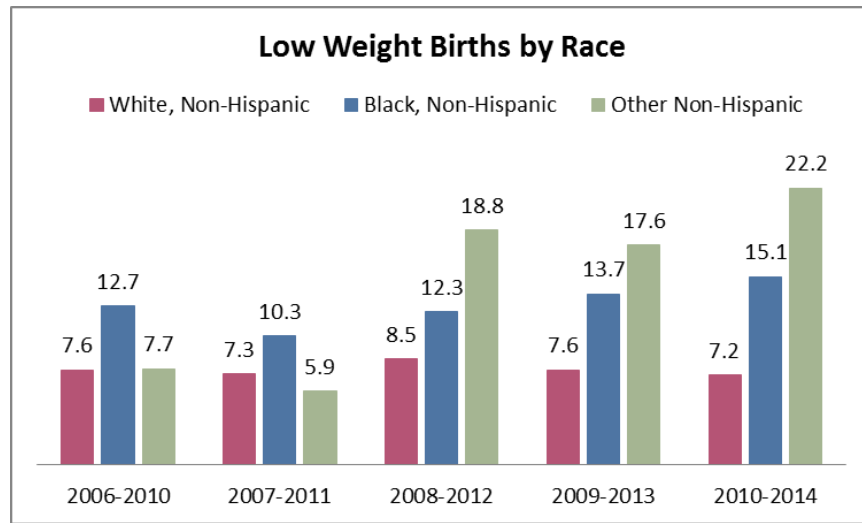
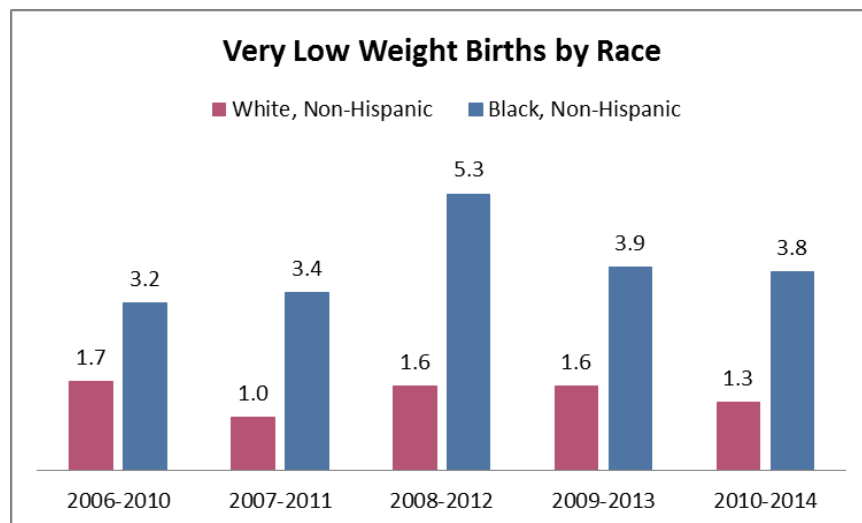


Figure 21. Very-Low Birth-Weight Births, Camden County, by Race (2006-2010 through 2010-2014)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2012-2016), Pregnancy and Births, Low and Very Low Weight Births, Black Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Cesarean Section Delivery

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

- As elsewhere in the US, the percentage of Cesarean section delivery in all four jurisdictions has risen over time. From the beginning to the end of the period cited in the table, Cesarean deliveries rose by 14% in Camden County, 16% in the ARHS region, 1% in Pamlico County, and 10% statewide.

**Table 104. Cesarean Section Deliveries.
(Aggregate Periods 2001-2005 through 2010-2014)**

Location	Percent of Resident Births Delivered by Cesarean Section									
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Camden County	28.5	29.5	31.3	33.1	34.7	32.9	33.9	34.8	31.8	32.5
<i>Regional Average</i>	<i>28.6</i>	<i>29.5</i>	<i>30.3</i>	<i>30.8</i>	<i>31.3</i>	<i>31.8</i>	<i>32.2</i>	<i>33.0</i>	<i>32.9</i>	<i>33.1</i>
Pamlico County	27.5	28.3	28.1	28.9	28.8	30.5	28.9	30.0	29.3	27.8
State of NC	27.7	28.7	29.6	30.3	30.9	31.2	31.2	31.1	30.9	30.5

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Pregnancy and Births, Births Delivered by Primary Caesarian Section; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Birth Complications

The Diagnosis Related Group (DRG) method of coding diagnoses associated with inpatient hospitalizations offers a series of codes describing newborns and neonates having certain conditions originating in the perinatal period. The table below summarizes inpatient discharges associated with these codes for Camden County residents delivering infants at the one hospital participating in this CHNA that saw over 20 inpatients in the two years cited (Sentara Albemarle Medical Center).

- Among Camden County residents the number of discharges at the cited hospital associated with newborns or neonates with prematurity or some kind of problem originating in the perinatal period totaled 60% of all newborns over the period cited.

**Table 105. Discharges of Newborn Infants, Camden County Resident Mothers
(2013 and 2014)**

Year	Number of Hospital Discharges by DRG (Diagnosis Related Group) Diagnosis					
	Normal Newborns	Extreme Immaturity or Respiratory Distress	Prematurity with Major Problems	Prematurity without Major Problems	Full-Term Neonate with Major Problems	Neonate with Other Significant Problems
2013	40	0	0	9	1	17
2014	38	0	0	1	2	17
Total	78	0	0	10	3	34

Source: Sentara Albemarle Medical Center

Infant Mortality

Infant mortality is the number of infant (under one year of age) deaths per 1,000 live births. The following table presents infant mortality data for Camden County, the ARHS region, Pamlico County and the state of NC.

- All of the Camden County infant mortality rates are unstable, so the trend presented should be interpreted with caution.
- The total infant mortality rate in Camden County has decreased from 9.9 in 2006-2010 to 6.6 in 2010-2014.
- Note that according to the CDC the 2013 infant mortality rate in NC was the 10th highest in the nation.

**Table 106. Total Infant Deaths
(2006-2010 through 2010-2014)**

Location	Infant Deaths										
	2006-2010		2007-2011		2008-2012		2009-2013		2010-2014		
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	
Camden County	Total	5	9.9	5	10.4	4	8.5	3	6.6	3	6.6
	White, Non-Hispanic	5	11.9	5	12.5	4	10.7	3	n/a	3	n/a
	African American, Non-Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
	Other, Non-Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
	Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
<i>Regional Average</i>	<i>Total</i>	<i>13</i>	<i>11.9</i>	<i>13</i>	<i>11.4</i>	<i>11</i>	<i>10.6</i>	<i>8</i>	<i>8.0</i>	<i>8</i>	<i>7.7</i>
	<i>White, Non-Hispanic</i>	<i>5</i>	<i>8.0</i>	<i>5</i>	<i>7.5</i>	<i>5</i>	<i>7.6</i>	<i>3</i>	<i>n/a</i>	<i>3</i>	<i>n/a</i>
	<i>African American, Non-Hispanic</i>	<i>7</i>	<i>18.3</i>	<i>7</i>	<i>18.1</i>	<i>6</i>	<i>11.1</i>	<i>5</i>	<i>n/a</i>	<i>4</i>	<i>n/a</i>
	<i>Other, Non-Hispanic</i>	<i>0</i>	<i>7.5</i>	<i>0</i>	<i>0.0</i>	<i>0</i>	<i>0.0</i>	<i>0</i>	<i>n/a</i>	<i>0</i>	<i>n/a</i>
	<i>Hispanic</i>	<i>1</i>	<i>33.9</i>	<i>1</i>	<i>20.6</i>	<i>1</i>	<i>21.1</i>	<i>0</i>	<i>n/a</i>	<i>1</i>	<i>n/a</i>
Pamlico County	Total	5	9.2	5	9.7	7	13.6	7	14.6	7	15.2
	White, Non-Hispanic	3	7.3	3	7.8	5	13.2	6	n/a	5	n/a
	African American, Non-Hispanic	2	19.4	2	21.3	2	21.5	1	n/a	2	n/a
	Other, Non-Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
	Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
State of NC	Total	5,066	7.9	4,899	7.8	4,675	7.5	4,441	7.3	4,295	7.1
	White, Non-Hispanic	2,074	5.9	2,001	5.7	1,918	5.6	1,850	5.4	1,811	5.4
	African American, Non-Hispanic	2,208	14.7	2,129	14.3	2,064	14.0	1,967	13.6	1,858	12.9
	Other, Non-Hispanic	187	6.3	188	6.2	181	5.9	178	5.7	185	5.8
	Hispanic	597	5.8	581	5.8	512	5.3	446	4.8	441	4.9

Source: a a a a a a a a a b a b

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

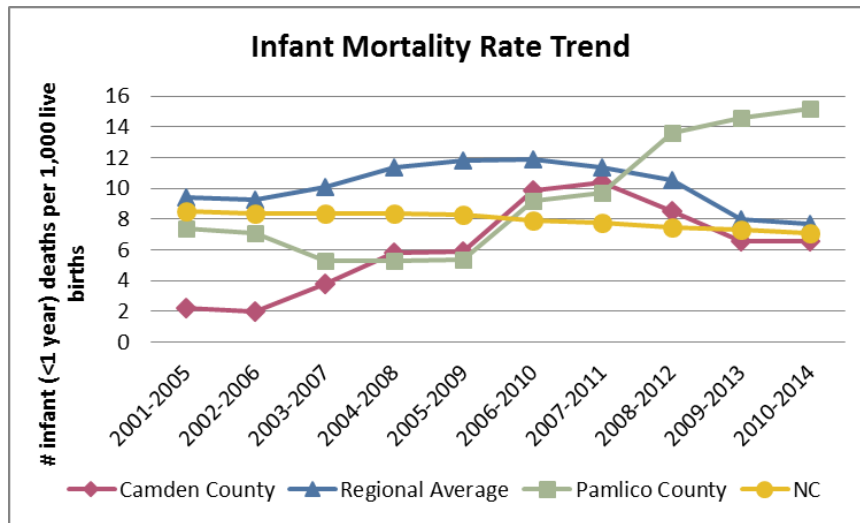
a - NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2014), Mortality, Infant Death Rates per 1,000 Live Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

b - NC Center for Health Statistics, Vital Statistics, Infant Mortality Statistics (2013 and 2014). Infant Death Rates by Perinatal Care Regions and County of Residence. <http://www.schs.state.nc.us/data/vital.cfm>.

The following figure plots the infant mortality trend for a longer period than shown in the table above.

- The Camden County infant mortality rate was lower than the regional rates over the entire period shown. The local rate was lower than the comparable NC rate from 2001-2005 through 2005-2009 and from 2009-13 through 2010-2014, but higher in the years between.

**Figure 22. Infant Mortality Rate
(2001-2005 through 2010-2014)**



Sources: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2014), Mortality, Infant Death Rates per 1,000 Live Births; <http://www.schs.state.nc.us/SCHS/data/databook/>, and NC Center for Health Statistics, Vital Statistics, Infant Mortality Statistics (2013 and 2014). Infant Death Rates by Perinatal Care Regions and County of Residence. <http://www.schs.state.nc.us/data/vital.cfm>.

Camden County infant mortality rates stratified by race are all unstable, and are not compared in this report.

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.

- Among comparators, life expectancy for persons born in 2010-2014 is longest in Camden County for all groups except African Americans.
- Life expectancy has improved over time among all groups presented. Life expectancy has improved over time among all groups presented.

Table 107. Life Expectancy at Birth, by Gender and Race (1990-1992 and 2012-2014)

Location	Life Expectancy in Years									
	Person Born in 1990-1992					Person Born in 2012-2014				
	Overall	Male	Female	White	African-American	Overall	Male	Female	White	African-American
Camden County	75.8	71.6	80.5	77.5	71.0	80.3	77.7	83.2	81.2	75.5
<i>Regional Average</i>	<i>73.7</i>	<i>69.8</i>	<i>77.7</i>	<i>75.1</i>	<i>70.3</i>	<i>78.3</i>	<i>75.8</i>	<i>81.0</i>	<i>79.0</i>	<i>76.5</i>
Pamlico County	75.1	71.5	78.7	76.7	70.7	77.5	75.2	80.3	77.2	77.6
State of NC	74.9	71.0	78.7	76.4	69.8	78.3	75.8	80.7	79.1	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 2012-2014, 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 major site-specific cancers. The list of topics and the accompanying data was retrieved from the NC SCHS *County Health Databook*. Unless otherwise noted, the numerical data are age-adjusted and represent five-year aggregate periods.

The table on the following page compares mortality rates for the 15 leading causes of death in Camden County, the ARHS region, Pamlico County, NC and the US for the five-year aggregate period 2010-2014 (or as otherwise noted). The causes of death are listed in descending order of rank in Camden County.

The table directly below highlights differences in mortality for the 15 leading causes of death (LCDs) between Camden County and NC. LCDs for which the mortality rate in Camden County is *higher* than the NC rate are highlighted in **red**; county rates *lower* than the NC rate are highlighted in **green**. Rates represented in **blue** are unstable.

Table 108. Comparison of Leading Causes of Death, Camden County and NC (Aggregate Period 2010-2014)

Age-Adjusted Rates (2010-2014)	Camden County No. of Deaths	Camden County Mortality Rate	Camden Rate Difference from NC
1. Heart Disease	95	187.8	+13.2%
2. Total Cancer	89	154.8	-9.9%
3. Chronic Lower Respiratory Diseases	24	46.7	+1.5%
4. Cerebrovascular Disease	19	35.2	-18.1%
5. Pneumonia and Influenza	11	23.0	+30.7%
6. Alzheimer's Disease	10	22.1	-24.3%
7. Suicide	11	21.0	+69.4%
8. Nephritis, Nephrotic Syndrome, and Nephrosis	9	19.6	+15.3%
9. Diabetes Mellitus	10	17.0	-23.1%
10. All Other Unintentional Injuries	7	12.6	-57.4%
11. Septicemia	5	9.6	-26.2%
12. Unintentional Motor Vehicle Injuries	5	9.2	-31.9%
13. Chronic Liver Disease and Cirrhosis	3	4.4	-54.6%
14. Acquired Immune Deficiency Syndrome	0	0.0	na
15. Homicide	0	0.0	na

Source: NC State Center for Health Statistics, County Health Data Book (see source detail at following table.)

Table 109. Overall Age-Adjusted Mortality Rates for the 15 Leading Causes of Death, Camden County and Comparators (Aggregate Period 2010-2014 or as Noted)¹

Cause of Death	Camden County			<i>Regional Average</i>			Pamlico County			State of NC			United States (2013)	
	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Rate	Rank
Diseases of the Heart	95	187.8	1	235	189.9	1	173	166.6	1	86,699	165.9	2	169.8	1
Total Cancer	89	154.8	2	225	175.1	2	166	153.1	2	92,542	171.8	1	163.2	2
Chronic Lower Respiratory Disease	24	46.7	3	52	43.2	3	44	39.4	4	24,042	46.0	3	42.1	3
Cerebrovascular Disease	19	35.2	4	50	40.0	4	44	41.0	3	22,116	43.0	4	36.2	5
Pneumonia and Influenza	11	23.0	5	32	28.2	5	11	12.0	11	9,011	17.6	8	15.9	8
Alzheimer's Disease	10	22.1	6	34	27.3	6	31	30.0	6	14,595	29.2	6	23.5	6
Suicide	11	21.0	7	11	11.4	12	13	19.7	8	6,256	12.4	12	12.6	10
Nephritis, Nephrotic Syndrome, and Nephrosis	9	19.6	8	17	14.2	10	14	14.1	10	8,813	17.0	9	13.2	9
Diabetes Mellitus	10	17.0	9	34	26.5	7	24	20.0	7	11,798	22.1	7	21.2	7
All Other Unintentional Injuries	7	12.6	10	29	25.3	8	31	37.2	5	14,791	29.6	5	39.4	4
Septicemia	5	9.6	11	15	13.3	11	10	8.7	13	6,798	13.0	11	10.7	12
Unintentional Motor Vehicle Injuries	5	9.2	12	14	16.1	9	11	16.3	9	6,679	13.5	10	10.9	11
Chronic Liver Disease and Cirrhosis	3	4.4	13	10	7.2	13	9	10.7	12	5,378	9.7	13	10.2	13
Homicide	0	0.0	14	4	4.0	14	4	7.6	14	2,728	5.7	14	5.2	14
Acquired Immune Deficiency Syndrome	0	0.0	14	3	2.8	15	3	6.1	15	1,331	2.6	15	2.1	15
Total Deaths All Causes (Some causes are not listed above)	373	712.1		987	803.7		742	747.4		408,611	785.2		731.9	
Source:	a	b	c	c	c	c	a	b	c	a	a	b	d	c

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

a - NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race-Sex-Specific Age-Adjusted Death Rates by County;

<http://www.schs.state.nc.us/SCHS/data/databook/>.

b - NC State Center for Health Statistics, Vital Statistics, NC Vital Statistics, Volume 2: Leading Causes of Death, 2014. <http://www.schs.state.nc.us/data/vital.cfm>.

c - Calculated

d - National Center for Health Statistics, National Vital Statistics System, Mortality Data. Deaths: Final Data for 2013 Volume 64, Number 2, Tables 9 and 16.

http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf.

The overall mortality rate in Camden County (712.1) was 9% *lower* than the overall NC mortality rate (785.2). Individual mortality rates were *higher* in Camden County than statewide for 5 of the 15 leading causes of death (*note that some of the Camden County mortality rates were unstable*):

- Heart disease
- Chronic lower respiratory disease
- Pneumonia and influenza
- Suicide
- Nephritis, nephrotic syndrome, nephrosis (kidney disease)

The overall mortality rate in Camden County was 11% *lower* than the regional average overall mortality rate (803.7). Individual mortality rates were higher in Camden County than region-wide for 3 of the 15 LCDs (*note that some of the Camden County mortality rates were unstable*):

- Chronic lower respiratory disease
- Suicide
- Kidney disease

The overall mortality rate in Camden County was 3% *lower* than the overall US mortality rate (731.9). Individual mortality rates in Camden County were higher than US rates for 5 of the 15 LCDs (*note that some of the Camden County mortality rates were unstable*):

- Heart disease
- Chronic lower respiratory disease (CLRD)
- Pneumonia and influenza
- Suicide
- Kidney disease

Hospital Discharges Associated with Leading Causes of Death

Below is data on *emergency department* (ED) discharges of Camden County residents from the hospitals in the study region seeing more than 20 Camden County patients in the ED over the two years cited. The diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death (LCD).

- The largest number of ED discharges in the table below are associated with injuries and poisoning, followed by COPD and pneumonia/influenza.

Table 110. Emergency Department Discharges for Leading Causes of Death

Year	Number of Emergency Department Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Pneumonia /Influenza	Alzheimer's Disease	Diabetes	Injuries/ Poisoning
2013	34	2	66	6	18/26	0	12	747
2014	26	3	75	8	22/11	0	6	715
Total	60	5	141	14	40/37	0	18	1,462

The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Note that the ICD-9 category "Injury and Poisoning" is used here as a surrogate for the NC Leading Cause of Death category "All Other Unintentional Injuries". This LCD category does **not** include motor vehicle injury, but the ICD category does. Some leading causes of death (such as Nephritis, Nephrotic Syndrome, and Nephrosis) have been excluded from this table.

The ICD-9 Code Categories referenced are as follows: Heart disease [Rheumatic heart disease (390-398xx), Hypertensive heart disease (402xx), and All other heart disease (404-429xx)]; Total cancer [All neoplasms (140-239xx)]; COPD [Bronchitis and emphysema (490-492xx)], Stroke [Cerebrovascular disease (430-438xx)]; Pneumonia and influenza [Pneumonia (480—486xx) and Influenza (487-488xx)]; Alzheimer's disease [Alzheimer's dementia (331.0)]; Diabetes [Diabetes (250xx)] and Injury and poisoning [All injuries and poisonings (800-999xx)].

The next table presents data on *inpatient* (IP) hospitalization discharges of Camden County residents from the one hospital in the study region seeing more than 20 Camden County inpatients over the two years cited (Sentara Albemarle Medical Center). Again, the diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death.

- The largest number of IP discharges in the table below are associated with heart disease, followed by COPD.

Table 111. Inpatient Hospitalization Discharges for Leading Causes of Death

Year	Number of Inpatient Hospitalization Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Pneumonia /Influenza	Alzheimer's Disease	Diabetes	Injuries/ Poisoning
2013	81	14	37	20	17/0	0	10	18
2014	73	20	28	14	11/0	0	3	18
Total	154	34	65	34	28/0	0	13	36

The hospital qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited is: Sentara Albemarle Medical Center only.

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 the 15 leading causes of death in Camden County and its comparator jurisdictions. The usefulness of the table is hampered somewhat by numerous suppressed rates.

In Camden County the overall mortality rate for males (899.2) was 36% higher than the overall mortality rate for females (578.2).

In Camden County, mortality rates for males were *higher* than comparable rates for females for:

- Heart disease (by 80%)
- Cancer (by 20%)

These local figures reiterate a long-term, statewide trend: males suffer mortality disproportionately. In NC as a whole, mortality rates for males traditionally have been higher than comparable rates for females for every leading cause of death except Alzheimer's disease. Statewide in the 2010-2014 period the overall mortality rate for males (931.0) was 39% higher than the overall mortality rate for females (669.6).

Table 112. Sex-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Camden County and Comparators (Aggregate Period 2010-2014)

Cause of Death	Camden County				Pamlico County Rate		Regional Average Rate		State of NC Rate	
	Males		Females		Males	Females	Males	Females	Males	Females
	Number	Rate	Number	Rate						
Diseases of the Heart	56	251.2	39	139.4	206.6	129.3	240.3	148.6	212.3	130.4
Total Cancer	45	174.5	44	145.6	191.0	121.6	218.0	143.4	214.4	142.1
Chronic Lower Respiratory Disease	16	n/a	8	n/a	39.6	37.5	67.3	36.7	26.4	18.7
Cerebrovascular Disease	8	n/a	1	n/a	n/a	56.0	47.1	43.0	43.6	41.7
Pneumonia and Influenza	6	n/a	5	n/a	n/a	n/a	88.3	61.2	22.9	32.5
Alzheimer's Disease	3	n/a	7	n/a	n/a	39.7	31.4	35.1	39.1	21.4
Suicide	8	n/a	3	n/a	n/a	n/a	54.1	36.6	52.3	42.2
Nephritis, Nephrotic Syndrome, and Nephrosis	8	n/a	1	n/a	n/a	n/a	41.4	31.2	20.6	14.6
Diabetes Mellitus	5	n/a	5	n/a	n/a	n/a	n/a	n/a	20.0	7.5
All Other Unintentional Injuries	6	n/a	1	n/a	56.6	n/a	n/a	n/a	20.2	15.9
Septicemia	2	n/a	3	n/a	n/a	n/a	n/a	n/a	13.4	6.5
Unintentional Motor Vehicle Injuries	3	n/a	2	n/a	n/a	n/a	30.7	n/a	14.5	12.0
Chronic Liver Disease and Cirrhosis	3	n/a	0	n/a	n/a	n/a	n/a	n/a	19.7	5.9
Homicide	0	n/a	0	n/a	n/a	n/a	n/a	n/a	3.7	1.5
Acquired Immune Deficiency Syndrome	0	n/a	0	n/a	n/a	n/a	n/a	n/a	9.0	2.4
Total Deaths All Causes	207	899.2	166	578.2	850.4	639.6	962.2	676.1	931.0	669.6

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 (2016), Mortality, 2010-2014 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Leading Causes of Death

Because of below-threshold numbers of deaths during the period, 2010-2014, age-adjusted racially-stratified mortality rates for Camden County are available only for white and African American non-Hispanics, and for only one cause of death.

According to data in the table below:

- In Camden County the overall mortality rate for African American non-Hispanics (942.9) was 38% higher than the overall mortality rate for white non-Hispanics (682.4).
- In Camden County the heart disease mortality rate for African American non-Hispanics (326.6) was twice the comparable rate for white non-Hispanics (165.9).

Racial differences in mortality will be described in detail as each cause of death is discussed separately in subsequent sections of this report.

Table 113. Race-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Camden County (Aggregate Period 2010-2014)

Cause of Death	Camden 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
Diseases of the Heart	68	165.9	26	326.6	0	n/a	0	n/a	1	n/a	95	187.8
Total Cancer	74	155.7	15	n/a	0	n/a	0	n/a	0	n/a	89	154.8
Chronic Lower Respiratory Disease	3	54.2	1	n/a	0	n/a	0	n/a	0	n/a	24	46.7
Cerebrovascular Disease	14	n/a	5	n/a	0	n/a	0	n/a	0	n/a	19	35.2
Pneumonia and Influenza	8	n/a	3	n/a	0	n/a	0	n/a	0	n/a	11	23.0
Alzheimer's Disease	9	n/a	1	n/a	0	n/a	0	n/a	0	n/a	10	22.1
Suicide	10	n/a	1	n/a	0	n/a	0	n/a	0	n/a	11	21.0
Nephritis, Nephrotic Syndrome, and Nephrosis	8	n/a	1	n/a	0	n/a	0	n/a	0	n/a	9	19.6
Diabetes Mellitus	8	n/a	2	n/a	0	n/a	0	n/a	0	n/a	10	17.0
All Other Unintentional Injuries	6	n/a	0	n/a	0	n/a	1	n/a	0	n/a	7	12.6
Septicemia	3	n/a	2	n/a	0	n/a	0	n/a	0	n/a	5	9.6
Unintentional Motor Vehicle Injuries	3	n/a	2	n/a	0	n/a	0	n/a	0	n/a	5	9.2
Chronic Liver Disease and Cirrhosis	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a	3	4.4
Homicide	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	0.0
Acquired Immune Deficiency Syndrome	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	0.0
Total Deaths All Causes	294	682.4	75	942.9	1	n/a	2	n/a	1	n/a	373	712.1

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 (2016), Mortality, 2010-2014 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

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 2010-2014. (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 Camden County were:

- Age Group 00-19: Congenital anomalies
- Age Group 20-39: Cancer – all sites
- Age Group 40-64: Cancer – all sites
- Age Group 65-84: Diseases of the heart
- Age Group 85+: Diseases of the heart

It is notable that in Camden County cancer ranked among the leading causes of death in the 20-39 age group, and that kidney disease was a leading cause of death in the 85+ age group.

Table 114. Three Leading Causes of Death by Age Group, by Unadjusted Death Rates, Camden County and Comparators (Aggregate Period 2010-2014)

Age Group	Rank	Cause of Death		
		Camden County	Pamlico County	State of NC
00-19	1	<i>Congenital anomalies (birth defects)</i>	Conditions originating in the perinatal period	Conditions originating in the perinatal period
		<i>Motor vehicle injuries</i>		
		<i>Suicide</i>		
	2	<i>Anemias</i>	<i>Suicide</i>	Congenital anomalies (birth defects)
		<i>Other unintentional injuries</i>		
		<i>Complications of medical & surgical care</i>		
		<i>SIDS</i>		
	3		<i>HIV Disease</i>	Motor vehicle injuries
			<i>Congenital anomalies (birth defects)</i>	
		<i>Homicide</i>		
20-39	1	Cancer - all sites	Other unintentional injuries	Other unintentional injuries
	2	<i>Suicide</i>	<i>Diseases of the heart</i>	Motor vehicle injuries
	3		<i>Suicide</i> <i>Homicide</i>	<i>Suicide</i>
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	<i>Suicide</i>	Diabetes mellitus Motor vehicle injuries Other unintentional injuries	Other unintentional injuries
65-84	1	Diseases of the heart	Cancer - all sites	Cancer - all sites
	2	Cancer - all sites	Diseases of the heart	Diseases of the heart
	3	Chronic lower respiratory diseases	Cerebrovascular disease	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	Nephritis, nephrotic syndrome & nephrosis	Alzheimer's disease	Alzheimer's disease

Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, Death Counts and Crude Death Rates per 100,000 for Leading Causes of Death, by Age Groups, NC, 2010-2014; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The next table summarizes changes in the leading causes of death between the last CHA (2007-2011 aggregate period) and the present CHA (2010-2014 aggregate period), an interval of three years.

- Mortality rates for **9 of the 15** leading causes of death in Camden County **decreased** between the last CHA and the present effort. The county mortality rate **increased** for heart disease, chronic lower respiratory disease, pneumonia and influenza, and suicide. (Note that some of the rates and corresponding rate differences should be deemed unstable, as indicated by blue type.)

**Table 115. Short-Term Changes in Leading Causes of Death, Camden County
(Between 2007-2011 and 2010-2014)**

Camden County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rate in 2007-2011	Rate in 2010-2014	Percent Difference
1. Heart Disease	160.3	187.8	+17.2%
2. Total Cancer	160.2	143.8	-10.2%
3. Chronic Lower Respiratory Diseases	36.3	46.7	+28.7%
4. Cerebrovascular Disease	47.1	35.2	-25.3%
5. Pneumonia and Influenza	20.4	23.0	+12.7%
6. Alzheimer's Disease	25.8	22.1	-14.3%
7. Suicide	10.0	21.0	+110.0%
8. Nephritis, Nephrotic Syndrome, and Nephrosis	26.0	19.6	-24.6%
9. Diabetes Mellitus	23.0	17.0	-26.1%
10. All Other Unintentional Injuries	29.5	12.6	-57.3%
11. Septicemia	13.2	9.6	-27.3%
12. Unintentional Motor Vehicle Injuries	15.9	9.2	-42.1%
13. Chronic Liver Disease and Cirrhosis	5.2	4.4	-15.4%
14. Acquired Immune Deficiency Syndrome	n/a	0.0	n/a
15. Homicide	n/a	0.0	n/a

Source: Sheila S. Pfaender, Public Health Consultant, via data from the NC State Center for Health Statistics, County Health Data Books.

The table below follows the same format to summarize the *long-term* change in leading causes of death. The data described in this table covers aggregate periods beginning in 2000-2004 and continuing through 2010-2014. The table displays a directional arrow for each cause of death. Each of these *overall trend direction* arrows describes the direction of the overall slope of the regression line calculated by MS Excel from the mortality rate data for each cause of death. The arrows are describing mortality rate changes: a **red/upward arrow** signifies an increasing rate trend, and a **green/downward arrow** signifies a decreasing rate trend.

- Over the 11-year period cited, Camden County mortality rates **decreased** overall for **7 of the 15** leading causes of death: heart disease, total cancer, stroke, septicemia, unintentional motor vehicle injuries, AIDS and homicide. Meanwhile, county mortality rates **increased** for **7 of the 15** LCDs: CLRD, pneumonia and influenza, Alzheimer's disease, suicide, kidney disease, diabetes, and liver disease. The mortality rate for all other unintentional injuries changed little over the period cited.

**Table 116. Long-Term Changes in Leading Causes of Death, Camden County
(Between 2000-2004 and 2010-2014)**

Camden County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Overall Trend Direction <i>(determined by Excel trendline)</i>
1. Heart Disease	▼
2. Total Cancer	▼
3. Chronic Lower Respiratory Disease	▲
4. Cerebrovascular Disease	▼
5. Pneumonia and Influenza	▲
6. Alzheimer's Disease	▲
7. Suicide	▲
8. Nephritis, Nephrotic Syndrome, and Nephrosis	▲
9. Diabetes Mellitus	▲
10. All Other Unintentional Injuries	Little change
11. Septicemia	▼
12. Unintentional Motor Vehicle Injuries	▼
13. Chronic Liver Disease and Cirrhosis	▲
14. Acquired Immune Deficiency Syndrome	▼
15. Homicide	▼

Source: Sheila S. Pfaender, Public Health Consultant, via data from the NC State Center for Health Statistics, County Health Data Books.

Differences in mortality statistics will be covered as each cause of death is discussed separately below, in the order of highest Camden County rank to lowest, beginning with heart disease. 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.

Note that all health data--however briefly it may be referenced in subsequent sections of this report--is available in detailed format in one or more of the following supporting document files: the 2016 Camden County Health Data Workbook, the 2016 Camden County CHA Presentation, or the 2016 Camden County Hospital Data Summary Workbook.

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 (57).

Heart disease was the leading cause of death in Camden County in the 2010-2014 period (cited previously).

Heart Disease Hospitalizations

The table below presents inpatient hospital discharge rate trend data for several years. According to this data from NC SCHS, heart disease has been cause for a high rate of inpatient hospitalization among Camden County residents, although at rates lower than the comparable state and regional averages.

Table 117. Heart Disease Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	9.2	9.5	9.6	6.6	5.3	5.7	7.1	7.5	8.3	7.6
<i>Regional Average</i>	11.4	11.9	11.1	10.6	9.7	9.7	9.9	11.1	10.8	11.1
Pamlico County	16.5	16.3	15.6	16.2	14.1	15.5	12.4	13.5	12.8	13.1
State of NC	13.1	12.7	12.2	11.8	11.4	11.3	10.9	10.7	10.3	10.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with diagnoses of chronic rheumatic heart disease (ICD-9 Codes 393-398), hypertensive heart disease (ICD-9 Code 402), and other forms of heart disease (ICD-9 Codes 420-429). Note that while significant, these categories do *not* include all forms of heart disease.

- Over the period cited, 0.9% of all ED discharges and 15.7% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of heart disease.

Table 118. Hospital Discharges, Camden County Residents: Heart Disease (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	34	0.9	26	0.8	60	0.9
IP	81	15.8	73	15.6	154	15.7

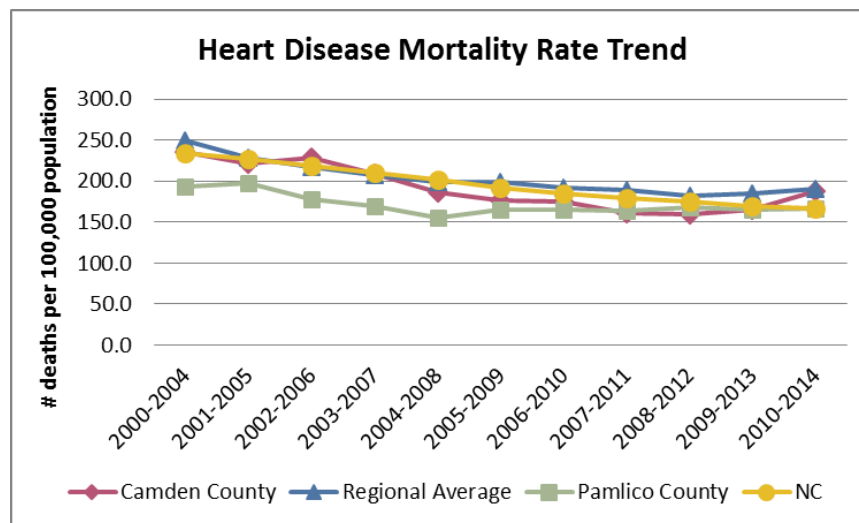
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Heart Disease Mortality Rate Trend

The figure below displays the heart disease mortality rate trend over time.

- The heart disease mortality rate fell significantly in all four jurisdictions over the period cited. The heart disease mortality rate for Camden County fell by 20% overall (from 236.0 to 187.8) between 2002-2004 and 2010-2014. At the state level, the heart disease mortality rate fell 29% overall in the same period.

Figure 23. Overall Heart Disease Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Heart Disease Mortality

The following table presents heart disease mortality data for 2010-2014, stratified by race.

- Due to below-threshold numbers of heart disease deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- In Camden County the heart disease mortality rate among African American non-Hispanics (326.6) was *twice* the comparable rate among white non-Hispanics (165.9).

Table 119. Race/Ethnicity-Specific Heart Disease Mortality (Aggregate Period 2010-2014)

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
Camden County	68	165.9	26	326.6	0	n/a	0	n/a	1	n/a	95	187.8
Regional Average	159	188.7	74	229.8	0	n/a	1	n/a	1	n/a	235	189.9
Pamlico County	128	158.7	43	205.2	1	n/a	1	n/a	0	n/a	173	166.6
State of NC	67,699	163.8	17,190	190.0	863	190.4	397	70.5	550	52.7	86,699	165.9

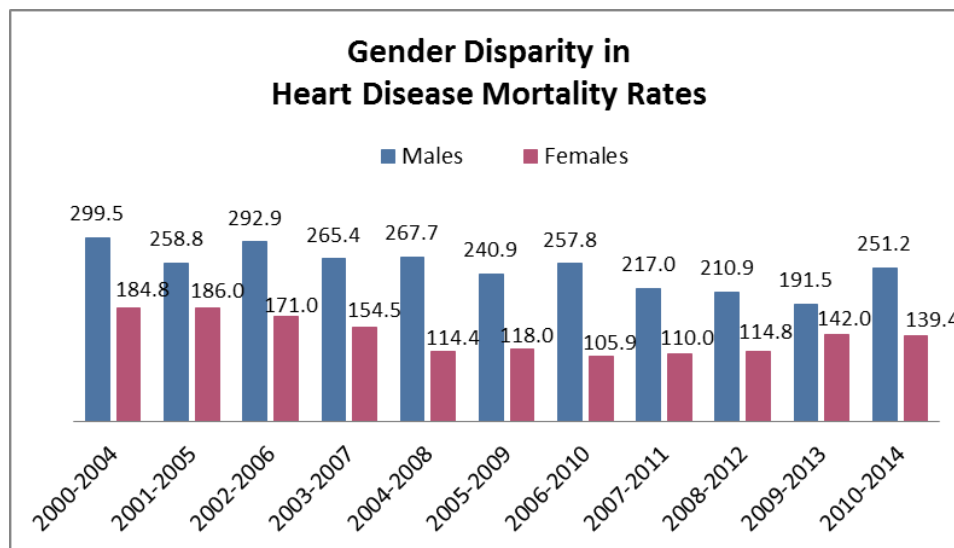
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <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 Camden County for the aggregate periods 2000-2004 through 2010-2014.

- It appears that there is a long-standing gender difference in heart disease mortality in Camden County. The mortality rate among males has been consistently higher than the mortality rate among females.
- The heart disease mortality rate among both men and women in Camden County has decreased since 2000-2004, but the rate among both men and women appears to be increasing of late.

Figure 24. Sex-Specific Heart Disease Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2016), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

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 (58).

Total Cancer

Total cancer (cancers of all types) was the second-leading cause of death in Camden County in the 2010-2014 period (cited previously).

Malignant Neoplasm Hospitalizations

The table below presents the inpatient hospital discharge rate trend for malignant neoplasms.

- The malignant neoplasm discharge rate in Camden County was variable annually, but was lower than the comparable rates region-wide and statewide in every year cited. Statewide, hospitalizations for this diagnosis decreased over time; there was no clear pattern in Camden County.

Table 120. All Malignant Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	2.1	3.0	2.8	1.7	2.0	1.1	1.6	0.9	2.0	1.9
<i>Regional Average</i>	3.6	3.4	3.5	2.9	2.9	2.4	2.4	2.4	2.2	2.4
Pamlico County	6.2	5.3	5.5	6.0	5.2	3.6	3.8	4.4	3.2	3.5
<i>State of NC</i>	3.9	3.9	3.9	3.6	3.4	3.3	3.2	3.0	2.9	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with diagnoses of neoplasm (ICD-9 Codes 140-239).

- Over the period cited, 0.07% of all ED discharges and 3.5% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of neoplasm (cancer).

Table 121. Hospital Discharges, Camden County Residents: All Malignant Neoplasms (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	2	0.06	3	0.09	5	0.07
IP	14	2.7	20	4.3	34	3.5

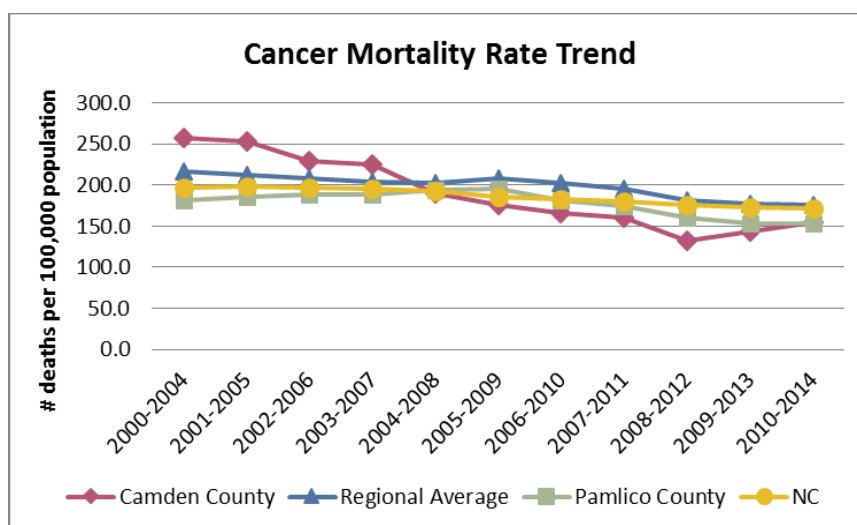
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Total Cancer Mortality Rate Trend

The figure below displays total cancer mortality rate trend over time.

- Throughout the early part of the period cited the total cancer mortality rate in Camden County exceeded the comparable rates for the region and the state.
- The total cancer mortality rate for Camden County fell by 40% overall (from 257.7 to 154.8) between 2002-2004 and 2010-2014. At the state level, the total cancer mortality rate fell 13% overall in the same period.

Figure 25. Overall Total Cancer Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Total Cancer Mortality

The next table presents total cancer mortality data stratified by race.

- Due to below-threshold numbers of total cancer deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- Statewide the total cancer mortality rate among African American non-Hispanics (199.4) was 17% higher than the comparable rate among white non-Hispanics (169.9).

Table 122. Race/Ethnicity-Specific Total Cancer Mortality (Aggregate Period 2010-2014)

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
Camden County	74	155.7	15	n/a	0	n/a	0	n/a	0	n/a	89	154.8
Regional Average	156	174.2	68	187.6	0	n/a	0	n/a	1	n/a	225	175.1
Pamlico County	141	165.7	25	122.0	0	n/a	0	n/a	0	n/a	166	153.1
State of NC	71,216	169.9	18,985	199.4	798	159.7	681	97.8	862	67.1	92,542	171.8

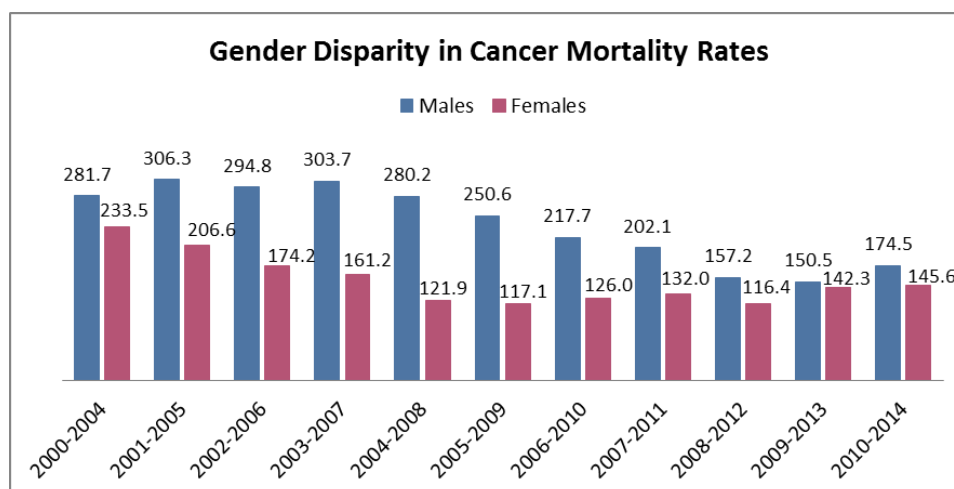
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Total Cancer Mortality

The table below depicts gender-stratified total cancer mortality rates in Camden County for the aggregate periods 2000-2004 through 2010-2014.

- It appears that there is a long-standing gender difference in total cancer mortality in Camden County. Recently, however, the gap has narrowed.
- The total cancer mortality rates for both males and females decreased over much of the period cited although rates for both men and women have increased in the past two aggregate periods.

Figure 26. Sex-Specific Total Cancer Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

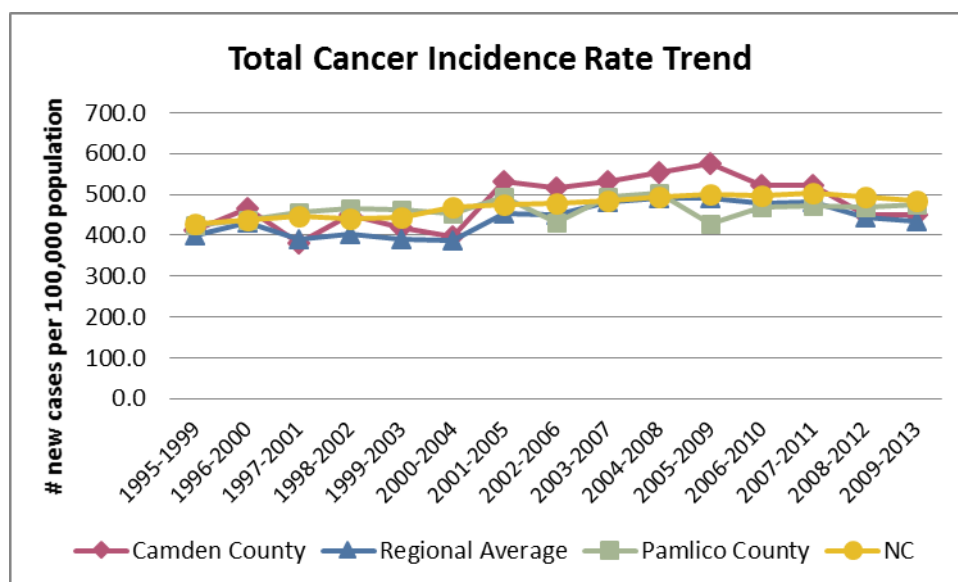
Total Cancer Incidence

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 figure plots the incidence rate trend for total cancer.

- The total cancer incidence rate in Camden County fluctuated over time, increasing until 2005-2009, after which it decreased. The county incidence rate *increased* by 9% overall (from 413.3 to 448.5) over the entire time period cited.
- The total cancer incidence rate region-wide *increased* 9% over the same time period, from 398.8 to 435.5. This was the largest percent increase among the four jurisdictions.
- The total cancer incidence rate for the state of NC increased gradually over the period cited, and was 13% higher in 2009-2013 (483.4) than in 1995-1999 (429.4).

**Figure 27. Overall Total Cancer Incidence Rate Trend
(Aggregate Periods 1995-1999 through 2009-2013)**



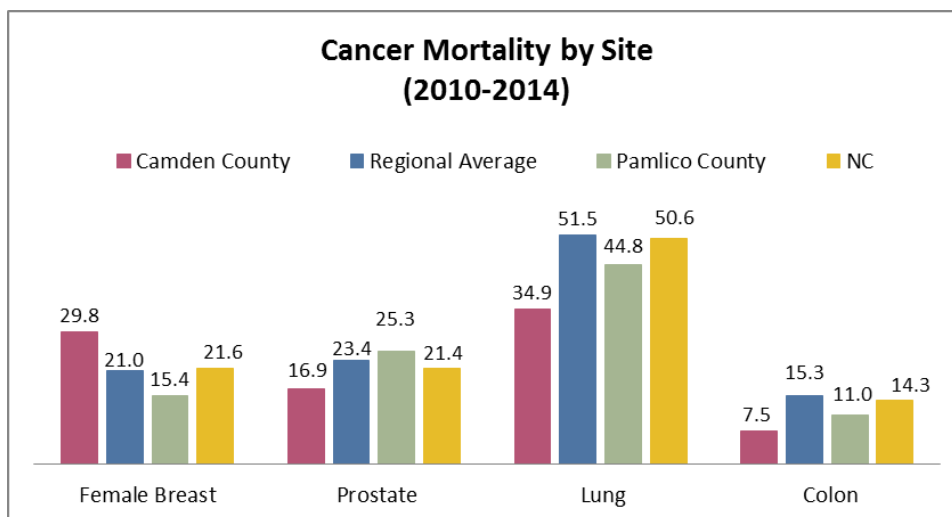
Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); <http://www.schs.state.us.nc/SCHS/CCR/reports.html>.

To this point the discussions of cancer mortality and incidence have focused on figures for total cancer. In Camden 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 here are gender-specific.

The following two figures present age-adjusted *mortality rate* data and *incidence rate* data for the four major site-specific cancers for the most recent aggregate periods.

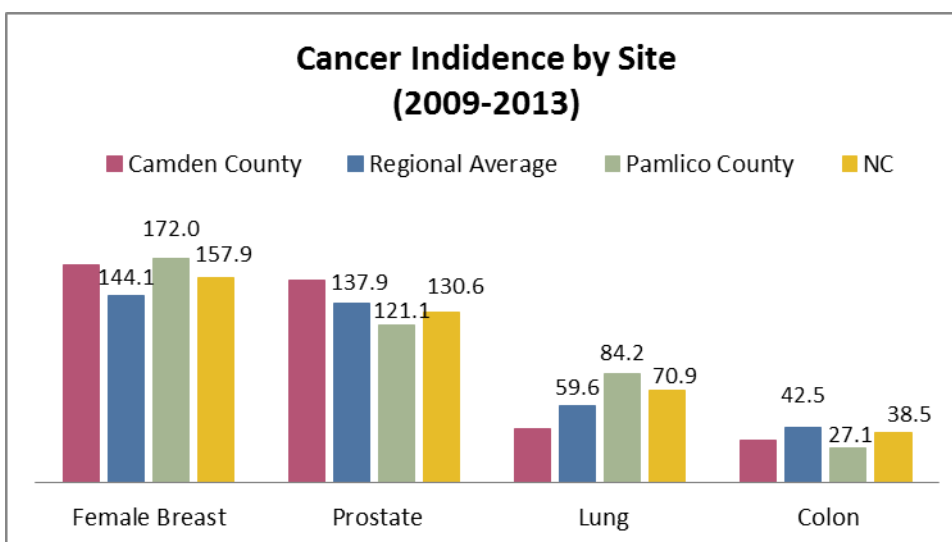
- In Camden County, in 2010-2014 the site-specific cancer with the highest *mortality rate* was lung cancer, followed by female breast cancer, prostate cancer, and colon cancer.
- In Camden County, in 2009-2013 the site specific cancer with the highest *incidence rate* was female breast cancer, followed by prostate cancer, lung cancer, and colon cancer.

Figure 28. Mortality Rates for Four Major Site-Specific Cancers (Aggregate Period, 2010-2014)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2016). 2010-2014 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/>.

Figure 29. Incidence Rates for Four Major Site-Specific Cancers (Aggregate Period 2009-2013)



Source: NC State Center for Health Statistics, Cancer Data, Annual Reports. NC Cancer Incidence Rates 2009-2013, 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 Camden County: lung cancer, female breast cancer, prostate cancer, and colon cancer.

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 rate data for malignant trachea, bronchus and lung neoplasms. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

- The hospital discharge rate for lung cancer in Camden County was highly variable over the period cited, due to instability; the comparable state rate fell 33% over the same period.

Table 123. Malignant Trachea, Bronchus, Lung Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.3	0.6	0.6	0.3	n/a	0.3	0.2	0.4	0.3	0.8
<i>Regional Average</i>	0.5	0.5	0.7	0.5	0.4	0.5	0.4	0.5	0.3	0.5
Pamlico County	0.4	0.6	1.5	0.7	1.2	0.5	0.7	1.2	0.5	0.8
State of NC	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

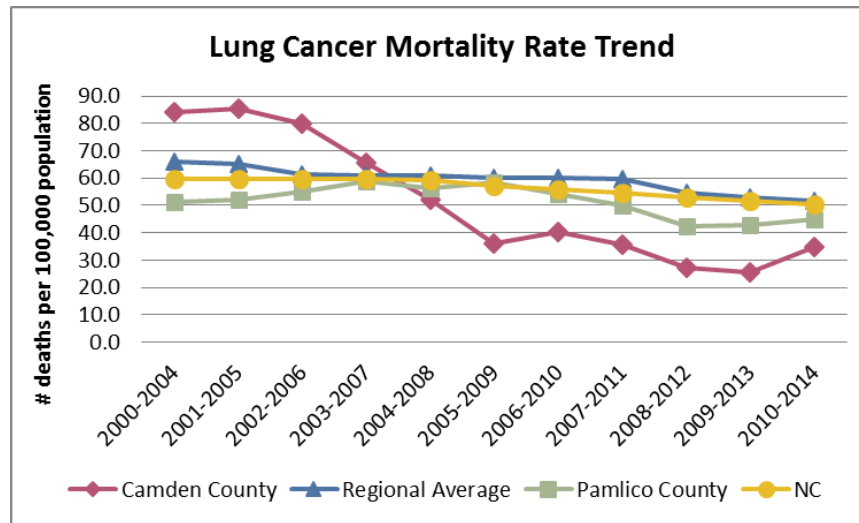
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Lung Cancer Mortality Rate Trend

The following figure plots the lung cancer mortality rate trend over time.

- Lung cancer mortality rates fell overall in all jurisdictions shown over the period cited, but the greatest drop among the comparators occurred in Camden County.
- The lung cancer mortality rate for Camden County decreased by 59% overall (from 84.3 to 34.9) between 2002-2004 and 2010-2014. At the state level, the lung cancer mortality rate fell 15% overall in the same period.

**Figure 30. Overall Lung Cancer Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Lung Cancer Mortality

The following table presents lung cancer mortality data for the 2010-2014 aggregate period, stratified by race.

- Due to below-threshold numbers of lung cancer deaths among populations at the county-level, mortality rates were suppressed for these groups.
- Statewide the lung cancer mortality rate among white non-Hispanics (52.0) was 2% higher than the comparable rate among African American non-Hispanics (50.9).

**Table 124. Race/Ethnicity-Specific Lung Cancer Mortality
(Aggregate Period 2010-2014)**

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
Camden County	18	n/a	3	n/a	0	n/a	0	n/a	0	n/a	21	34.9
Regional Average	51	59.4	17	44.2	0	n/a	0	n/a	0	n/a	67	51.5
Pamlico County	46	53.3	3	n/a	0	n/a	0	n/a	0	n/a	49	44.8
State of NC	22,161	52.0	4,888	50.9	273.0	53.0	157	22.7	112	10.3	27,591	50.6

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.

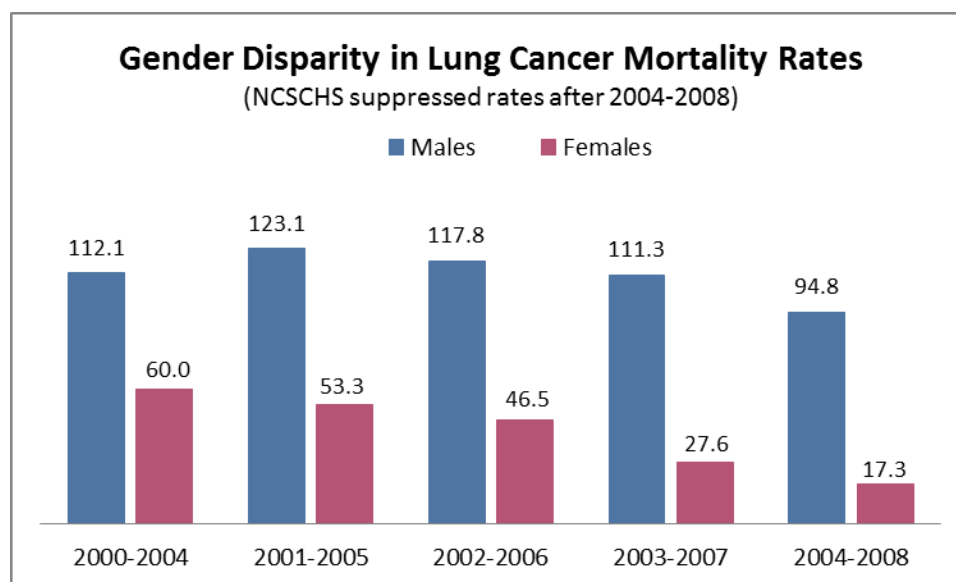
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Lung Cancer Mortality

The following figure plots gender-stratified lung cancer mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008.

- The NC State Center for Health Statistics suppressed all gender-stratified lung cancer mortality rates for Camden County after 2004-2008.
- The lung cancer mortality rate for Camden County males traditionally has been much higher than the comparable rate for females.
- The lung cancer mortality rate among Camden County males fell over part of the period cited, as did the comparable rates for females.

**Figure 31. Sex-Specific Lung Cancer Mortality Rate Trend, Camden County
(Aggregate Periods 2000-2004 through 2004-2008)**



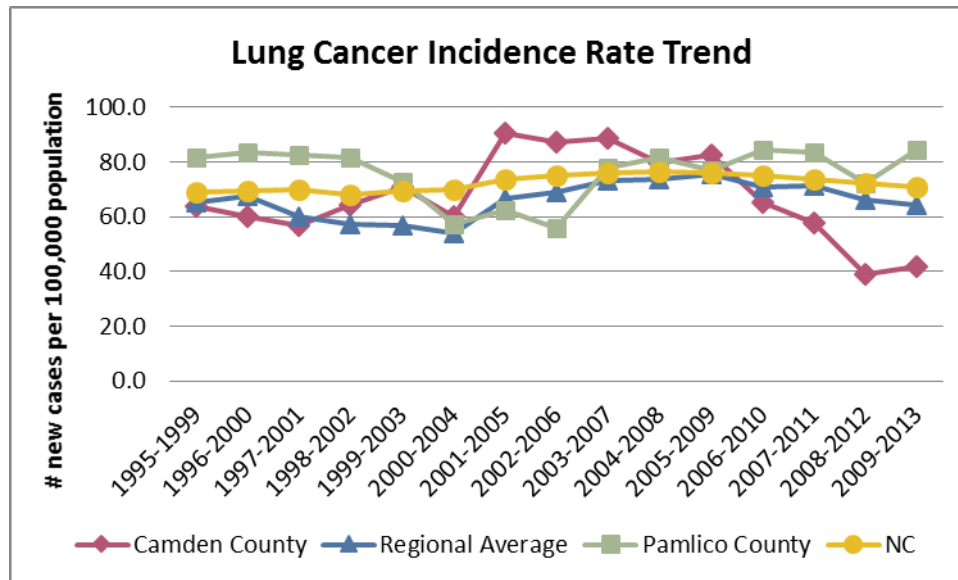
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2016), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Lung Cancer Incidence

The following figure plots the incidence rate trend for lung cancer.

- Despite year-to-year fluctuation, lung cancer incidence rates changed very little overall between 1995-1999 and 2009-2013.
- Sometimes increases in incidence are noted after major screening campaigns. It is not known whether or not increased screening activity played a role in the lung cancer incidence changes in these jurisdictions, especially since screenings for breast, prostate and colon cancer are more common than screenings for lung cancer.

**Figure 32. Lung Cancer Incidence Rate Trend
(Aggregate Periods 1995-1999 through 2009-2013)**



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>.

Female 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 Camden County in the 2010-2014 period; there also were no breast cancer deaths among males statewide. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

Breast Cancer Hospitalizations

The following table summarizes inpatient hospital discharge rate data for female breast cancer.

- Hospital discharge rates for breast cancer in the two counties were unstable due to small numbers of hospitalizations; the rates for the region also were unstable since the regional average was based on county rates, many of which were unstable.
- Statewide, the discharge rate for female breast cancer was steady at 0.2 until 2011 when it fell to (and remained at) 0.1.

Table 125. Malignant Female Breast Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.2	0.5	0.3	0.1	0.3	n/a	n/a	n/a	n/a	0.1
Regional Average	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1
Pamlico County	0.5	0.2	n/a	0.2	0.3	n/a	0.1	n/a	0.1	0.1
State of NC	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

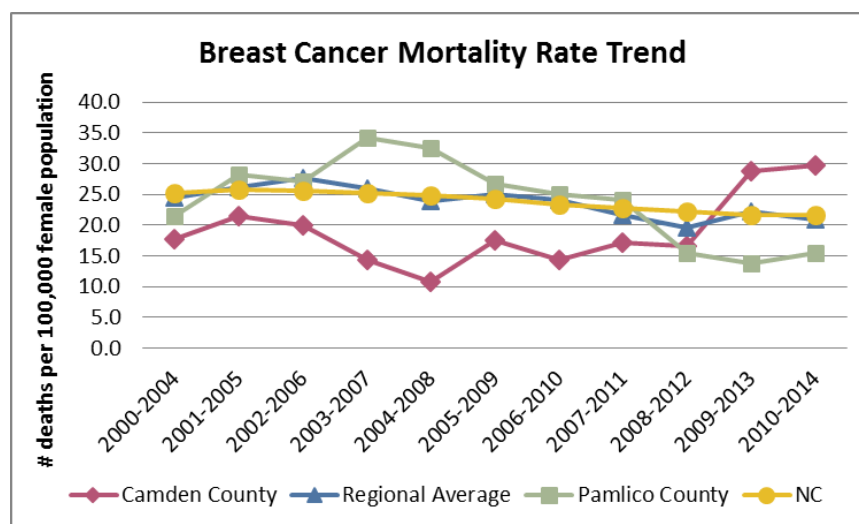
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Breast Cancer Mortality Rate Trend

The following figure displays the female breast cancer mortality rate trend over time.

- The breast cancer mortality rate in Camden County was erratic over the period cited, likely due to small and varying numbers of deaths. The erratic county rate was lower than the NC rate from 2000-2004 through 2008-2012, then spiked upward.
- The Camden County breast cancer mortality rate in 2010-2014 (29.8) was 68% higher than the rate in 2000-2004 (17.7).
- The NC breast cancer mortality rate declined 14% over the period cited, from 25.2 to 21.6.

Figure 33. Overall Female Breast Cancer Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Breast Cancer Mortality

The next table presents breast cancer mortality rate data for the 2010-2014 aggregate period, stratified by race.

- Due to below-threshold numbers of female breast cancer deaths among racially-stratified populations in all jurisdictions except NC, mortality rates for those groups were suppressed.
- Statewide, the female breast cancer mortality rate for African American non-Hispanic females (29.0) was 43% higher than the comparable rate for white non-Hispanic females (20.3).

Table 126. Race/Ethnicity-Specific Female Breast Cancer Mortality (Aggregate Period 2010-2014)

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
Camden County	9	n/a	1	n/a	0	n/a	0	n/a	0	n/a	10	29.8
Regional Average	10	25.7	6	n/a	0	n/a	0	n/a	0	n/a	15	21.0
Pamlico County	8	n/a	2	n/a	0	n/a	0	n/a	0	n/a	10	15.4
State of NC	4,645	20.3	1,678	29.0	43.0	15.0	15	11.6	74	9.1	6,491	21.6

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.

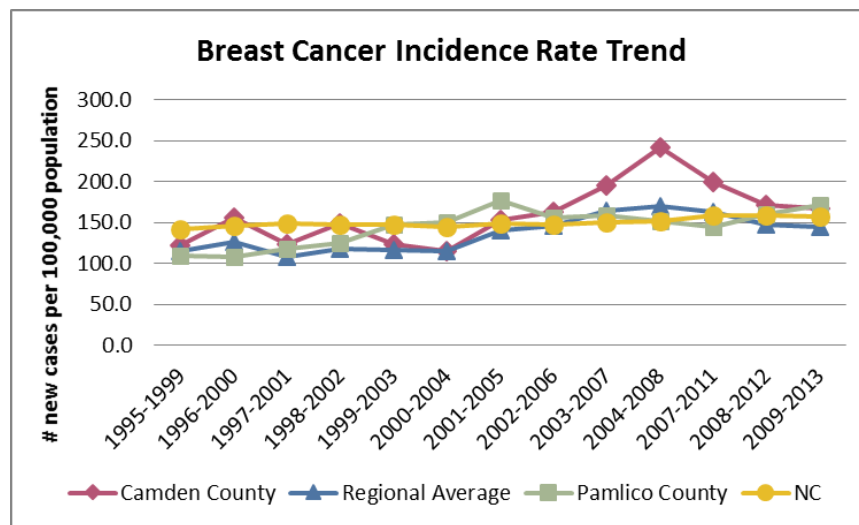
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Breast Cancer Incidence

The figure below plots the incidence rate trend for breast cancer.

- Breast cancer incidence rates increased overall in the period cited in every comparator jurisdiction. In Camden County the overall increase was 37%, from 121.8 in 1995-1999 to 167.1 in 2009-2013. The increase statewide in the same period was 12%.

Figure 34. Breast Cancer Incidence Rate Trend (Aggregate Periods 1995-1999 through 2009-2013)



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>.

Prostate Cancer

Prostate Cancer Hospitalizations

The table below summarizes hospital discharge rate data for malignant neoplasms of the prostate. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

- The hospital discharge rates for prostate cancer in Camden County were variable and unstable throughout the period cited.

Table 127. Malignant Prostate Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.1	0.3	0.1	0.2	0.2	0.2	0.6	0.1	0.2	0.1
Regional Average	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Pamlico County	0.3	0.4	0.3	0.7	0.5	0.5	0.3	0.3	0.1	0.2
State of NC	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2

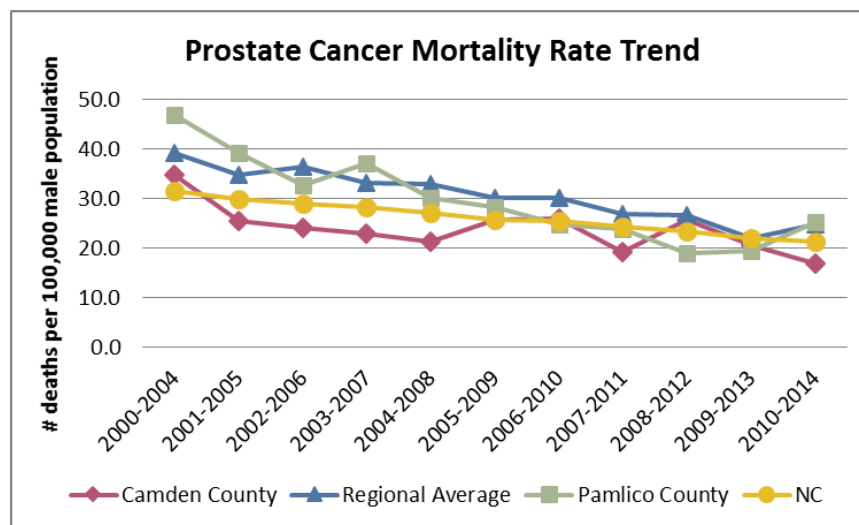
Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence;
<http://www.schs.state.nc.us/SCHS/data/databook/>.

Prostate Cancer Mortality Rate Trend

The following figure plots the prostate cancer mortality rate trend over time.

- The prostate cancer mortality rate in Camden County was erratic over the period cited, due to small numbers of cases and unstable rates. The (unstable) county mortality rate fell 52% overall, from 34.9 in 2000-2004 to 16.9 in 2010-2014.
- The NC prostate cancer mortality rate decreased by 32% over the period cited, from 31.6 in 2000-2004 to 21.4 in 2010-2014.

Figure 35. Overall Prostate Cancer Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Prostate Cancer Mortality

The table below presents prostate cancer mortality rate data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of prostate cancer deaths among racially-stratified populations in all jurisdictions except NC, mortality rates for those groups were suppressed.

- Statewide, the prostate cancer mortality rate for African American non-Hispanic males (44.2) was 2.5 times the comparable rate for white non-Hispanic males (17.9).

Table 128. Race/Ethnicity-Specific Prostate Cancer Mortality Rate (Aggregate Period 2010-2014)

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
Camden County	3	n/a	1	n/a	0	n/a	0	n/a	0	n/a	4	16.9
Regional Average	7	n/a	6	n/a	0	n/a	0	n/a	0	n/a	13	24.8
Pamlico County	8	n/a	2	n/a	0	n/a	0	n/a	0	n/a	10	25.3
State of NC	2,939	17.9	1,305	44.2	50	32.8	11	n/a	33	9.6	4,338	21.4

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.

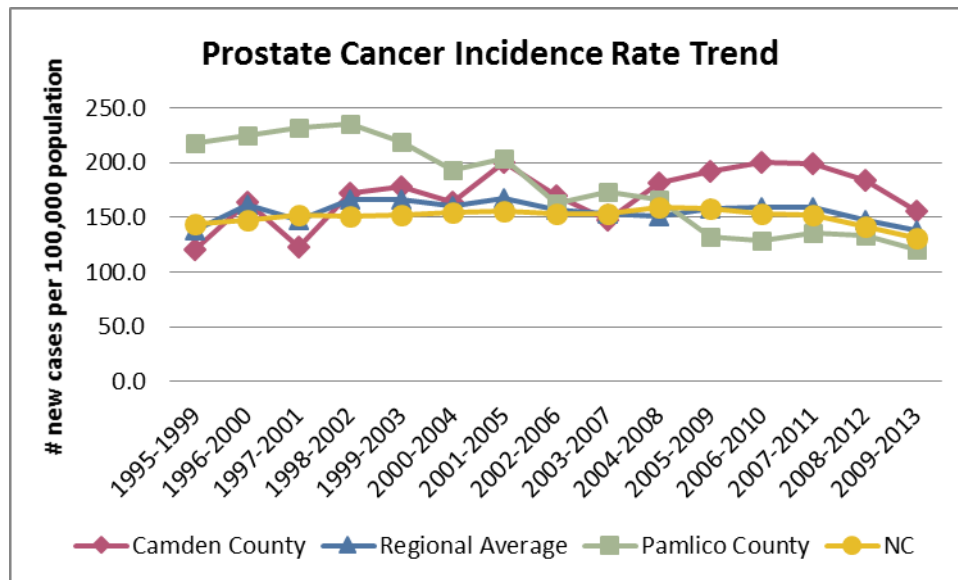
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Prostate Cancer Incidence

The following figure plots the incidence rate trend for prostate cancer.

- The prostate cancer incidence rate in Camden County was higher than the state and regional rates for much of the period cited.
- The prostate cancer incidence rate in Camden County rose over time to the highest rate among the comparators. The local rate rose 29% overall, from 120.8 in 1995-1999 to 155.5 in 2009-2013.

Figure 36. Prostate Cancer Incidence Rate Trend (Aggregate Periods 1995-1999 through 2009-2013)



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>.

It is not known whether or not increased screening activity played a role in any of the increases in prostate cancer incidence.

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 only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

- The hospital discharge rates for colorectal cancer in Camden County was variable over the period cited, but was lower in 2014 than in 2005. The NC rate has been static at 0.4 for several years.

Table 129. Malignant Colon, Rectum and Anus Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.3	0.5	0.5	0.2	0.4	0.1	0.4	n/a	0.2	0.2
<i>Regional Average</i>	0.5	0.7	0.6	0.5	0.5	0.3	0.4	0.4	0.4	0.4
Pamlico County	0.4	0.6	0.5	0.6	0.4	0.4	0.5	0.2	0.3	0.5
State of NC	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

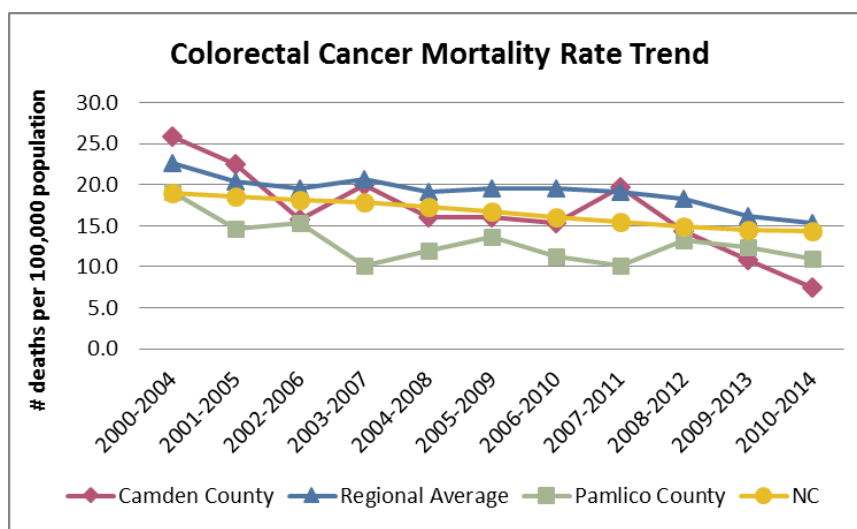
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Colon Cancer Mortality Rate Trend

The following figure plots the colon cancer mortality rate trend over time.

- The colorectal cancer mortality rates in all four jurisdictions fell overall over the period cited.
- The largest overall change in colorectal cancer mortality among the comparators occurred in Camden County, where the local rate fell over time from significantly higher than the regional and state rates to the lowest rate among comparators.
- The colorectal cancer mortality rate for Camden County decreased by 71% overall (from 25.9 to 7.5) between 2002-2004 and 2010-2014. It should be noted, however, that all the Camden County rates were technically unstable.
- At the state level, the colorectal cancer mortality rate fell 25% overall in the same period.

**Figure 37. Overall Colon Cancer Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Colon Cancer Mortality

The next table presents colorectal cancer mortality rates for the 2010-2014 aggregate period, stratified by race.

- Due to below-threshold numbers of colon cancer deaths among racially stratified populations at the county level, mortality rates for those groups were suppressed.
- Statewide, the colon cancer mortality rate for African American non-Hispanics was 51% *higher* than the comparable rate for white non-Hispanics.

**Table 130. Race/Ethnicity-Specific Colon Cancer Mortality
(Aggregate Period 2010-2014)**

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
Camden County	3	n/a	1	n/a	0	n/a	0	n/a	0	n/a	4	7.5
Regional Average	13	19.1	7	26.0	0	n/a	0	n/a	0	n/a	20	15.3
Pamlico County	9	n/a	1	n/a	0	n/a	0	n/a	0	n/a	10	11.0
State of NC	5,550	13.4	1,907	20.3	65	12.9	48	6.2	62	4.8	7,632	14.3

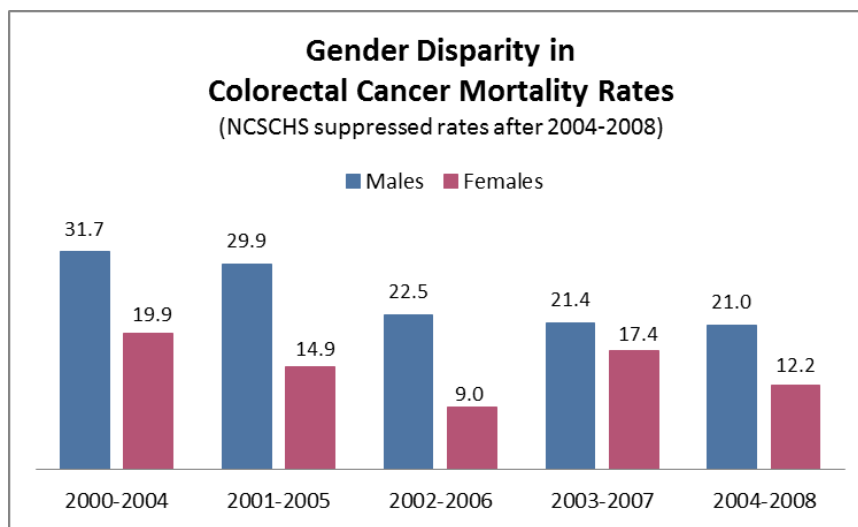
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Colon Cancer Mortality

Gender-stratified colon cancer mortality rates in Camden County cannot be plotted after 2004-2008 because all subsequent mortality rates were suppressed.

- In the periods cited the colon cancer mortality rate for males was higher than the comparable rate for females. It should be noted that all the rates in the graph are technically unstable.

Figure 38. Sex-Specific Colorectal Cancer Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



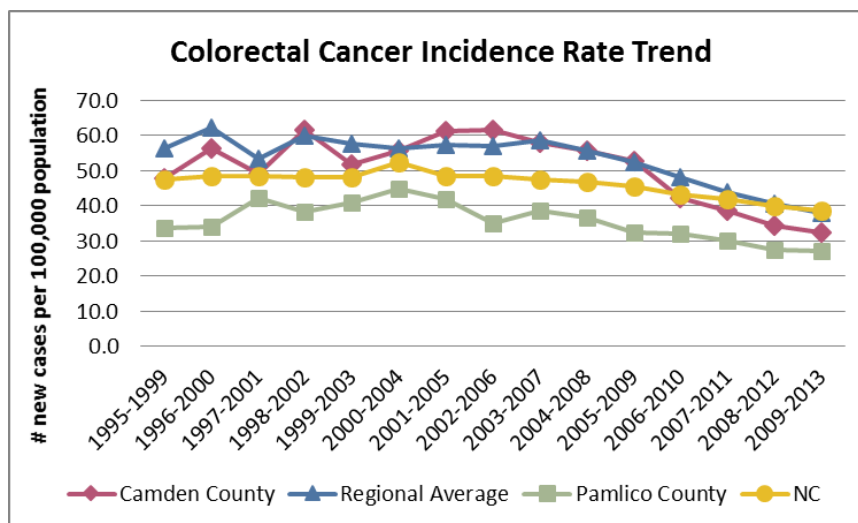
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2010), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Colon Cancer Incidence

The following figure plots the incidence rate trend for colon cancer.

- Colorectal cancer incidence rates decreased in all comparator jurisdictions. In Camden County the colorectal cancer incidence rate fell 33% over the period cited, from 48.0 in 1995-1999 to 32.4 in 2009-2013. At the state level, the colon cancer incidence rate decreased overall by 19%.

Figure 39. Colon Cancer Incidence Rate Trend (Aggregate Periods 1995-1999 through 2009-2013)



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>.

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 (59).

CLRD was the third leading cause of death in Camden County in the 2010-2014 period (cited previously).

The following table presents the inpatient 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 Camden County residents over time, occasionally at a higher rate than in the other jurisdictions.

Table 131. COPD Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	2.8	3.7	3.2	3.0	3.2	2.9	3.8	3.0	2.1	1.9
<i>Regional Average</i>	4.3	3.8	4.0	4.3	3.3	3.3	3.7	2.2	2.1	1.8
Pamlico County	2.2	3.7	4.2	4.0	4.4	2.7	1.7	0.7	1.2	2.3
State of NC	3.5	3.2	3.1	3.4	3.4	3.2	3.2	2.1	2.0	1.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In the ICD-9 system, Chronic Obstructive Pulmonary Disease and Allied Conditions appear in the code range of 490-496. This category includes chronic bronchitis, emphysema, asthma, and other forms of chronic airway obstruction. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with a primary diagnosis of COPD and Allied Conditions (ICD-9 490-496xx).

- Over the period cited, 2.4% of all ED discharges and 6.6% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of COPD and Allied Conditions.

Table 132. Hospital Discharges, Camden County Residents: COPD and Allied Conditions (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	81	2.3	82	2.4	163	2.4
IP	37	7.2	28	6.0	65	6.6

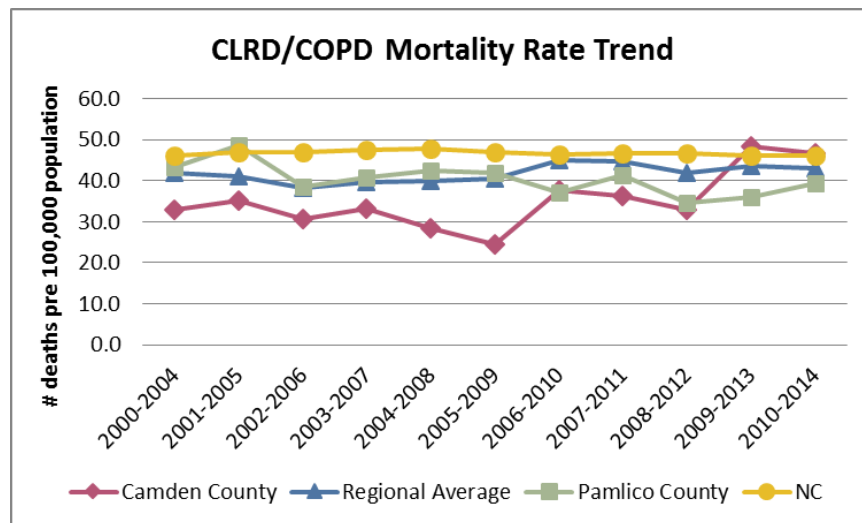
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

CLRD Mortality Rate Trend

The figure below plots the CLRD mortality rate trend over time.

- The CLRD mortality rate in Camden County, lower than the comparable rate for NC through most of the interval cited, rose to above the NC rate in 2009-2013. The county rate rose 42% overall, increasing from 32.9 in 2000-2004 to 46.7 in 2010-2014.
- At the state level, the CLRD mortality rate was essentially unchanged over the period.

Figure 40. Overall CLRD Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in CLRD Mortality

The following table presents CLRD mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of CLRD disease deaths among stratified populations at the county level, mortality rates were suppressed for those groups.
- Statewide the CLRD mortality rate is highest among white non-Hispanics, followed by American Indian non-Hispanics and African American non-Hispanics.

Table 133. Race/Ethnicity-Specific CLRD Mortality (Aggregate Period 2010-2014)

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
Camden County	23	54.2	1	n/a	0	n/a	0	n/a	0	n/a	24	46.7
Regional Average	44	51.2	8	28.3	0	n/a	0	n/a	0	n/a	52	43.2
Pamlico County	39	44.9	5	n/a	0	n/a	0	n/a	0	n/a	44	39.4
State of NC	21,274	51.0	2,466	27.9	175	40.8	56	11.3	71	8.7	24,042	46.0

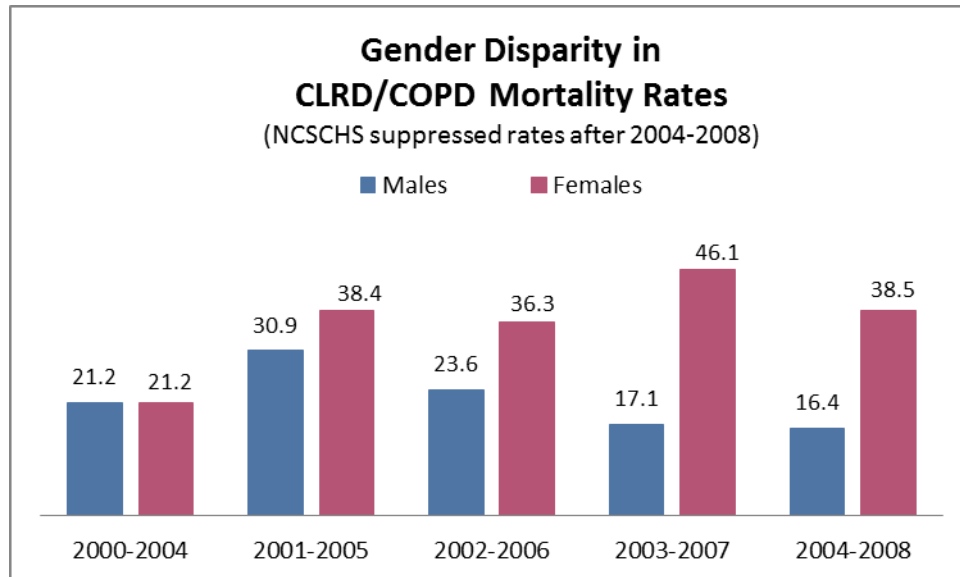
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The figure below plots gender-stratified CLRD mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. Note that gender-stratified CLRD mortality rates in Camden County were suppressed after 2004-2008.

- It appears that there has been a significant gender difference in CLRD mortality rates in Camden County that is atypical: for three of the aggregate periods cited, the CLRD mortality rate among Camden County females was higher than the comparable rate for males. It should be noted, however, that all the rates in the figure were technically unstable.

Figure 41. Sex-Specific CLRD Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 (60).

Cerebrovascular disease was the fourth leading cause of death in Camden County in the 2010-2014 period (cited previously).

Cerebrovascular Disease Hospitalizations

The table below presents the inpatient hospital discharge rate trend data for cerebrovascular disease (CVD). According to this data, CVD caused a smaller proportion of illness-related hospitalizations among Camden County residents than among residents in the comparator jurisdictions.

Table 134. Cerebrovascular Disease Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	1.8	1.7	2.0	1.0	1.0	1.6	1.2	0.8	2.1	1.5
<i>Regional Average</i>	3.1	3.0	2.8	2.5	2.4	2.8	2.2	2.4	2.7	2.7
Pamlico County	4.4	4.0	4.8	4.4	3.8	5.3	4.9	4.7	4.9	2.9
<i>State of NC</i>	3.2	3.1	3.1	3.0	3.1	3.1	3.0	3.0	2.9	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In the ICD-9 system, cerebrovascular disease is in the category Diseases of the Circulatory System, within the specific ICD-9 Code range of 430-438. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with a diagnosis of cerebrovascular disease (ICD-9 430-438xx).

- Over the period cited, 0.2% of all ED discharges and 3.5% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of cerebrovascular disease.

Table 135. Hospital Discharges, Camden County Residents: Cerebrovascular Disease (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	6	0.2	8	0.2	14	0.2
IP	20	3.9	14	3.0	34	3.5

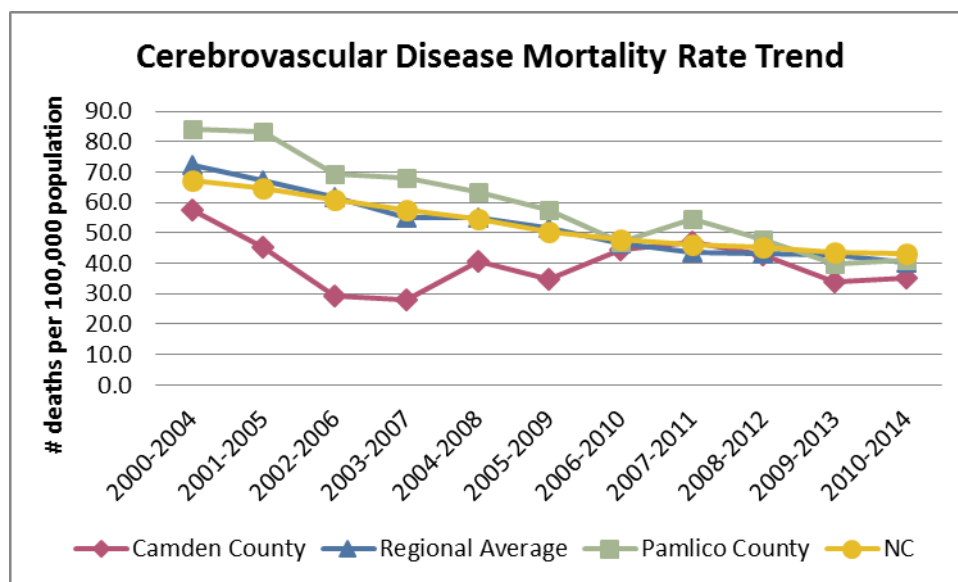
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Cerebrovascular Disease Mortality Rate Trend

The figure below plots the CVD mortality rate trend over time.

- The CVD mortality rate in Camden County was lower than the comparable rates for the region and the state throughout most the interval cited.
- CVD mortality rates in every jurisdiction fell over the period cited.
- The Camden County CVD mortality rate in 2010-2014 was 35.2, 39% lower than the rate in 2000-2004 (57.6).
- The CVD mortality rate for NC as a whole decreased 25% over the period cited.

Figure 42. Overall Cerebrovascular Disease Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Cerebrovascular Disease Mortality

The table below presents CVD mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of CVD disease deaths among some stratified populations in Camden County and elsewhere, mortality rates were suppressed for those groups.
- Statewide the CVD mortality rate for African American non-Hispanic persons (55.8) was 37% higher than the rate for white non-Hispanic persons (40.6).

Table 136. Race/Ethnicity-Specific Cerebrovascular Disease Mortality (Aggregate Period 2010-2014)

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		
Camden County	14	n/a	5	n/a	0	n/a	0	n/a	0	n/a	19	n/a		
<i>Regional Average</i>	32	41.6	18	56	0	n/a	0	n/a	0	n/a	50	40.9		
Pamlico County	34	39.7	10	n/a	0	n/a	0	n/a	0	n/a	44	41.0		
State of NC	16,713	40.6	4,870	55.8	158	37.2	167	30.9	208	19.3	22,116	43.0		

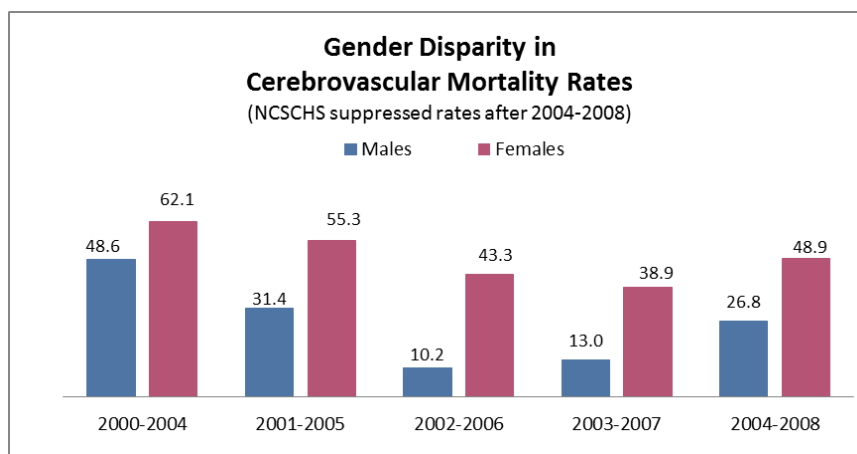
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Cerebrovascular Disease Mortality

The figure below plots gender-stratified CVD mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008, after which period rates were suppressed.

- The graph demonstrates that the CVD mortality rate among Camden County females was higher than the comparable rate among Camden County males throughout the period cited. Rates for both males and females increased in the last period shown, and the rate differential between the genders had decreased.

Figure 43. Sex-Specific Cerebrovascular Disease Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 (61).

Pneumonia/influenza was the fifth-ranked cause of death in Camden County in 2010-2014 (cited previously).

Pneumonia and Influenza Hospitalizations

The table below presents hospital discharge rate trend data. According to this data, pneumonia and influenza discharge rates in Camden County were volatile, even when stable.

Table 137. Pneumonia and Influenza Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	3.0	3.9	1.8	2.0	2.0	2.0	2.0	3.3	1.6	1.1
<i>Regional Average</i>	4.1	3.5	2.6	3.0	2.9	2.7	2.8	2.6	2.7	2.1
Pamlico County	4.8	3.7	3.7	2.6	2.7	2.6	2.0	3.3	3.1	3.0
<i>State of NC</i>	4.1	3.7	3.4	3.3	3.5	3.1	3.2	3.2	3.1	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The ICD-9 codes for pneumonia are 480-487 and the code for influenza is 488. The next table presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with a primary diagnosis of pneumonia (ICD-9 Codes 480-487xx) or influenza (ICD-9 Code 488xx).

- Over the period cited, 0.6% of all ED discharges and 2.9% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of pneumonia.
- Over the period cited, 0.5% of all ED discharges and 0.0% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of influenza.

Table 138. Hospital Discharges, Camden County Residents: Pneumonia and Influenza (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
Pneumonia						
ED	18	0.5	22	0.6	40	0.6
IP	17	3.3	11	2.4	28	2.9
Influenza						
ED	26	0.7	11	0.3	37	0.5
IP	0	0	0	0	0	0

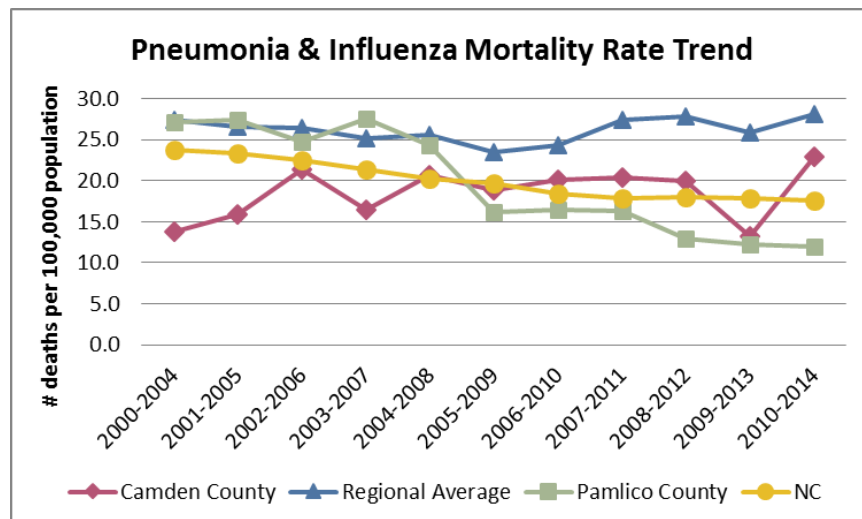
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Pneumonia and Influenza Mortality Rate Trend

The following figure plots the pneumonia/influenza mortality rate trend over time.

- The pneumonia/influenza mortality rate in Camden County was lower than the regional rate throughout the period cited, and lower than the NC rate for some of the period cited.
- Between 2000-2004 and 2010-2014 the pneumonia/influenza mortality rate in Camden County increased by 67%, rising from 13.8 to 23.0. Note, however, that all of the county rates were technically unstable.
- At the state level, the pneumonia/influenza mortality rate fell gradually to a current low 17.6. (See Camden County Health Data Workbook for detail.)

Figure 44. Overall Pneumonia and Influenza Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Pneumonia and Influenza Mortality

The next table presents pneumonia/influenza mortality data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of pneumonia/influenza deaths among stratified populations in Camden County and elsewhere, mortality rates were suppressed.
- At the state level the pneumonia/influenza mortality rate for African American non-Hispanic persons was slightly lower than the rate for white non-Hispanic persons.

Table 139. Race/Ethnicity-Specific Pneumonia and Influenza Mortality (Aggregate Period 2010-2014)

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
Camden County	8	n/a	3	n/a	0	n/a	0	n/a	0	n/a	11	23.0
<i>Regional Average</i>	26	58.6	6	n/a	0	n/a	0	n/a	0	n/a	32	28.2
Pamlico County	8	n/a	3	n/a	0	n/a	0	n/a	0	n/a	11	12.0
State of NC	7,421	18.1	1,412	16.2	57	13.2	50	10.9	71	6.2	9,011	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.

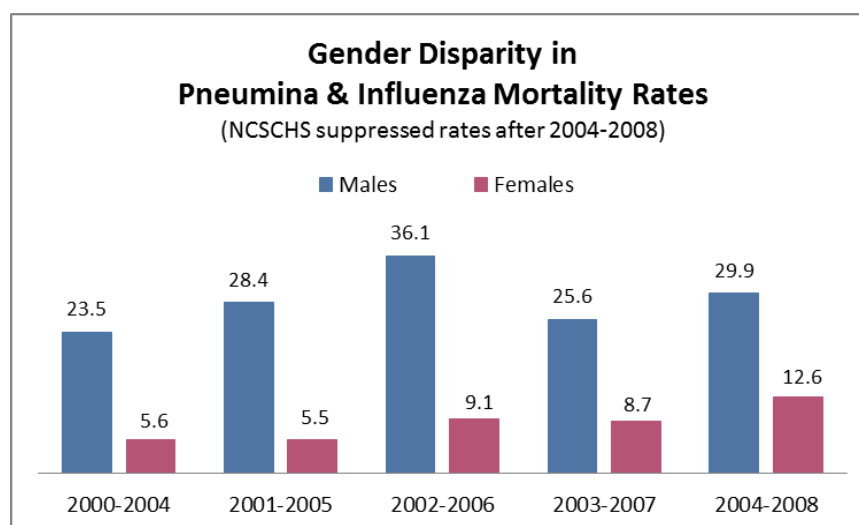
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Pneumonia and Influenza Mortality

The next figure depicts gender-stratified pneumonia/influenza mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. (Note that later rates were suppressed.)

- Over the period cited below, the rate for males varied from two to four times the rate for females. Note, however, that all the rates for the period cited were unstable.

Figure 45. Sex-Specific Pneumonia and Influenza Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 (62).

Alzheimer's disease was the sixth leading cause of death in Camden County in the 2010-2014 aggregate period (cited previously).

Alzheimer's Disease Hospitalizations

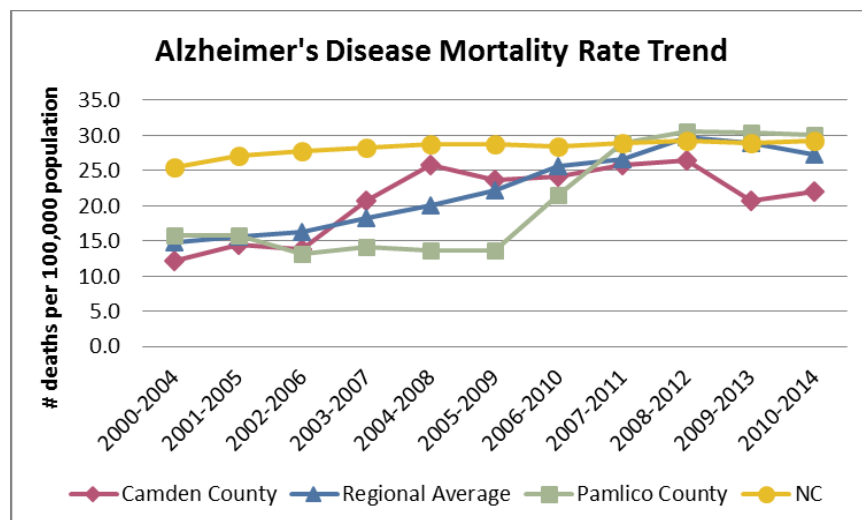
At the present time the NC SCHS does not track Alzheimer's disease-related hospitalizations. Alzheimer's disease is coded 331.0 in the ICD-9 system; however, it can be difficult to diagnose and may first be identified as another form of dementia. There were no ED or IP discharges of Camden County residents from area hospitals coded with that primary diagnosis in 2013 or 2014.

Alzheimer's Disease Mortality Rate Trend

The figure below plots the Alzheimer's disease mortality rate trend over time.

- The Alzheimer's disease mortality rate in Camden County was lower than the comparable rate for NC throughout the interval cited. Although unstable, the local rates did rise overall by 81% over the period, from 12.2 in 2000-2004 to 22.1 in 2010-2014. Over the same period the NC rate rose 15%.

Figure 46. Overall Alzheimer's Disease Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Alzheimer's Disease Mortality

The table below presents Alzheimer's disease mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of Alzheimer's disease deaths among many stratified populations, mortality rates were suppressed for those groups.
- Statewide, the Alzheimer's disease mortality rate was highest among American Indian non-Hispanics, followed by white non-Hispanics and African American non-Hispanics.

Table 140. Race/Ethnicity-Specific Alzheimer's Disease Mortality (Aggregate Period 2010-2014)

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
Camden County	9	n/a	1	n/a	0	n/a	0	n/a	0	n/a	10	22.1
<i>Regional Average</i>	22	32.1	12	33.8	0	n/a	0	n/a	0	n/a	34	27.3
Pamlico County	23	29.0	8	n/a	0	n/a	0	n/a	0	n/a	31	30.0
State of NC	12,318	30.1	2,017	26.5	134	41.0	39	9.9	87	13.2	14,595	29.2

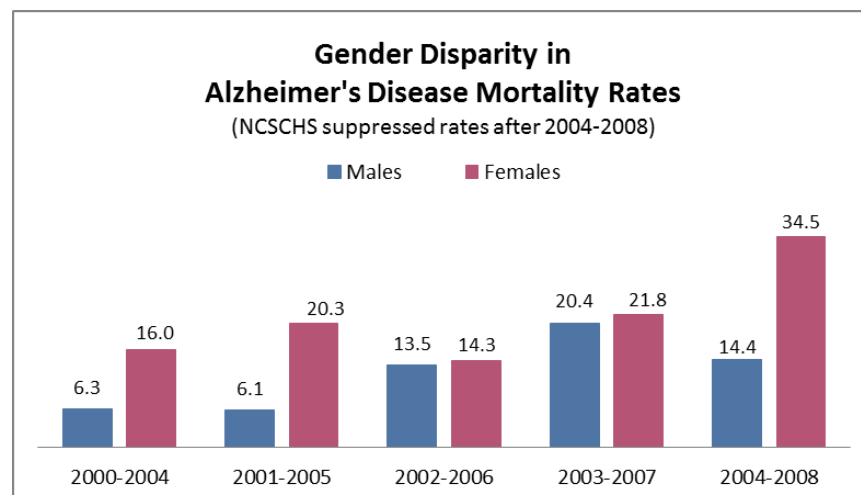
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Alzheimer's Disease Mortality

The following figure plots gender-stratified Alzheimer's disease mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008, after which rates were suppressed. Note that all the rates in the graph below are unstable.

- It appears that for most of the period cited the Alzheimer's disease mortality rate for females was higher than the comparable rate for males, although the gender differential varied considerably, likely due to small numbers of events and unstable rates.

Figure 47. Sex-Specific Alzheimer's Disease Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 seventh-ranked cause of death in Camden County in 2010-2014 (cited previously).

Suicide Hospitalizations

At the present time the NC State Center for Health Statistics does not track hospitalizations related to suicide or attempted suicide.

Hospitals do, however, track a diagnosis called Suicide Ideation, which is coded V62.84 in the ICD-9 system. As shown in the table below, there were no inpatient hospitalizations of Camden County residents with that ICD-9 code at any of the qualifying hospitals in 2013 or 2014. There were, however, nine emergency department visits by Camden County residents coded for suicide ideation in the same period.

- Over the period cited, 0.1% of all ED discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of suicide ideation. There were no IP discharges associated with the suicide ideation code.

Table 141. Hospital Discharges, Camden County Residents: Suicide Ideation (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	2	0.06	7	0.2	9	0.1
IP	0	0.0	0	0.0	0	0.0

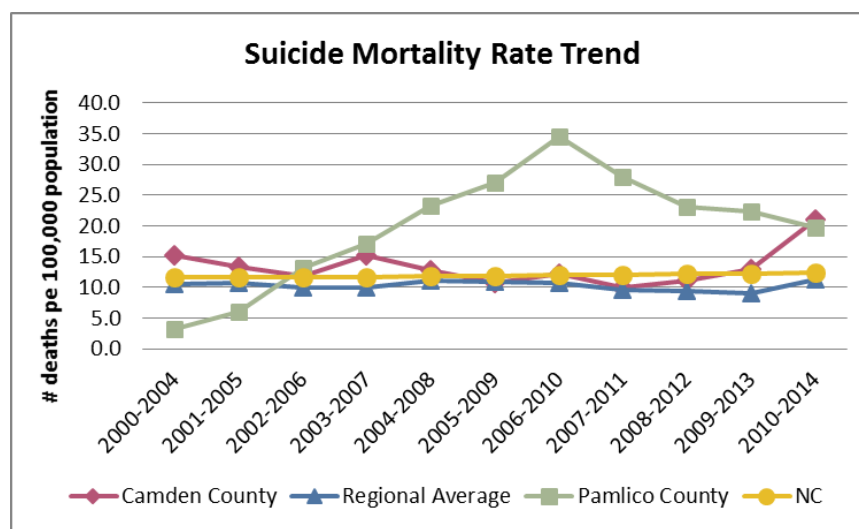
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Suicide Mortality Rate Trend

The following figure plots the suicide mortality rate trend over time.

- The suicide mortality rate for Camden County was higher than the comparable regional and state rates through much the period cited. Note, however, that all the Camden County suicide rates were unstable.
- The Camden County rate fluctuated over the period cited, but increased dramatically in the last period, leading to an overall increase of 38%, from 15.2 in 2000-2004 to 21.0 in 2010-2014.
- The state suicide rate was relatively static over the period cited. The rate in 2010-2014 (12.4) was 7% higher than the rate in 2000-2004 (11.6).

**Figure 48. Overall Suicide Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Suicide Mortality

The following table presents suicide mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of suicide deaths among stratified populations in Camden County and elsewhere, mortality rates were suppressed for those groups, and no comparisons are possible.
- Statewide the highest suicide rate occurred among white non-Hispanics, followed by American Indian non-Hispanics and Other races non-Hispanic.

**Table 142. Race/Ethnicity-Specific Suicide Mortality
(Aggregate Period 2010-2014)**

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
Camden County	10	n/a	1	n/a	0	n/a	0	n/a	0	n/a	11	21.0
Regional Average	11	18.2	1	n/a	0	n/a	0	n/a	0	n/a	11	11.4
Pamlico County	12	n/a	1	n/a	0	n/a	0	n/a	0	n/a	13	19.7
State of NC	5,466	15.9	518	4.9	66	11.4	78	5.9	128	3.5	6,256	12.4

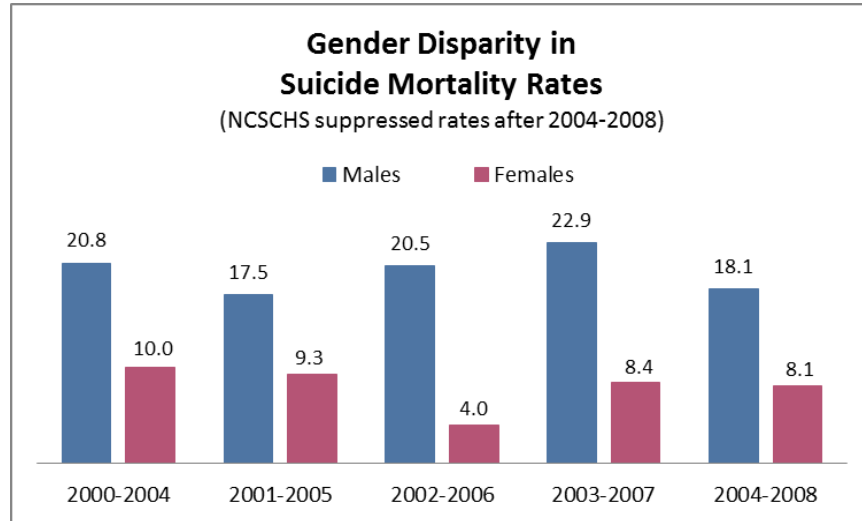
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Suicide Mortality

The following figure plots gender-stratified suicide mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. (Suicide rates in subsequent aggregate periods were suppressed.)

- For the interval shown it appears that the suicide rate among Camden County males was significantly higher than the comparable mortality rate among Camden County females. Although all the rates for both sexes were unstable due to below-threshold numbers of deaths, this disproportionate-pattern of gender-based suicide mortality is common throughout NC.

Figure 49. Sex-Specific Suicide Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 (63,64).

This composite set of kidney disorders was the eighth leading cause of death in Camden County in 2010-2014 (cited previously).

Nephritis, Nephrotic Syndrome and Nephrosis Hospitalizations

The table below presents the hospital discharge rate trend data for the composite of kidney disorders. According to this data, kidney disease caused a lower rate of hospitalizations in Camden County than in the ARHS region or statewide throughout the period cited.

Table 143. Nephritis, Nephrosis, Nephrotic Syndrome Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Camden County	0.6	0.5	0.7	0.1	0.5	0.7	0.6	0.7	0.9	1.7		
<i>Regional Average</i>	1.3	1.4	1.3	1.0	1.0	1.2	1.3	1.6	1.7	2.0		
Pamlico County	1.0	1.5	1.7	1.6	1.8	2.1	2.7	1.8	2.5	2.2		
State of NC	1.2	1.3	1.7	1.6	1.4	1.5	1.8	1.8	1.8	1.9		

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 (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Diagnoses of nephritis, nephrotic syndrome and nephrosis are coded 580-589 in the ICD-9 system. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with a primary diagnosis of any of the above listed kidney diseases (ICD-9 Codes 580-589xx).

- Over the period cited, 0.06% of all ED discharges and 3.2% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of kidney disease.

Table 144. Hospital Discharges, Camden County Residents: Kidney Diseases (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	2	0.06	2	0.06	4	0.06
IP	12	2.3	19	4.1	31	3.2

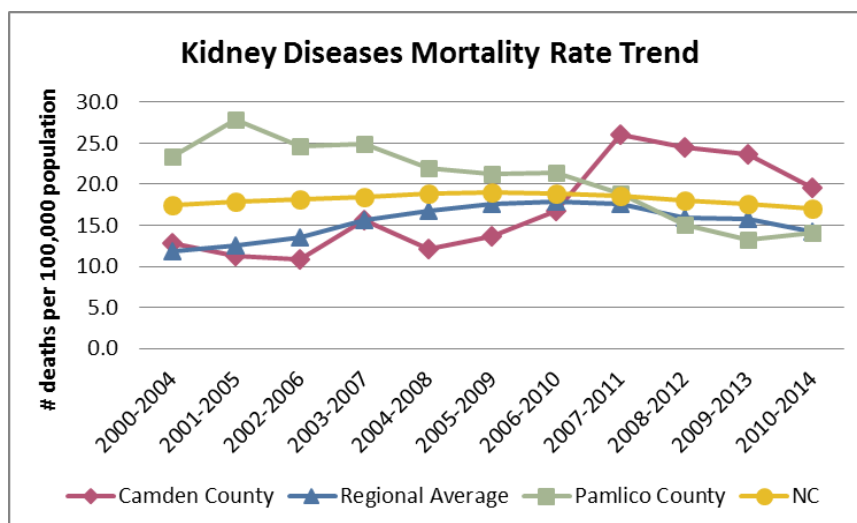
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend

The figure below plots the kidney disease mortality rate trend over time.

- The kidney disease mortality rate in Camden County, which was lower than the NC or regional rates throughout most of the period cited, increased significantly after 2006-2010, and increased 53% overall (from 12.8 to 19.6) between 2000-2004 and 2010-2014. Note, however, that all rates for Camden County were technically unstable.
- The kidney disease mortality rate for NC as a whole rose 7% overall between 2000-2004 and 2010-2014.

Figure 50. Overall Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality

The following table presents kidney disease mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of kidney disease deaths among stratified populations in Camden County and elsewhere, mortality rates were suppressed for those groups.
- Statewide, the kidney disease mortality rate among African American non-Hispanic persons was more than twice the rate for white non-Hispanic persons.

Table 145. Race/Ethnicity-Specific Nephritis, Nephrotic Syndrome and Nephrosis Mortality (Aggregate Period 2010-2014)

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
Camden County	8	n/a	1	n/a	0	n/a	0	n/a	0	n/a	9	19.6
<i>Regional Average</i>	10	n/a	7	25.7	0	n/a	0	n/a	0	n/a	17	14.2
Pamlico County	8	n/a	6	n/a	0	n/a	0	n/a	0	n/a	14	14.1
State of NC	5,667	13.8	2,910	32.9	100	24.5	48	8.8	88	9.1	8,813	17.0

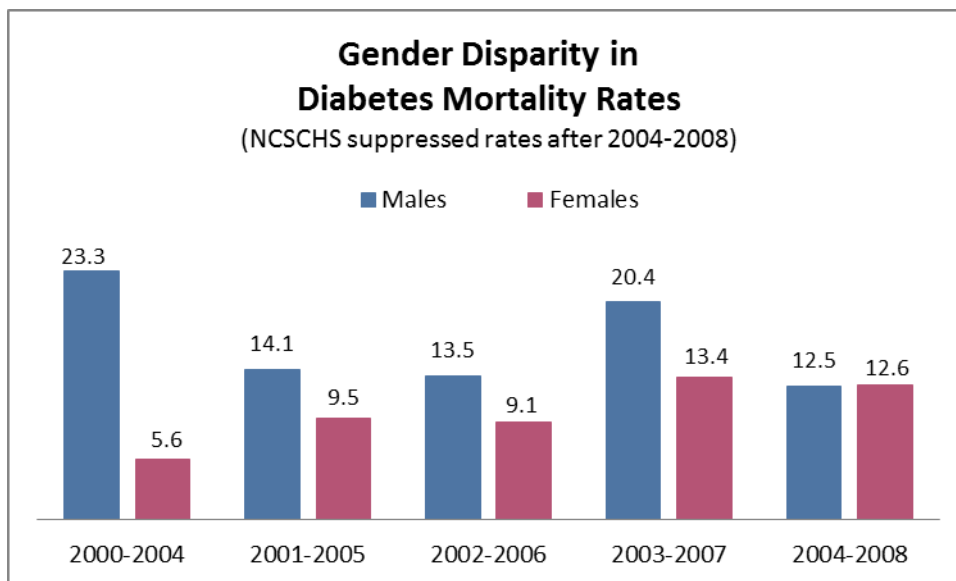
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality

The figure below depicts gender-stratified kidney disease mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. (The period covered is truncated to only those aggregates for which the NC State Center for Health Statistics did not suppress rates.)

- According to the graph, the kidney disease mortality rates among Camden County males appeared to be significantly higher than the comparable rates among Camden County females for four of the five intervals shown. In the last aggregate period the rates for both genders were essentially the same. However, it should be noted that all the gender-stratified kidney disease mortality rates in the graph were unstable.

Figure 51. Sex-Specific Nephritis, Nephrotic Syndrome, Nephrosis Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 (65).

Diabetes was the ninth leading cause of death in Camden County in 2010-2014 (cited previously).

Diabetes Mellitus Hospitalizations

The table below presents inpatient hospitalization discharge rate trend data for diabetes. The rates for Camden County were highly variably as they were all unstable.

Table 146. Diabetes Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	1.0	0.8	0.6	1.5	1.1	0.8	0.2	1.1	1.0	0.5
<i>Regional Average</i>	1.9	1.7	1.5	1.7	1.2	1.6	1.5	1.5	1.5	1.3
Pamlico County	1.3	1.9	1.9	2.0	1.3	2.2	2.3	2.1	1.3	1.5
State of NC	1.8	1.8	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9

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 (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In ICD-9 coding, diabetes falls in the category Endocrine and Metabolic Diseases (ICD-9 Codes 240-279), with a specific ICD-9 Code of 250 for diabetes mellitus. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with a diagnosis of diabetes (ICD-9 250xx).

- Over the period cited, 0.3% of all ED discharges and 1.3% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of diabetes.

Table 147. Hospital Discharges, Camden County Residents: Diabetes Mellitus (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	12	0.3	6	0.2	18	0.3
IP	10	2.0	3	0.6	13	1.3

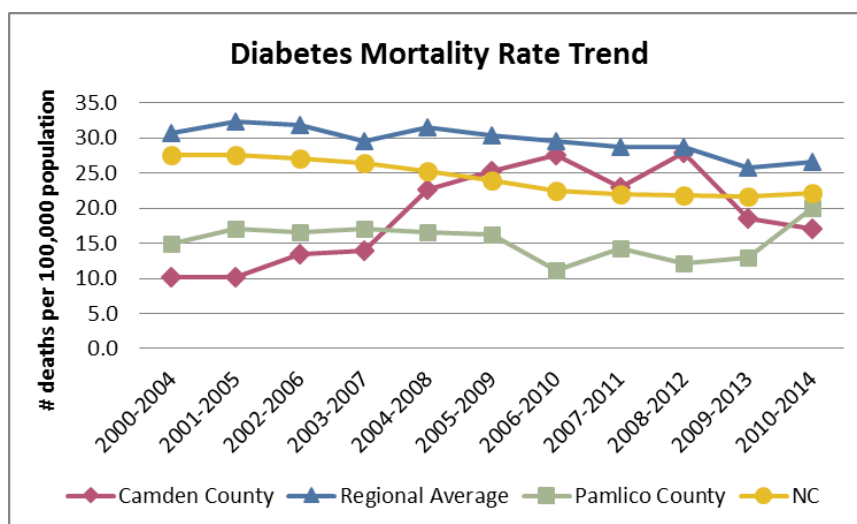
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

Diabetes Mellitus Mortality Rate Trend

The figure below plots the diabetes mortality rate trend over time.

- The diabetes mortality rate in Camden County was lower than the regional rate throughout the period cited, and lower than the state rate through much of the period cited.
- The Camden County diabetes mortality rate fluctuated considerably over time, but increased overall. In 2010-2014 the Camden county rate was 17.0, 68% higher than the rate in 2000-2004 (10.1). Note that all the Camden County rates were unstable.
- The diabetes mortality rate for NC as a whole decreased 20% over the period cited.

**Figure 52. Overall Diabetes Mellitus Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Diabetes Mellitus Mortality

The following table presents diabetes mortality data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of diabetes deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- Statewide the diabetes mortality rate among African American non-Hispanics (43.3) was almost 2½ times the comparable rate among white non-Hispanics (17.9).

**Table 148. Race/Ethnicity-Specific Diabetes Mellitus Mortality
(Aggregate Period 2010-2014)**

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
Camden County	8	n/a	2	n/a	0	n/a	0	n/a	0	n/a	10	17.0
Regional Average	16	28.2	18	53.1	0	n/a	0	n/a	0	n/a	34	26.5
Pamlico County	17	n/a	7	n/a	0	n/a	0	n/a	0	n/a	24	20.0
State of NC	7,432	17.9	3,961	43.3	219	46.0	69	11.9	117	9.3	11,798	22.1

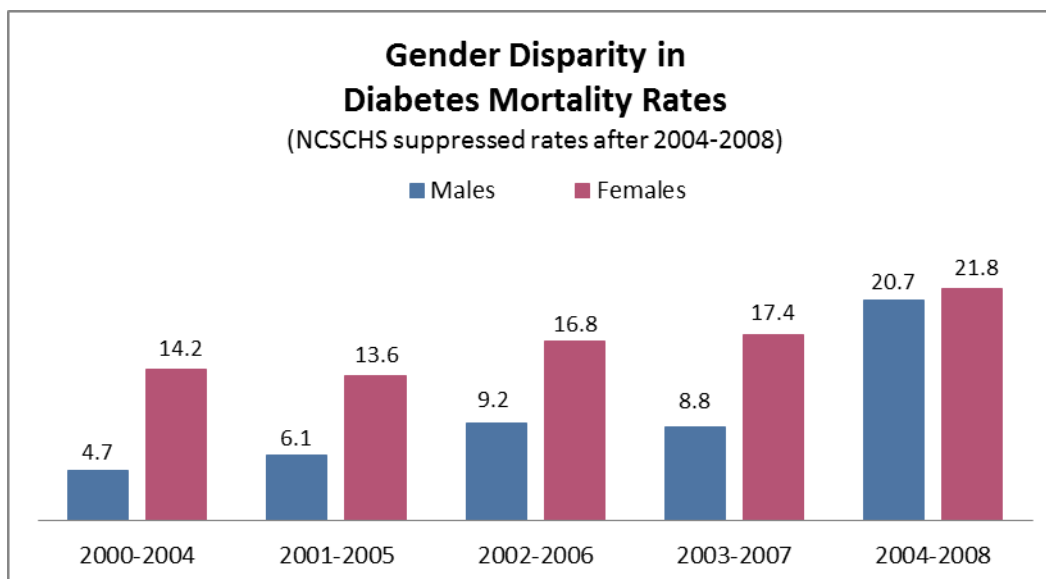
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Diabetes Mellitus Mortality

The figure below plots gender-stratified diabetes mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008, after which period rates were suppressed.

- While in the more distant past the diabetes mortality rate among Camden County females was higher than the comparable rate among males, the rate difference had shrunk by 2004-2008. Note that all the rates in the graph were technically unstable.

**Figure 53. Sex-Specific Diabetes Mellitus Mortality Rate Trend, Camden County
(Aggregate Periods 2000-2004 through 2004-2008)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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, 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 tenth leading cause of death in Camden County in the 2010-2014 period (cited previously).

All Other Unintentional Injury Hospitalizations

In its customary reports in the public domain the NC State Center for Health Statistics separates mortality from injury due to unintentional motor vehicle crashes (“unintentional motor vehicle injury”) from injury due to unintentional *non*-motor vehicle events (“all other unintentional injury”). At the present time the Center does not provide inpatient hospitalization data specific to motor vehicle injury, but it *does* report hospitalization data for the broad category “injury and poisoning”. The table below presents trend data on inpatient hospitalization discharges for injury and poisoning hospitalizations.

- The inpatient hospitalization discharge rate for injury and poisoning in Camden County was lower—usually *significantly* so—than the rates in the comparator jurisdictions throughout the period cited.

Table 149. Injury and Poisoning Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	4.2	5.4	3.4	3.0	1.8	2.6	2.4	3.6	2.8	2.3
<i>Regional Average</i>	6.6	6.3	6.3	5.6	5.3	5.6	5.2	5.8	5.6	4.8
Pamlico County	9.5	11.8	9.9	11.9	8.7	9.3	8.6	9.4	7.5	7.8
<i>State of NC</i>	8.5	8.6	8.6	8.5	8.3	8.2	8.2	8.1	7.7	7.6

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The large ICD-9 code category called *all injuries and poisonings* (ICD-9 Codes 800-999) includes injuries resulting from motor vehicle crashes as well as all other injuries. This category also covers poisoning from all sources, including drug overdoses.

The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Camden County residents with a primary diagnosis of Injury and Poisoning (ICD-9 800-999xx).

- Over the period cited, 21.2% of all ED discharges and 3.7% of all IP discharges of Camden County residents at qualifying hospitals involved a primary diagnosis of injury and poisoning.

Table 150. Hospital Discharges, Camden County Residents: All Injury and Poisoning (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	747	21.4	715	21.1	1462	21.2
IP	18	3.5	18	3.8	36	3.7

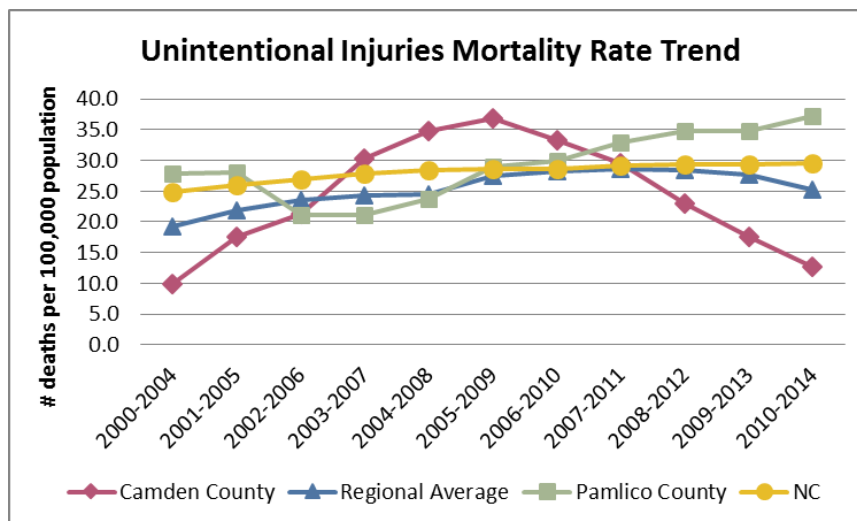
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospital qualifying on the basis of more than 20 IP discharges over the period cited was: Sentara Albemarle Medical Center only.

All Other Unintentional Injury Mortality Rate Trend

The figure below plots the all other unintentional injury mortality rate trend over time.

- The all other unintentional injury mortality rate in Camden County followed a strange pattern of increase and decrease over the period cited, starting and ending the series the lowest among the comparators and passing through a period the highest among the comparators. The Camden County rate rose overall by 27%, from 9.9 in 2000-2004 to 12.6 in 2010-2014. Note that all the Camden County rates were unstable.
- At the state level, the all other unintentional injury mortality rate rose 19% over the period cited.

Figure 54. Overall All Other Unintentional Injury Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in All Other Unintentional Injury Mortality

The following table presents all other unintentional injury mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of all other unintentional injury deaths among stratified county populations, mortality rates were suppressed for those groups.
- At the state level, the all other unintentional injury mortality rate is highest among American Indian non-Hispanics (41.0), followed by white non-Hispanics (34.3) and African American non-Hispanics (19.9).

Table 151. Race/Ethnicity-Specific All Other Unintentional Injury Mortality (Aggregate Period 2010-2014)

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
Camden County	6	n/a	0	n/a	0	n/a	1	n/a	0	n/a	7	12.6
Regional Average	22	32.7	7	28.5	0	n/a	0	n/a	0	n/a	29	25.3
Pamlico County	26	42.3	5	n/a	0	n/a	0	n/a	0	n/a	31	37.2
State of NC	12,247	34.3	1,963	19.9	217	41.0	86	11.7	278	11.9	14,791	29.6

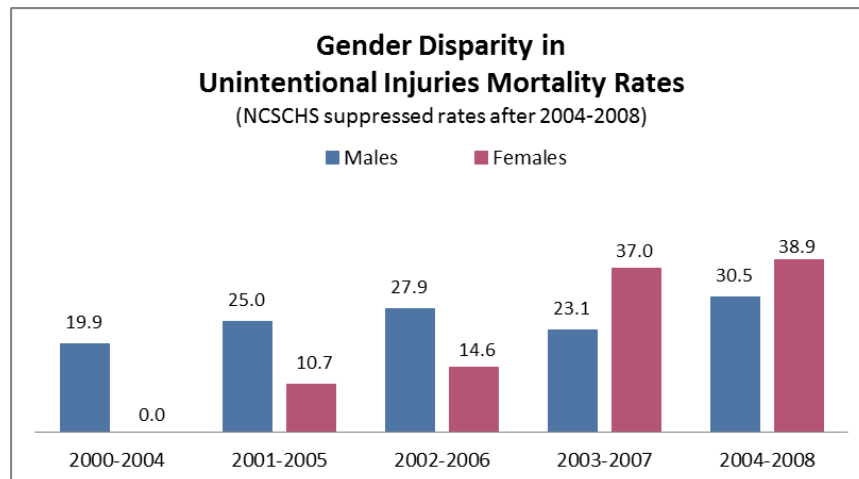
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in All Other Unintentional Injury Mortality

The figure below plots gender-stratified all other unintentional injury mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008, after which rates were suppressed.

- The graph appears to show an increase in unintentional injury mortality among Camden County women, but not much change among men in the county. It should be noted, however, that all rates presented are unstable.

Figure 55. Sex-Specific All Other Unintentional Injury Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

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 (66). 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 now a preferred term for septicemia, but NC SCHS continues to use the older term.

Septicemia was the eleventh-ranked cause of death in Camden County in 2010-2014 (cited previously).

Septicemia Hospitalizations

The table below presents inpatient hospital discharge rate trend data for septicemia. The rates for Camden County were highly variable, but only the first six were technically unstable. The stable Camden County septicemia discharge rates were the lowest among the comparators.

Table 152. Septicemia Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.7	0.4	0.7	0.1	0.6	0.5	1.7	2.1	2.9	1.9
<i>Regional Average</i>	1.4	1.7	1.5	1.5	1.4	1.9	3.0	3.4	4.3	4.1
Pamlico County	1.5	1.7	2.2	1.9	2.2	3.2	3.6	6.3	4.7	4.8
State of NC	1.6	1.8	2.0	2.3	2.5	2.9	3.4	3.7	4.2	4.8

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 (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In the case of septicemia, it is more convenient to use the DRG (Diagnosis-Related Group) diagnosis code rather than the ICD-9 diagnosis code, despite the fact that DRG codes apply only to inpatient hospitalizations. The table below presents data on 2013 and 2014 inpatient hospital discharges at qualifying area hospital for Camden County residents with a primary diagnosis of septicemia (DRG Codes 870-872xx).

- Over the period cited, 6.0% of all IP discharges of Camden County residents at the qualifying hospital involved a primary diagnosis of septicemia.

Table 153. Hospital Discharges, Camden County Residents: Septicemia (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
IP	39	7.6	20	4.3	59	6.0

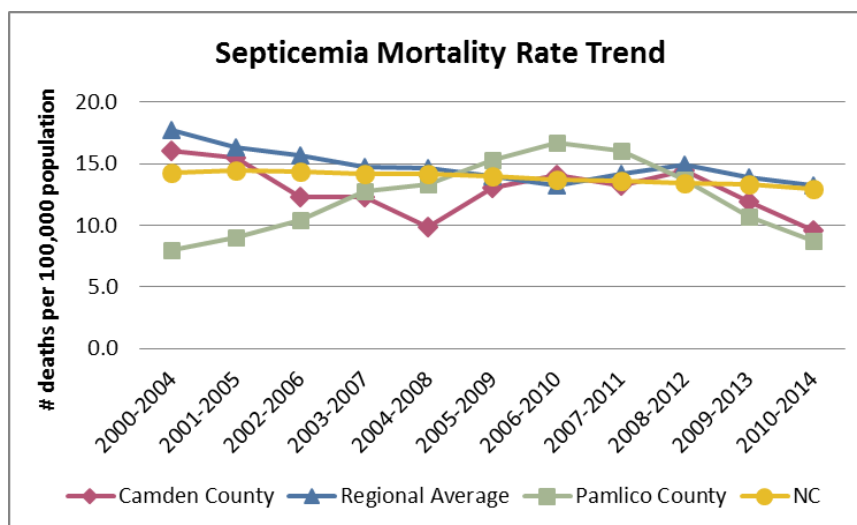
The hospital qualifying on the basis of more than 20 IP discharges over the period cited was Sentara Albemarle Medical Center only.

Septicemia Mortality Rate Trend

The following figure plots the septicemia mortality rate trend over time.

- For all but the first two intervals cited the septicemia mortality rate in Camden County was lower than the comparable rates for the region and the state. The county rate decreased by 40% overall over the period cited, from 16.1 in 2000-2004 to 9.6 in 2010-2014. Note that all the rates for Camden County were technically unstable.
- The septicemia mortality rate for NC as a whole decreased 9% overall between 2000-2004 and 2010-2014.

Figure 56. Overall Septicemia Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Septicemia Mortality

The following table presents septicemia mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of septicemia disease deaths among stratified populations in Camden County and elsewhere, 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-Hispanics and white non-Hispanics.

**Table 154. Race/Ethnicity-Specific Septicemia Mortality
(Aggregate Period 2010-2014)**

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
Camden County	3	n/a	2	n/a	0	n/a	0	n/a	0	n/a	5	9.6
<i>Regional Average</i>	10	15.1	5	n/a	0	n/a	0	n/a	0	n/a	15	13.3
Pamlico County	6	n/a	4	n/a	0	n/a	0	n/a	0	n/a	10	8.7
State of NC	4,974	12.1	1,664	18.6	58	13.3	33	5.5	69	5.5	6,798	13.0

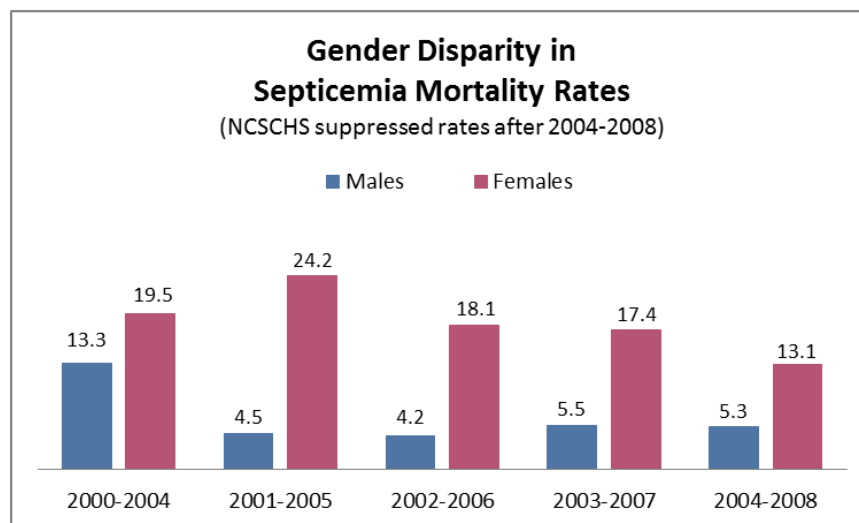
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Septicemia Mortality

The next figure depicts gender-stratified septicemia mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. Note that rates in subsequent periods were suppressed.

- According to the graph, the septicemia mortality rate among Camden County females appeared to be significantly higher than the comparable rate among Camden County males for all the time periods shown. However, it should be noted that all the gender-stratified septicemia mortality rates in the graph were unstable.

**Figure 57. Sex-Specific Septicemia Mortality Rate Trend, Camden County
(Aggregate Periods 2000-2004 through 2004-2008)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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

As described earlier in this report, 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. (Deaths due to all other unintentional injuries were discussed in detail in a previous section of this report.)

Mortality attributable to unintentional motor vehicle injury was the twelfth-leading cause of death in Camden County in the aggregate period 2010-2014 (cited previously).

Unintentional Motor Vehicle Injury Hospitalizations

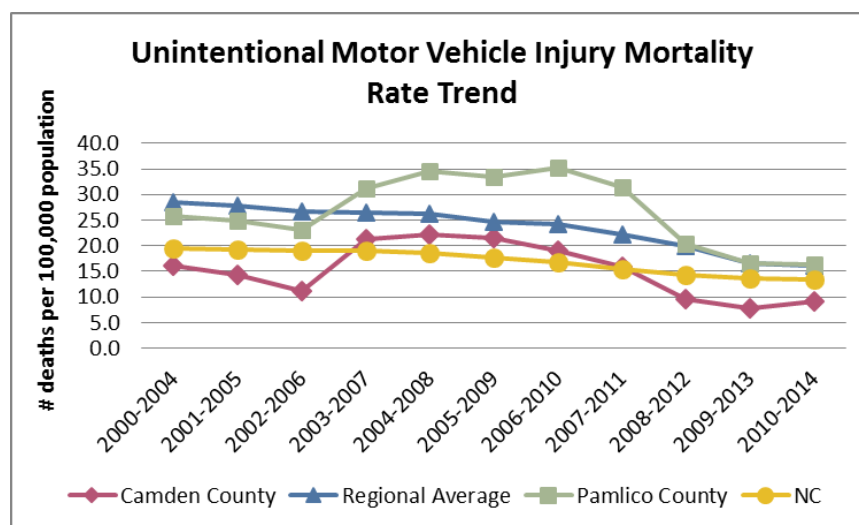
Neither the NC State Center for Health Statistics nor the hospitals participating in this assessment use a *diagnosis* code specific for hospitalizations caused by motor vehicle injury. The hospitals do code *causation* for injury and poisoning, but that data is not included in this report.

Unintentional Motor Vehicle Injury Mortality Rate Trend

The figure below plots the unintentional motor vehicle injury mortality rate trend over time.

- The unintentional motor vehicle injury mortality rate in Camden County was the lowest among the comparators in six of the eleven periods cited. The local rate was lower than the regional rate in every aggregate period cited.
- Although it rose for a span in the middle of the period cited, the unintentional motor vehicle injury mortality rate in Camden County fell 43% overall between 2000-2004 and 2010-2014, from 16.2 to 9.2. Note, however, that all Camden County rates are unstable.
- At the state level, the unintentional motor vehicle injury mortality rate fell 31% over the period cited.

Figure 58. Unintentional Motor Vehicle Injury Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Unintentional Motor Vehicle Injury Mortality

The next table presents unintentional motor vehicle injury mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of unintentional motor vehicle injury deaths among racially stratified populations, mortality rates were suppressed for those groups.
- Statewide the unintentional motor vehicle injury mortality rate was highest for American Indian non-Hispanics, followed by African American non-Hispanics and white non-Hispanics.

Table 155. Race/Ethnicity-Specific Unintentional Motor Vehicle Injury Mortality (Aggregate Period 2010-2014)

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
Camden County	3	n/a	2	n/a	0	n/a	0	n/a	0	n/a	5	9.2
<i>Regional Average</i>	8	n/a	6	n/a	0	n/a	0	n/a	0	n/a	14	16.1
Pamlico County	10	n/a	1	n/a	0	n/a	0	n/a	0	n/a	11	16.3
State of NC	4,513	13.6	1,512	14.2	150	25.8	74	6.0	430	9.9	6,679	13.5

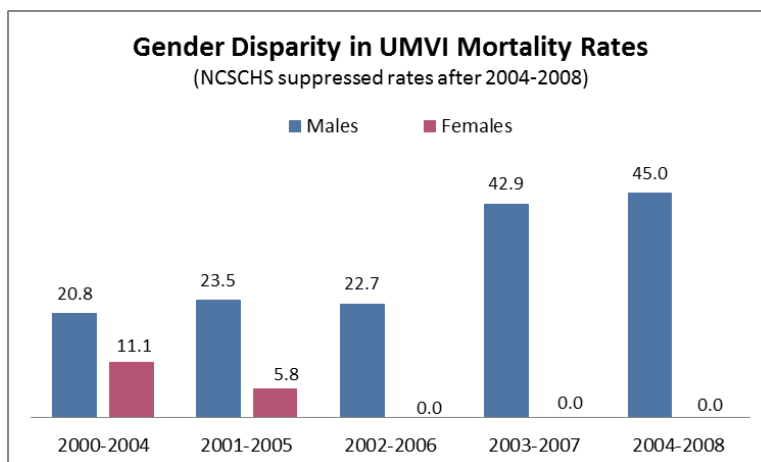
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Unintentional Motor Vehicle Injury Mortality

The figure below plots gender-stratified unintentional motor vehicle injury mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008, after which rates were suppressed.

- Over the period cited, the unintentional motor vehicle injury mortality rate among males far exceeded the rate among females (when there was one).

Figure 59. Sex-Specific Unintentional Motor Vehicle Injury Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 unintentional motor vehicle injury mortality rate has a strong age component.

The table below presents unintentional motor vehicle injury mortality data, stratified by age group, for the aggregate period 2010-2014. Note that this data is *not* age-adjusted.

- There were so few motor vehicle deaths in any age group in Camden County that comparisons are unsupported.
- Statewide, the 20-39 age group has the highest motor vehicle injury mortality rate (18.1), followed by the 40-64 age group (14.5).

Table 156. Motor Vehicle Injury Mortality, Numbers and Rates, by Age (Aggregate Period 2010-2014)

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
Camden County	n/a	n/a	2	14.6	n/a	n/a	1	5.3
<i>Regional Average</i>	17	22.6	2	10.9	6	26.5	4	13.4
Pamlico County	n/a	n/a	n/a	n/a	1	7.8	9	36.9
State of NC	n/a	n/a	794	6.2	2,354	18.1	2,357	14.5

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, 2016 County Health Databook, Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups, NC 2010-2014; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Alcohol-Related Traffic Crashes

The table below presents several years of data on the proportion of traffic crashes that were alcohol-related.

- The percent of alcohol-related crashes varied over time without a clear pattern in all the jurisdictions.
- In Camden County the six-year average of alcohol-related traffic crashes was 6.6%. Region-wide the comparable average was 5.8%, in Pamlico County it was 7.8%, and in NC it was 5.2%

Table 157. Alcohol-Related Traffic Crashes Trend (2008-2013)

Location	2008			2009			2010			2011			2012			2013		
	Total Crashes			Total Crashes			Total Crashes			Total Crashes			Total Crashes			Total 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	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes
Camden County	146	10	6.9	172	13	7.6	164	13	7.9	140	4	2.9	137	9	6.6	149	11	7.4
<i>Regional Average</i>	345	18	5.3	367	21	6.2	348	20	6.0	347	18	5.0	333	21	6.0	329	19	6.0
Pamlico County	224	18	8.0	200	10	5.0	213	14	6.6	180	15	8.3	169	19	11.2	170	13	7.7
State of NC	214,358	11,982	5.6	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 2000 through 2013 (single years).

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 (2008-2013); <http://www.hsrrc.unc.edu/ncaf/crashes.cfm>.

2 - Calculated (% alcohol related crashes is calculated by dividing # alcohol-related crashes by # reportable crashes)

The next table presents detail on the outcomes of alcohol-related crashes in 2013.

- In 2013 in Camden County 7.4% of all crashes, 6.0% of all property damage only crashes, 12.9% of non-fatal crashes, and none of the fatal crashes were alcohol-related.
- 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 fatal crashes were alcohol-related.

Table 158. 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
Camden County	149	11	7.4	117	7	6.0	31	4	12.9	1	0	0.0
<i>Regional Average</i>	329	19	6.0	236	12	5.0	91	9	11.8	2	0	4.8
Pamlico County	170	13	7.6	120	6	5.0	48	7	14.6	2	0	0.0
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	2	1	1	2	1	1	2	1	1	2

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 year 2011.

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.

Note: Regional arithmetic mean percentages appearing in italic type include unstable county percentages. Such mean figures likely are unstable and should be interpreted with caution.

1 - Source: UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts, 2013; <http://www.hsrb.unc.edu/ncaf/crashes.cfm>.

2 - Calculated (% alcohol related crashes is calculated by dividing # alcohol-related crashes by # reportable crashes)

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 (67).

Chronic liver disease and cirrhosis was the thirteenth-ranked cause of death in Camden County in the 2010-2014 (cited previously).

Chronic Liver Disease and Cirrhosis Hospitalizations

The table below presents hospital discharge rate trend data for chronic liver disease and cirrhosis. Note that all of the Camden County rates were unstable or suppressed.

Table 159. Chronic Liver Disease and Cirrhosis Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.2	n/a	n/a	0.3	0.2	0.2	n/a	n/a	n/a	0.3
Regional Average	0.3	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2
Pamlico County	0.7	0.2	0.1	0.5	0.5	0.7	0.6	0.3	0.1	0.4
State of NC	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	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 (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence;
<http://www.schs.state.nc.us/SCHS/data/databook/>.

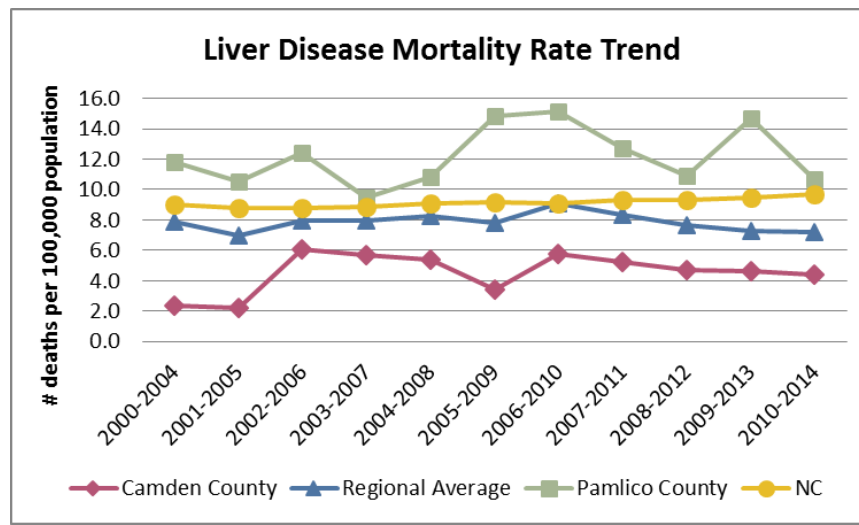
The ICD-9 Code for chronic liver disease and cirrhosis is 571, but there were too few discharges at any of the participating hospitals to merit tabulation for this report.

Chronic Liver Disease and Cirrhosis Mortality Rate Trend

The following figure displays the chronic liver disease and cirrhosis mortality rate trend over time.

- The chronic liver disease and cirrhosis mortality rate for Camden County fluctuated over the period cited, but remained below the state and regional rates throughout the period cited. The local mortality rate was 2.4 in 2000-2004 and 4.4 in 2010-2014, an 83% increase.
- The chronic liver disease and cirrhosis mortality rate for NC as a whole rose 8% over the period cited, from 9.0 in 2000-2004 to 9.7 in 2010-2014.

Figure 60. Overall Chronic Liver Disease and Cirrhosis Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality

The table below presents chronic liver disease and cirrhosis mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of chronic liver disease and cirrhosis deaths among stratified populations, mortality rates were suppressed for those groups.
- Statewide, the chronic liver disease and cirrhosis mortality rate was highest among American Indian non-Hispanics, followed by white non-Hispanics and African American non-Hispanics.

Table 160. Race/Ethnicity-Specific Chronic Liver Disease and Cirrhosis Mortality (Aggregate Period 2010-2014)

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
Camden County	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a	3	4.4
Regional Average	8	n/a	2	n/a	0	n/a	0	n/a	0	n/a	11	7
Pamlico County	7	n/a	2	n/a	0	n/a	0	n/a	0	n/a	9	10.7
State of NC	4,404	10.8	798	7.3	65	11.2	28	3.4	83	4.4	5,378	9.7

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.

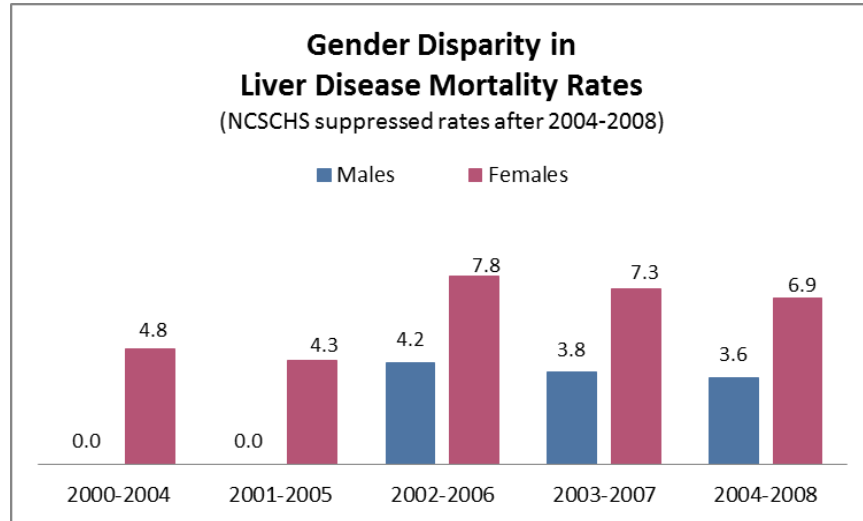
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Chronic Liver Disease and Cirrhosis Mortality

The following figure plots gender-stratified chronic liver disease and cirrhosis mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. Note that subsequent rates were suppressed.

- According to the graph, the chronic liver disease and cirrhosis mortality rate among Camden County females appeared to be higher than the comparable rate among Camden County males for all the time periods shown. However, it should be noted that all the gender-stratified mortality rates in the graph were unstable.

Figure 61. Sex-Specific Chronic Liver Disease and Cirrhosis Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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) (68).

AIDS was the fourteenth-ranked cause of death in Camden County in 2010-2014 (cited previously).

AIDS Hospitalizations

The table below presents hospital discharge rate trend data for AIDS. All the rates for Camden County and Pamlico County were unstable. Statewide, the AIDS hospital discharge was 0.2 for many years, but in 2011 it decreased to 0.1.

Table 161. AIDS Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0.7	n/a	0.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Regional Average</i>	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
Pamlico County	n/a	n/a	0.1	0.1	0.2	0.2	n/a	n/a	n/a	0.1
State of NC	0.2	0.2	0.2	0.2	0.2	0.2	0.1	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 (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

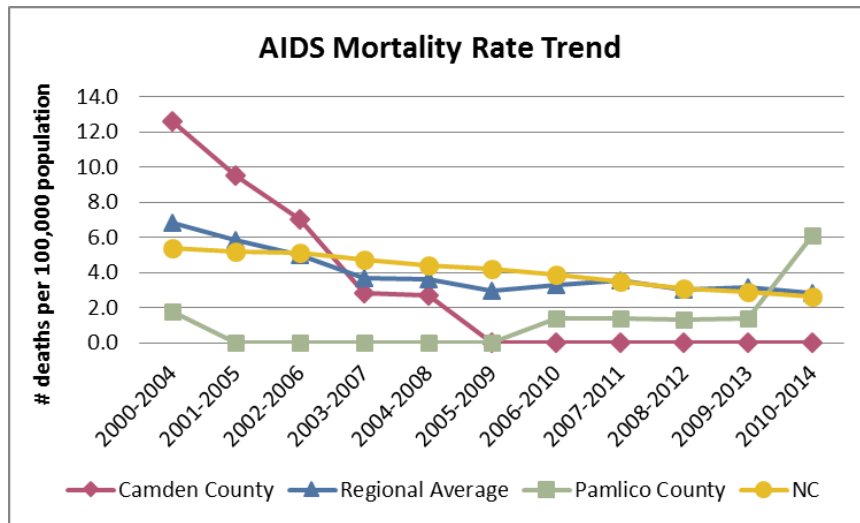
In the ICD-9 coding scheme, AIDS falls in the category Infectious and Parasitic Diseases, with the specific code of 042. There were too few discharges at any of the participating hospitals to warrant tabulation in this report.

AIDS Mortality Rate Trend

The following figure plots the AIDS mortality rate trend over time.

- The county- and regional-level AIDS mortality rates for the entire period cited were unstable. Despite the instability, it appeared that the AIDS mortality rate was decreasing in both counties and across the region.
- The AIDS mortality rate for NC as a whole decreased 52% (from 5.4 to 2.6) over the period cited.

**Figure 62. Overall AIDS Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in AIDS Mortality

The table below presents AIDS mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of AIDS deaths among all stratified populations at the county- and regional level, mortality rates were suppressed for those groups.
- Statewide, the AIDS mortality rate was highest among African American non-Hispanics, followed by Hispanics and white non-Hispanics.

**Table 162. Race/Ethnicity-Specific AIDS Mortality
(Aggregate Period 2010-2014)**

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
Camden County	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	0.0
Regional Average	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	3	2.8
Pamlico County	2	n/a	1	n/a	0	n/a	0	n/a	0	n/a	3	6.1
State of NC	306	0.9	973	9.0	9	n/a	4	n/a	39	1.4	1,331	2.6

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.

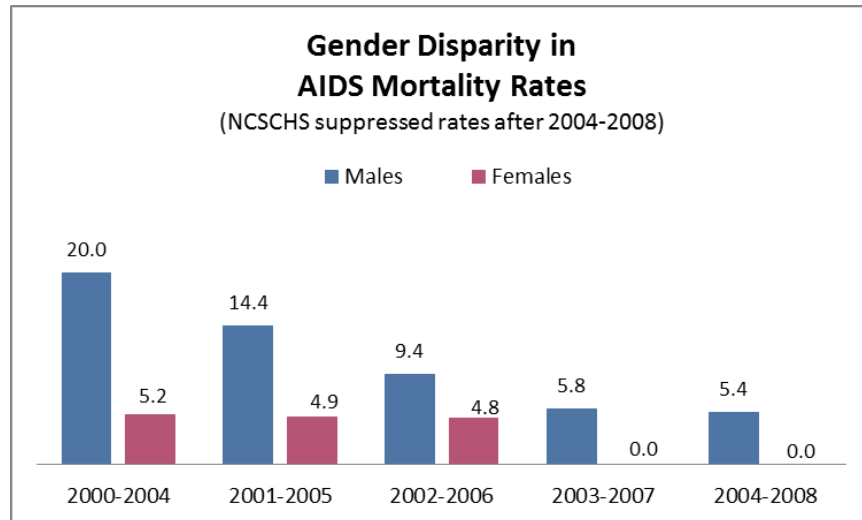
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in AIDS Mortality

The following figure plots gender-stratified AIDS mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. Mortality rates in subsequent aggregate periods were suppressed.

- All the AIDS mortality rates shown in the graph were unstable, but the pattern of higher rates for males than for females is common. Noteworthy is the steady decrease in AIDS mortality among the county's males.

Figure 63. Sex-Specific AIDS Mortality Rate Trend, Camden County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), 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 fifteenth-ranked cause of death in Camden County in 2010-2014 (cited previously).

Homicide Hospitalizations

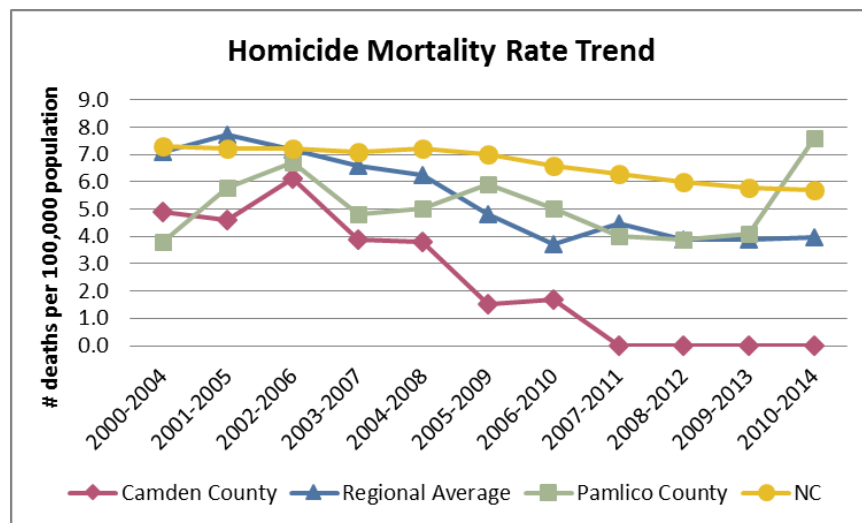
At the present time the NC SCHS does not track hospitalizations related to homicide or attempted homicide. There is an ICD-9 code descriptive of Homicidal Ideation (V62.85), but it has not been pursued for inclusion in this report.

Homicide Mortality Rate Trend

The figure below plots the homicide mortality rate trend over time.

- The homicide mortality rate in Camden County appeared to be lower than the comparable rates for the state during most of the period cited, and decreased from 4.9 to zero over the period cited. It should be noted, however, that all the county-level homicide rates were unstable.
- At the state level, the homicide rate decreased 22% over the period cited.

Figure 64. Overall Homicide Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Homicide Mortality

The next table presents homicide mortality data for the period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of homicide deaths among stratified populations at the county level, all mortality rates were suppressed for those groups.
- Statewide, the homicide mortality rate was highest for American Indian non-Hispanics, followed by African American non-Hispanics and Hispanics.

**Table 163. Race/Ethnicity-Specific Homicide Mortality
(Aggregate Period 2010-2014)**

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
Camden County	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	0.0
Regional Average	2	n/a	2	n/a	0	n/a	0	n/a	0	n/a	4	4.0
Pamlico County	2	n/a	1	n/a	0	n/a	0	n/a	1	n/a	4	7.6
State of NC	997	3.1	1,416	13.0	88	15.0	40	3.2	187	4.3	2,728	5.7

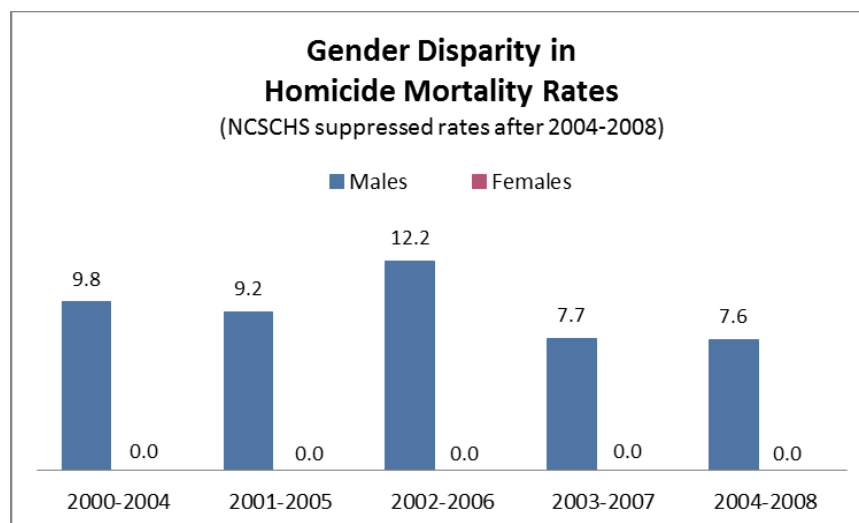
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Homicide Mortality

The figure below plots gender-stratified homicide mortality rates in Camden County for the aggregate periods 2000-2004 through 2004-2008. Rates for subsequent aggregate periods were suppressed.

- There were no homicides among Camden County females in the period cited. The disproportional gender-based pattern of homicide mortality depicted in the graph—a mortality rate much higher among males—is common throughout NC.

**Figure 65. Sex-Specific Homicide Mortality Rate Trend, Camden County
(Aggregate Periods 2000-2004 through 2004-2008)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

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 disease (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 (69).

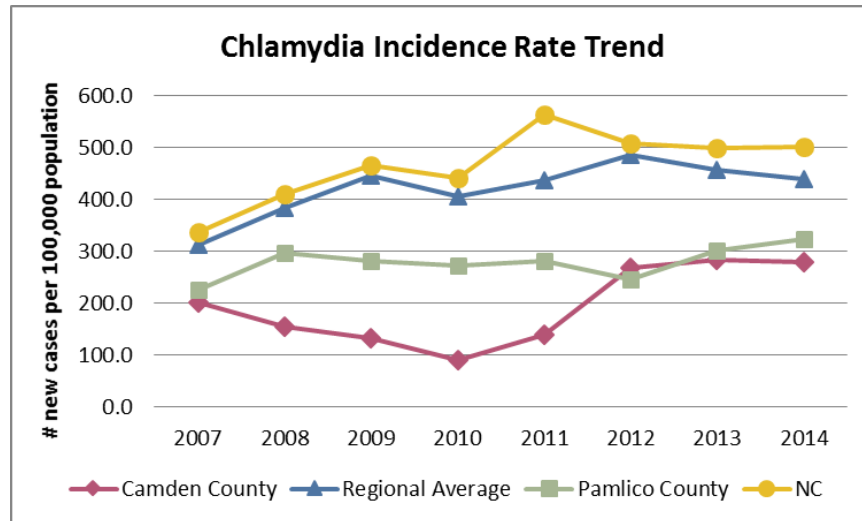
The following figure presents incidence data (i.e., new cases diagnosed) on chlamydia infections.

- 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 Camden County was well below the comparable NC rate and regional average in every year cited.
- The NC Communicable Disease Branch provides the following disclaimer to this 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 ESS). 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.

Figure 66. Chlamydia Infection Incidence Trend (2007-2014)



Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures. AIDS/HIV and STDs. Annual Reports. Years as noted. Table 13; <http://epi.publichealth.nc.gov/cd/stds/annualrpts.html>.

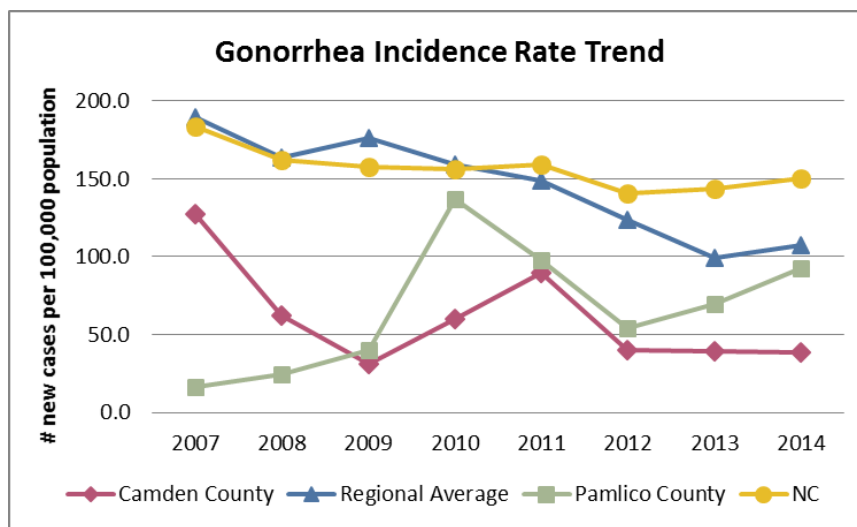
Gonorrhea

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 one 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 (70).

The following figure presents incidence data (i.e., new cases diagnosed) for gonorrhea infections.

- The gonorrhea incidence rate in Camden County was lower than the comparable state and regional average rates in every aggregate period cited.
- The Camden County gonorrhea incidence rate fell 70% over the period cited, from 127.3 in 2007 to 38.7 in 2014. Note that all but the 2007 rate were unstable.

Figure 67. Gonorrhea Infection Incidence Trend (2007-2014)



Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures. AIDS/HIV and STDs. Annual Reports. Years as noted. Table 8; <http://epi.publichealth.nc.gov/cd/stds/annualrpts.html>.

The table below presents the 2006-2010 racially/ethnically-stratified gonorrhea infection rates for the four comparator jurisdictions. Note that this is old data, but no update was available from the source at the time this report was developed.

- In every jurisdiction the highest gonorrhea incidence occurred among the African American non-Hispanic population. Note however that the gonorrhea incidence rate in Camden County was unstable for all groups.

Table 164. Gonorrhea Infection Incidence Rate, Stratified by Race/Ethnicity (Aggregate Period 2006-2010)

Location	Incidence, All Ages, Number and Rate (New cases per 100,000 population)									
	Total		White, Non-Hispanic		African American, Non-Hispanic		Other, Non-Hispanic		Hispanic	
	# Cases	Rate	# Cases	Rate	# Cases	Rate	# Cases	Rate	# Cases	Rate
Camden County	30	62.5	13	33.6	17	222.9	0	0.0	0	0.0
<i>Regional Average</i>	195	179.5	34	51.6	158	430.1	0	39.2	2	178.7
Pamlico County	33	52.5	18	38.2	15	107.0	0	0.0	0	0.0
State Total	77,867	168.9	16,488	52.9	58,041	581.6	1,485	96.7	1,853	54.2

Note: Rates for 5-year aggregates appearing in **bold** type are based on fewer than 20 cases per five year period. Such rates are unstable and should be interpreted with caution.

Note: Regional arithmetic mean rates appearing in *italic* type include more than three unstable county rates. Such mean rates likely are unstable and should be interpreted with caution.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2012). NC Resident Gonorrhea Cases and Rates per 100,000 Population (years and counties as noted): <http://www.schs.state.nc.us/schs/data/databook/>.

Human Immune Deficiency Virus (HIV)

From the standpoint of traditional incidence rates, the numbers of new HIV cases in small counties like Camden County tend to be low and yield extremely variable or suppressible rates. (For example, there were 2 new HIV cases in Camden County in the five-year period from 2010-2014.) Instead, the following table approximates a *prevalence* estimate for each jurisdiction on the basis of how many persons are living with HIV on a particular date.

- As of December 31, 2014 there were 12 persons with HIV/AIDS living in Camden County.

Table 165. HIV Prevalence: HIV and AIDS Cases Living as of December 31, 2014 (By County of Residence)

Location	Number of Living Cases
Camden County	12
<i>Regional Average</i>	<i>36</i>
Pamlico County	21
<i>State of NC</i>	<i>28,526</i>

Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures. AIDS/HIV and STDs. Annual Reports. 2014. Table 1. <http://epi.publichealth.nc.gov/cd/stds/figures/std14rpt.pdf>.

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 (71).

The table below presents hospital discharge data for asthma, stratified by age, for the period 2011-2014. (At the present time this is the best measure of asthma prevalence available from NC SCHS.)

- The overall hospital discharge rate for Camden County residents with asthma was highly variable, often based on very small numbers of cases.
- County-level discharge rates for youth are all unstable, but at the state level the rates for youth (age 0-14) are half-again higher than the overall rates.

Table 166. NC Hospital Discharges with a Primary Diagnosis of Asthma, Numbers and Rates per 100,000 (2011-2014)

Location	Discharges, Number and Rate (Discharges per 100,000 Population)															
	2011				2012				2013				2014			
	All Ages		Age 0-14		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	No.	Rate	No.	Rate
Camden County	10	99.9	1	49.0	14	138.8	2	101.1	19	186.5	2	101.4	8	77.4	0	0.0
<i>Regional Average</i>	24	118.1	3	52.7	26	134.6	5	124.6	21	122.1	3	86.3	21	102.7	1	33.5
Pamlico County	8	60.6	0	0.0	11	84.1	2	107.8	3	23.2	0	0.0	14	108.1	5	291.7
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	9,035	90.9	2,754	144.6

Note: Bold type indicates a likely unstable rate based on a small (fewer than 10) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (Years as noted), 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>.

Because the hospital discharge rate for asthma in Camden County has long been higher than the comparable state rate, it may be illustrative to examine local hospital discharge data for asthma. Note that this data, meant to be illustrative rather than exact, is from Sentara Albemarle Medical Center *only*. In the ICD-9 system, asthma carries the code 493 and is classified within the broad category, Chronic Obstructive Pulmonary Disease and Allied Conditions (code range of 490-496).

The table below presents ED and IP data summarizing 2013 and 2014 discharges of Camden County residents associated with a primary diagnosis of asthma, *stratified by race*.

- Blacks compose 14% of the Camden County population, but account for 57% of ED discharges and 74% of IP discharges associated with a diagnosis of asthma at the target hospital during the period cited.

Table 167. Hospital Discharges, Camden County Residents, by Race: Asthma (2013-2014)

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	31	23	55	14	5	19
2014	37	26	65	6	1	8
Total	68	49	120	20	6	27

Discharge figures from Sentara Albemarle Medical Center were highlighted because that hospital saw the largest number of ED and IP patients from Camden County.

The following table presents ED and IP data summarizing 2013 and 2014 discharges of Camden County residents associated with a primary diagnosis of asthma, *stratified by age group*.

- Children age 14 and younger compose 19% of the Camden County population, but account for 32% of ED discharges associated with a diagnosis of asthma.

- There were only two IP discharges among children age 14 and younger over the period cited.

Table 168. Hospital Discharges, Camden County Residents, by Age Group: Asthma (2013-2014)

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Age 0-14	Age > 14	Total	Age 0-14	Age > 14	Total
2013	23	32	55	2	17	19
2014	15	50	65	0	8	8
Total	38	82	120	2	25	27

Discharge figures from Sentara Albemarle Medical Center were highlighted because that hospital saw the largest number of ED and IP patients from Camden County.

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.

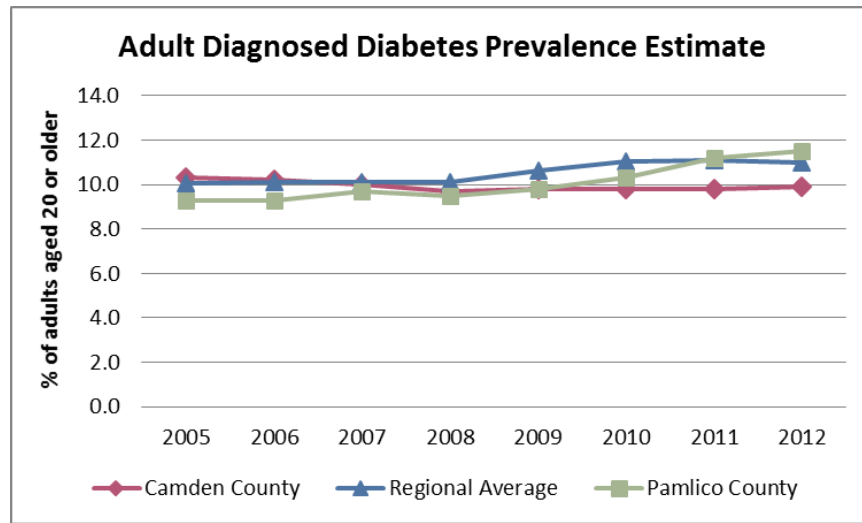
In recent years, medical professionals have begun to diagnose *prediabetes*, a condition in which blood glucose levels are higher than normal but not high enough for a diagnosis of diabetes. People with prediabetes are at increased risk for developing Type 2 diabetes and for heart disease and stroke (72).

As discussed previously in the mortality section of this report, diabetes was the 9th leading cause of death in Camden County for the 2010-2014 aggregate period, causing 10 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 figure plots estimates of the prevalence of diagnosed diabetes in adults age 20 and older in Camden County and its local comparators (state-level data was not available).

- The annual estimated prevalence of diabetes among Camden County adults was lower than the prevalence region-wide for most of the period shown.
- Over the 8-year period presented, the average annual estimated prevalence of adult diabetes in Camden County was 9.9%, compared to 10.5% Region-wide.

Figure 68. Adult Diagnosed Diabetes Prevalence Estimate Trend (2005-2012)



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: Centers for Disease Control and Prevention, Diabetes. Data and Statistics. County Data: Maps and Data Tables. Indicator: Diagnosed Diabetes, Age Adjusted Percentage. Years as noted; <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>.

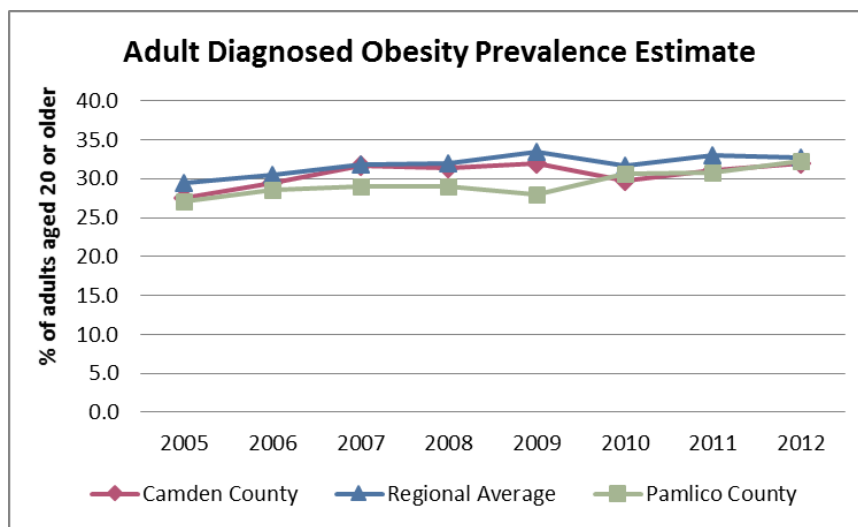
Obesity

Obesity in Adults

The figure below plots recent estimates of the prevalence of diagnosed obesity in adults age 20 and older in the three local jurisdictions being compared in this CHA. Comparable state-level data was not available.

- The annual estimated prevalence of adult obesity in the county was lower than in the Region for the entire period presented and increased slightly overall.
- The average annual estimated prevalence of adult obesity in Camden County was 30.6% in the period from 2005 through 2012, compared to 31.8% in the Region [State data is not available].

Figure 69. Adult Diagnosed Obesity Prevalence Estimate Trend (2005-2012)



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: Centers for Disease Control and Prevention, Diabetes. Data and Statistics. County Data: Maps and Data Tables. Indicator: Diagnosed Diabetes, Age Adjusted Percentage. Years as noted; <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>

Obesity in Children

There is limited “measured” obesity data for children in Camden County. One source is the NC *Healthy Weight Initiative*, which via the NC Nutrition and Physical Activity Surveillance System (NC NPASS), collects height and weight measurements from children seen in NC DPH-sponsored WIC and Child Health Clinics, as well as some school-based Health Centers (73). (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 table below presents NC NPASS data for children ages 2-4 for the period 2008-2012. Data for other age groups in Camden County represented small numbers of children and too many unstable rates for inclusion here. Unfortunately, more recent data was not available from this source at the time this report was developed.

- In Camden County in 2012, 11.5% of the participating children age 2-4 were “overweight” and 16.9% were “obese” (total = 28.4%)

- In NC in the same period, 14.9% were overweight and 14.5% were obese (total = 29.4%).

Table 169. 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
Camden County	11.2	18.1	19.7	n/a	14.2	18.6	n/a	13.7	11.5	16.9
<i>Regional Average</i>	15.5	17.1	14.0	15.1	15.6	16.2	15.2	16.6	13.0	16.9
Pamlico County	18.8	9.8	22.6	18.9	29.4	n/a	16.8	16.8	15.7	12.2
<i>State of NC</i>	16.3	15.4	15.8	15.4	16.1	15.6	16.2	15.7	14.9	14.5

Note: Figures denoted in **bold** type indicate percentages based on fewer than 10 cases.

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 (2008-2012), 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. Camden County responses are combined among those of 40 other counties in an eastern NC region BRFSS data summary. Consequently, it is necessary to look elsewhere to adequately describe the dental needs of adults in Camden County.

As noted in the Health Resources section of this report the ratio of dentists-to-population in Camden County is very low. With resources for dental care in such short supply, it might be expected that county residents would have some difficulty accessing needed dental care.

Sometimes an indicator of a dental care access problem is the frequency with which the local emergency department is used as a dental provider. The ICD-9 Codes 520-525, Diseases of Oral Cavity, Salivary Glands, and Jaws, include diagnoses typically associated with dentistry (e.g., dental caries, gingivitis, periodontitis, tooth loss, etc.) and ICD-9 Code 528, Diseases of the Oral Soft Tissue. The table below lists ED visits to the region's three qualifying hospitals in 2013-2014 by Camden County residents for conditions associated with these code categories.

- For the period 2013-2014, Camden County residents made a total of 162 visits (an annual average of 81 visits) to local EDs for attention to dental problems.

Table 170. Emergency Department Admissions of Camden County Residents for Dental Conditions (2013-2014)

ICD-9 Code	Diagnosis	Number of ED Discharges		
		2013	2014	Total
520-525xx	Diseases of the oral cavity	80	73	153
528xx	Diseases of the oral soft tissue	3	6	9
Total		83	79	162

Source: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

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 following table presents dental service utilization figures for Medicaid clients for SFY2010. This data is very old, but the source has not added data any more recent.

- From this data it appears that Medicaid-eligible persons under the age of 21 in Camden County receive dental services at a 52% higher proportion than Medicaid-eligible persons age 21 and older. The direction, if not the proportion, of difference is the same in the other three jurisdictions.

Table 171. 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
Camden County	765	258	33.7	537	119	22.2
<i>Regional Average</i>	<i>2,256</i>	<i>773</i>	<i>34.6</i>	<i>1,716</i>	<i>464</i>	<i>26.5</i>
Pamlico County	1,480	812	54.9	1,131	369	32.6
<i>State Total</i>	<i>1,113,692</i>	<i>541,210</i>	<i>48.6</i>	<i>679,139</i>	<i>214,786</i>	<i>31.6</i>

Source: NC DHHS, NC Division of Medical Assistance, Statistics and Reports, County Specific Snapshots for NC Medicaid Services (2008 and 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 (74).

The table below presents partial summaries of the screenings conducted in SY2009-2010 and SY2012-2013.

- In Camden County the percentage of children at both levels with untreated decay decreased between periods.

**Table 172. Child Dental Screening Summary
(SY2009-2010 and SY2012-2013)**

Location	School Dental Screening Results							
	2009-2010				2012-2013			
	Kindergarten		5th Grade		Kindergarten		5th Grade	
	% Screened	% Untreated Decay	% Screened	% Untreated Decay	% Screened	% Untreated Decay	% Screened	% Untreated Decay
Camden County	100	22	94	4	99	13	94	1
<i>Regional Average</i>	95	23	95	5	93	19	94	3
Pamlico County	87	18	96	4	88	7	90	3
<i>State of NC</i>	74	15	69	3	58	13	51	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>.

Mental Health

With the mental health system in the state—and Camden County—still coping with system reform growing pains, mental health merits a closer look.

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 (75).

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 (76).

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 (77). The LME/MCO serving Camden County is Trillium Health Resources.

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 2005 through 2014.

- The number of Camden County residents served by the Area Mental Health Program has fluctuated annually, and was about the same in 2014 as in 2005.

Table 173. Persons Served by Mental Health Area Programs/Local Management Entities (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	218	207	229	241	198	217	236	160	231	216
<i>Regional Average</i>	758	724	730	730	733	706	765	382	611	511
Pamlico County	341	312	324	427	515	454	497	438	276	457
State of NC	337,676	322,397	315,338	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

Since mental health reform in NC, only the most seriously ill mental health patients 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 (78).

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 table below presents a summary of the number of persons in each comparator jurisdiction served in NC State Psychiatric Hospitals for the period from 2005 through 2014.

- Over the 10-year period cited the number of Camden County residents served by State Psychiatric Hospitals decreased from 13 to zero.

Table 174. Persons Served in NC State Psychiatric Hospitals (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	13	9	11	8	2	1	1	0	0	0
<i>Regional Average</i>	41	39	33	18	13	9	8	5	4	4
Pamlico County	31	18	19	5	4	2	0	4	4	1
State of NC	18,435	18,292	18,498	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 519);

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 (79).

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 next table presents a summary of the persons in each jurisdiction served in NC State Developmental Centers for the period from 2005 through 2014.

- The numbers of persons in the three local jurisdictions served in state developmental centers were small and variable, and demonstrated no definitive pattern.
- At the state level, the number of persons served decreased by 41% between 2005 and 2014.

Table 175. Persons Served in NC State Developmental Centers (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	2	2	0	0	2	2	2	0	2	2
<i>Regional Average</i>	6	6	1	1	6	6	5	0	5	5
Pamlico County	6	6	0	0	6	6	5	0	4	4
<i>State of NC</i>	2,172	1,690	1,713	1,409	1,404	1,375	1,355	1,340	1,331	1,282

Source: 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 following table presents a summary of the persons in each jurisdiction served in NC State ADATC for the period from 2005 through 2014.

- During the 10-year period from 2005 through 2014, a total of 41 Camden County residents were served by NC State Alcohol and Drug Abuse Treatment Centers (ADATCs), with the number varying from year to year. A high of 11 were served in 2008; 2 were served in 2014.

Table 176. Persons Served in NC Alcohol and Drug Abuse Treatment Centers (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	2	5	5	11	6	6	3	1	0	2
<i>Regional Average</i>	11	14	9	19	21	13	11	8	11	8
Pamlico County	12	16	10	8	11	13	9	13	3	9
State of NC	3,732	4,003	3,733	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 the Hospital for Mental Health Services

It is unclear whether local mental health resources are actually meeting the need in Camden County, because the hospitals, especially the emergency departments in the region, are seeing many mental health patients.

The table below presents 2013-2014 data on ED and IP discharges of Camden County residents with diagnoses associated with mental health issues, or primary diagnosis of ICD-9 Codes 290-319xx. The data are from the ARHS Region hospitals seeing more than 20 Camden County patients in the two years cited. The ED data is from Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The IP data is from Sentara Albemarle Medical Center only.

- Over the two-year period cited, ED discharges related to all Mental, Behavioral and Neurological Disorder diagnoses composed an average of 2.3% of all ED discharges, and IP discharges for mental health diagnoses composed an average of 0.6% of all IP discharges.
- Note that these diagnoses (ICD-9 290-319xx) include psychotic and non-psychotic disorders, and conditions associated with alcohol and drug abuse.

Table 177. ED and IP Discharges of Camden County Residents with Mental Health Diagnoses

Year	No. Emergency Department Discharges	No. In-Patient Hospitalization Discharges
2013	70 (2.0% of all ED discharges)	5 (1.0% of all IP discharges)
2014	85 (2.5%)	1 (0.2%)

The following table provides more detailed 2013-2014 hospital data for Camden County residents from the five ARHS region hospitals that saw more than 20 Camden County patients over the period cited. The diagnoses covered in this case include codes in the ICD-9 code category 290-319xx, Mental, Behavioral and Neurodevelopmental Disorders specific to drug- and alcohol-related conditions.

- In the period cited there was a total of 155 ED discharges of Camden County residents diagnosed with mental or behavioral disorders.
- The most commonly-diagnosed drug- or alcohol-related mental health problem among this patient group was non-dependent use of drugs. There was a total of 26 discharges under this code, or 17% of all mental, behavioral and neurodevelopmental disorder discharges.

Table 178. Detailed ED Discharges of Camden County Residents with Mental Health Diagnoses (2013-2014)

ICD-9 Code	Diagnosis	Number of ED Discharges		
		2013	2014	Total
290-319xx	Mental, Behavioral and Neurodevelopmental Disorders	70	85	155
290-299.9	Psychosis	21	24	45
291	<i>Alcohol-induced mental disorders</i>	3	1	4
292	<i>Drug-induced mental disorders</i>	0	1	1
300	Neurotic, Personality Disorders, etc. (non-psychotic)	49	61	110
300.9	<i>Suicidal risk and tendencies</i>	0	0	0
303	<i>Alcohol dependence syndrome</i>	4	2	6
304	<i>Drug dependence</i>	3	2	5
305-305.99	<i>Non-dependent use of drugs (excluding 305.1)</i>	6	17	26
305.1	<i>Tobacco use disorder</i>	0	0	0

Source: Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center

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 (NC DENR).

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. There is no AQI monitoring station in or near Camden County.

Toxic Releases

Over 4 billion pounds of toxic chemicals are released into the nation's environment each year. 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 (80).

According to EPA data in the table below, in 2014 there were no facilities in Camden County reporting TRI releases of any kind to any destination (81).

Table 179. Facilities Releasing TRI Chemicals, Camden 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	Releasing Facility	Facility Location
Camden County	<i>No data for TRI on-site and off-site reported disposed of or Otherwise Released for all industries, for all chemicals</i>					
<i>Regional Total</i>	2,746,802					
NC Total	61,903,968					
NC County Average	619,040					

Source: TRI Release Reports: Chemical Reports, 2014. US EPA TRI Explorer, Release Reports, Chemical Reports website: http://iaspub.epa.gov/triexplorer/tri_release.chemical.

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 (82).

As of February 14, 2016, SDWIS listed two active community water systems in Camden County, serving an estimated total of 10,433 persons. A community water system is one that serves 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.

As of February, 2016 SDWIS listed no non-transient, non-community water systems or transient, non-community water systems in Camden County.

The EPA 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 table below lists the active water systems in Camden County as of October 28, 2015. The table also includes any *health-based* violations for the period from 2005 through 2015.

- All the water systems rely on groundwater sources.
- No health violations were recorded for either CWS in the period cited.

Table 180. Active Water Systems in Camden County (2015)

Type of Water System	Total Population Served	Primary Water Source Type	Health Violations 2005-2015
Community Water Systems			
South Camden Water and Sewer District	5,133	Groundwater	None
South Mills Water Association	5,300	Groundwater	None
Total	10,433		
Non-Transient, Non-Community Water Systems			
None		n/a	n/a
Total	0		
Transient, Non-Community Water Systems			
None		n/a	n/a
Total	0		

Source: *Safe Drinking Water Search for the State of North Carolina*. US EPA Envirofacts Safe Drinking Water Information System (SDWIS) website: <http://www3.epa.gov/enviro/facts/sdwis/search.html>

Municipal Drinking Water Systems

South Camden Water Department

The South Camden Water Department, which operates under Camden County's Public Works Department, manages a reverse-osmosis water treatment system.

All of the operators have to attend a state certified school and obtain the proper licenses. To be the ORC (Operator in Responsible Charge) or Backup ORC for this system a B-Well license and a Grade 1 Physical/ Chemical Water Pollution Control System Operator license is needed. All licensed operators have to receive at least six continuing education hours per year for each of their licenses.

The duties of the operators are many, including but not limited to routine maintenance of the equipment in the plant, pumps, motors, generators, the generator at the plant is a permanent in-place generator and is capable of running the on-site wells as well as the whole plant. We also have a portable generator for the remote wells.

We are constantly monitoring the flows and pressures within the system and monitoring the chemical levels, and making adjustments accordingly.

Staff take water samples for contract labs and an in-house lab. The in-house lab is certified by the state and EPA to sample temperature, dissolved oxygen (DO) and pH. Staff also test water for conductivity, phosphate; both naturally occurring and added, and constantly monitor the chlorine level in the water.

Staff also help insure water quality by flushing water lines and collecting chlorine samples daily required by the state. The state also requires bacteriological testing monthly and yearly samples of lead, copper, and THM in the system (83).

Wastewater Systems

Municipal Wastewater Systems

Camden County Wastewater Treatment Plant

The Camden County sewer system began operation in 2008. The service area includes the section of highway 158 between and including Lambs Marina and the Medical Park, Gumberry Rd., Hwy 343 from Gumberry Rd. to Scotland Rd. and Scotland Rd. The largest customers are the four schools, the courthouse complex and River Bridge Apartments.

The entire sewer collection system is force main, meaning that every connection has a tank, pump, and pump controls. The thirteen duplex pump stations are equipped with larger concrete tanks and two pumps with telemetry, so operations can be monitored from the treatment plant.

The duplex pump stations have to be visited at least once a week to check for grease build up, pump and control float operation, run hours, wash down and any other problems that may occur. The two main pump stations are the courthouse complex and Burnt Mills; they move the waste to the waste water plant. Both main pump stations have on site back-up generators; there are two mobile generators for the other pump stations. Plant staff do all the basic maintenance on the generators in house.

The capacity of the wastewater treatment plant is 100,000 gallons per day; the plant currently averages around 18,000 gallons per day when the schools are in secession and about 9000 gallons per day on holidays and weekends. The wastewater plant also has a back-up generator for emergency power.

After the wastewater is treated it is pumped three miles north to the 5.9 million gallon storage pond at the spray irrigation site. There are currently four zones with spray nozzles and green ash trees planted. The treated wastewater is sprayed on the zones as necessary to keep the level down in the storage pond. A sewer maintenance worker keeps the grass cut, spray nozzles unclogged and maintains equipment as necessary (84).

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.

The following table lists the NPDES-permitted dischargers in Camden County and the destinations and permitted volumes of their discharges. Both of the permitted dischargers are water treatment plants operated by local governments.

Table 181. National Pollutant Discharge Elimination System (NPDES) Permitted Dischargers, Camden County (September, 2015)

Owner	Facility	Type	Discharge Destination	Permitted Flow (Gal/Day)
South Mills Water Association, Inc.	South Mills Water Association WTP	Water Treatment Plant	Dismal Swamp Canal	not limited
Camden County	Camden County Reverse Osmosis WTP	Water Treatment Plant	Pasquotank River	432,000

Source: 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 as of 9/4/15; <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 for the period FY2009-10 through FY2013-14.

- In FY2013-14, Camden County managed 3,430 tons of municipal solid waste (MSW) for a rate of 0.34 tons per capita. This tonnage represented an increase of 9% from the per capita rate for FY1991-92 (the period customarily used for the base rate).
- As a regional average, the per capita rate of waste disposed in FY2013-14 fell by 1% from the rate for the base year.
- During the same FY2013-14 period the overall state per capita solid waste management rate was 12% less than the FY1991-92 base per capita rate.

**Table 182. Solid Waste Disposal
FY2009-10 through FY2013-14**

Location	MSW Tons Managed 1991-1992	MSW Tons Disposed					Base Year Per Capita (1991-1992)	Per Capita Rate 2013-2014	%Change Base Year to 2013-2014
		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014			
Camden County	1,850.16	4,006.51	3,339.03	3,413.00	3,054.00	3,430.00	0.31	0.34	9
<i>Regional Total</i>	90,272.93	112,837.00	116,918.14	111,229.00	109,034.00	118,565.00	n/a	n/a	n/a
<i>Regional Average</i>	12,896.13	16,119.57	16,702.59	15,889.86	15,576.29	16,937.86	0.78	0.78	-1
Pamlico County	8,541.24	9,591.29	9,445.25	19,211.00	11,034.00	17,347.00	0.75	1.33	77
State of NC	7,257,428.09	9,395,457.19	9,467,044.71	9,443,380.00	9,149,130.00	9,273,571.00	1.07	0.94	-12

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Program, NC Solid Waste Management Annual Report, Fiscal Years as noted. County Per Capita Report; <http://portal.ncdenr.org/web/wm/sw/swmar>.

The following table presents the FY2013-14 County Waste Disposal Report for Camden County.

- All of Camden County's solid waste is transferred to or transported directly to landfills *outside* the county.

**Table 183. County Waste Disposal Report, Camden County
(FY2013-14)**

Location	Facility Name	Facility Type	Tons Received	Tons Transferred
Camden County	Pasquotank County C&D Landfill	Construction & Demolition Landfill	256.14	0.00
	East Carolina Regional Landfill	Municipal Solid Waste Landfill	34.83	0.00
	Currituck Transfer Station	Municipal Solid Waste Transfer Station	8.90	8.90
	Pasquotank County Transfer Station	Municipal Solid Waste Transfer Station	3,130.30	3,130.30

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/c/document_library/get_file?p_l_id=4649434&folderId=4667253&name=DLFE-38490.pdf.

Municipal Solid Waste Management

Camden County Solid Waste and Recycling Program

Camden County has three convenience sites to which people may bring solid waste: Camden Township site in Camden, Shiloh Township site in Shiloh, and South Mills Township site in South Mills. These convenience sites accept recyclables, yard waste, scrap metals, appliances, furnishings, household waste, motor oil, oil filters, antifreeze, and tires. The only plastics allowed are bottles and jugs with a neck smaller than the body. Construction debris and shingles are *not* accepted (85).

Hazardous Waste Generation

The EPA maintains a database that catalogs generators, transporters, and other handlers of hazardous wastes. The data, located in the Resource Conservation and Recovery Act Information (RCRAInfo) database, is accessed via EPA Envirofacts. As of February, 2016, that site listed no hazardous waste generators in Camden County (86).

LEAD

Lead is a highly toxic natural metal found in the environment in soil, dust, air, and water. Historically it was used for many years in common household products such as paint, batteries, makeup, and ceramics, as an additive to gasoline, and as an ingredient in pesticides. Currently, it is used in lead-acid batteries, fishing weights, marine paint, lead shot, bullets, and in the manufacture of some plastics. Recently, the electronics industry is using more lead in magnetic imaging equipment, transistors, night vision equipment, and energy generation (87).

People can get lead in their body if they put their hands or other objects covered with lead dust in their mouths, ingest paint chips, soil, or water that contains lead, or breathe in lead dust, especially during renovations that disturb painted surfaces. Children are at greatest risk.

The Children's Environmental Health Branch of DENR, via its Lead Poisoning Prevention Program, catalogues data on the results of blood lead level monitoring among children. The following table presents blood lead monitoring data for 2006-2011. This site offers no data that is more recent.

The data for Ages 1 and 2 are routine screening results; the data for Ages 6 Months to 6 Years represents children who have been tested because a lead poisoning hazard had been identified in their residential housing unit or their child-occupied facility (e.g., daycare facility). All results at the county level likely are unstable due to small numbers of positive cases.

**Table 184. Blood Lead Assessment Results
(2006-2011)**

Location	Year	Ages 1 and 2					Ages 6 Months to 6 Years		
		Target Population	No. Tested	% Tested	No. ≥ 10µg/dL	% ≥ 10µg/dL	No. Tested	Confirmed 10-19 µg/dL	Confirmed ≥20 µg/dL
Camden County	2006	205	72	35.1	2	2.8	116	N/A	N/A
	2007	206	91	44.2	N/A	N/A	140	N/A	N/A
	2008	218	73	33.5	N/A	N/A	114	N/A	N/A
	2009	203	99	48.8	N/A	0.0	131	N/A	N/A
	2010	194	107	55.2	N/A	0.0	137	N/A	N/A
	2011	193	98	50.8	1	1.0	125	N/A	N/A
Pamlico County	2006	234	165	70.5	2	1.2	278	N/A	N/A
	2007	229	147	64.2	1	0.7	237	N/A	N/A
	2008	218	162	74.3	1	0.6	271	N/A	N/A
	2009	212	155	73.1	N/A	0.0	241	N/A	N/A
	2010	223	155	69.5	N/A	0.0	208	N/A	N/A
	2011	215	138	64.2	N/A	N/A	165	N/A	N/A
State of NC	2006	242,813	103,899	42.8	867	0.8	135,595	255	38
	2007	250,686	112,556	44.9	706	0.6	143,972	232	38
	2008	258,532	121,023	46.8	654	0.5	152,222	181	36
	2009	261,644	129,395	49.5	583	0.5	160,713	143	38
	2010	257,543	132,014	51.3	519	0.4	162,060	146	24
	2011	249,087	129,558	52	461	0.4	156,039	102	22

Source: NC DHHS, Division of Public Health, Environmental Health Section, Children's Environmental Health. NC Childhood Lead Poisoning Prevention Program (CLPPP). Resources: Surveillance Data.
<http://ehs.ncpublichealth.com/hcceb/cehu/lead/resources.htm>.

FOOD-, WATER-, AND VECTOR-BORNE HAZARDS

Food-, Water-, and Vector-Borne Diseases

A number of human diseases and syndromes are caused or exacerbated by microbial contaminants or by animal vectors in the natural environment. Several of these conditions are among the illnesses that must be reported to health authorities. A number of food-, water-, and vector-borne diseases are of increasing importance because they are either rare but becoming more prevalent, or spreading in geographic range, or becoming more difficult to treat. Among these diseases are Shiga toxin producing *E. coli*, salmonellosis, Lyme disease, West Nile virus infection, Eastern equine encephalitis, and rabies.

The following table summarizes cases of food-, water-, and vector-borne disease statewide in the period 2009-2014.

- The most common food-, water-, and vector-borne disease statewide is salmonellosis, followed by campylobacter infection and Rocky Mountain spotted fever (spotted fever rickettsiosis).

Table 185. Food-, Water-, and Vector-Borne Diseases, North Carolina (2009-2014)

Disease/Organism	Number of Cases					
	2009	2010	2011	2012	2013	2014 ¹
Campylobacter infection	587	851	909	1,091	1,101	982
Cryptosporidiosis	160	94	115	88	126	167
E. Coli O157:H7 (or other STEC)	112	97	155	208	101	89
Ehrlichiosis	31	130	96	133	93	85
Encephalitis California Group (Lacrosse)	169	22	24	26	13	23
Hepatitis A	41	48	30	34	46	38
Listeriosis	27	22	21	14	23	30
Lyme Disease	252	89	75	124	180	171
Rocky Mountain Spotted Fever	325	292	305	594	428	500
Salmonellosis	1,806	2,352	2,516	2,208	1,926	2,115
Shigellosis	358	253	225	137	256	474

¹: 2014 data includes January - December but it is not presented in the source as a final number for the year.

Source: NC DHHS, Epidemiology Branch, Communicable Disease Section, Facts and Figures, NC Communicable Disease Reports (years as noted) <http://epi.publichealth.nc.gov/cd/figures.html>.

Vector Control

Bacterial, viral and parasitic diseases that are transmitted by mosquitoes, ticks and fleas are collectively called *vector-borne diseases* (the insects and arthropods are the *vectors* that carry the diseases). Although the term vector can also apply to other carriers of disease—such as mammals that can transmit rabies or rodents that can transmit Hantavirus—those diseases are generally called *zoonotic* (animal-borne) diseases.

The most common vector-borne diseases found in North Carolina are carried by ticks and mosquitoes. The tick-borne illnesses most often seen in the state are Rocky Mountain Spotted Fever, ehrlichiosis, Lyme disease and Southern Tick-Associated Rash Illness (STARI). The

most frequent mosquito-borne illnesses, or "arboviruses," in North Carolina include Lacrosse encephalitis, West Nile virus and Eastern equine encephalitis (88).

One way to prevent or limit the transmission of vector-borne illnesses is to control the vectors of the disease. In the case of mosquitoes, that is usually accomplished by improving cultural practices (e.g., emptying temporary water reservoirs like puddles, flowerpots and bird feeders or by people covering their skin or applying insect repellent when outdoors). In extreme cases, communities may sometimes resort to large-scale aerial spraying to destroy the insect or interfere with its reproductive cycle. Spraying initiatives can be controversial, however, since the typically broadcast application of the pesticide is non-selective and can affect humans and pets.

Rabies, a vector-borne disease, 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 Camden County and its comparators for the period 2005-2014. First of all, rabies is not common in the region, with only 46 cases identified region-wide in 10 years. Secondly, rabies is more common in animals *other* than cats, dogs or bats. Statewide in 2013 54% of all rabies cases were in raccoons.

Table 186. Animal Rabies Cases (2005-2014)

Location	Total Number of Animal Rabies Cases									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Camden County	0	0	1	0	0	0	0	0	1	0
<i>Regional Total</i>	<i>3</i>	<i>5</i>	<i>3</i>	<i>7</i>	<i>10</i>	<i>10</i>	<i>0</i>	<i>2</i>	<i>5</i>	<i>1</i>
Pamlico County	2	1	0	0	0	0	0	1	0	1
State of NC	458	521	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>.

Animal Control in Camden County

The Sheriff's Department in Camden County provides animal control services for the county.

Animal Shelters Serving Camden County

The SPCA of Northeastern North Carolina is the animal shelter for Pasquotank and Camden Counties. It is physically located in Elizabeth City. It is open to the public Saturday through Wednesday 10:00 to 3:30 and Thursday and Friday 10:00 to 6:00.

The SPCA of Northeastern NC provides a loving environment, food, shelter and temporary housing for all lost, strayed or unwanted domestic animals from Pasquotank and Camden Counties. The SPCA does all it can to prevent the spread of diseases at the shelter. Services offered by the organization include educational seminars on the importance of good pet care. The shelter promotes a spay/neuter program, including vouchers to help new owners with the cost of these procedures, since one requirement of adoption is that the adopted pet must be spayed or neutered (89).

BUILT ENVIRONMENT

The term *built environment* refers to the human-made surroundings that provide the setting for human activity, ranging in scale from buildings and parks or green space to neighborhoods and cities. As often used the term also includes supporting infrastructure for those settings, such as the water supply, or the energy grid. In recent years, public health research has expanded the definition of built environment to include healthy food access, community gardens, recreational facilities, and the ease of getting around on foot or on bicycle.

Access to Grocery Stores and Farmers' Markets

The following table presents data on the availability of grocery stores.

- The number of grocery stores in Camden County decreased from one to none between 2007 and 2012.
- In 2010, an estimated 48 Camden County households (~1%) have no car and therefore low access to grocery stores.
- In 2010 an estimated 98 persons in Camden County (~1%) had low income and low access to grocery stores.

**Table 187. Availability of Grocery Stores
(2007 and 2012; 2010)**

Location	Grocery Stores						2010			
	2007		2012		% Change (2007-2012)		Households with No Car and Low Access		Low Income & Low Access	
	#	# per 1,000 Population	#	# per 1,000 Population	#	# per 1,000 Population	#	%	#	%
Camden County	1	0.11	0	0.11	-100.00	-100.00	48	1.32	98	0.99
<i>Regional Total</i>	39	n/a	30	n/a	n/a	n/a	2,349	n/a	6,632	n/a
<i>Regional Average</i>	6	n/a	5	n/a	n/a	n/a	336	n/a	947	n/a
Pamlico County	3	0.25	4	0.31	33.34	26.72	215	3.91	307	2.34
State of NC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1	2	2	2	2

1 - Store Availability. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

2 - Stores. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

Low access = living more than 1 mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area

The next table presents data on the availability of farmers' markets.

- Despite the rural, agrarian nature of much of the ARHS region, there are very few farmers' markets anywhere in the region: two in 2009 and four in 2013, none of which was in Camden County.
- According to another source (NC FarmFresh.com), there were three farms, roadside stands or farmers markets in Camden County in 2015: Hughes Strawberries (Shiloh), Keeterbarn Corner Farm (South Mills), and Williams Strawberry Farm (South Mills) (90).

**Table 188. Availability of Farmers' Markets
(2009 and 2013)**

Location	Farmers' Markets					
	2009		2013		% Change (2009-2013)	
	# Markets	# Markets per 1,000 Population	# Markets	# Markets per 1,000 Population	# Markets	# Markets per 1,000 Population
Camden County	0	0.000	0	0.000	0.0	0.0
<i>Regional Total</i>	2	n/a	4	n/a	100.0	n/a
Pamlico County	0	0.000	1	0.080	0.0	0.0
<i>State of NC</i>	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1

1 - *Local Foods: Farmers Markets*. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

Access to Fast Food Restaurants

The following table presents data on the availability of fast food restaurants.

- Camden County had two fast food restaurants in 2007 and two in 2012. In 2012 there were more fast food restaurants in the county than grocery stores.

**Table 189. Availability of Fast Food Restaurants
(2007 and 2012)**

Location	Fast Food Restaurants					
	2007		2012		% Change (2007-2012)	
	#	# per 1,000 Population	#	# per 1,000 Population	#	# per 1,000 Population
Camden County	2	0.21	2	0.21	0.0	45.33
<i>Regional Total</i>	77	n/a	86	n/a	n/a	n/a
<i>Regional Average</i>	11	0.47	12	0.51	9.0	10.79
Pamlico County	9	0.72	11	0.74	22.2	16.16
<i>State of NC</i>	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1

Source: *Fast Food Restaurants*. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

Access to Recreational Facilities

The table below presents data on the availability of recreational and fitness facilities.

- There were no recreation and fitness facilities in Camden County in either 2007 or 2009. This source does not provide more recent data on recreation and fitness facilities.

**Table 190. Availability of Recreation and Fitness Facilities
(2007 and 2009)**

Location	Recreation and Fitness Facilities					
	2007		2009		% Change (2007-2009)	
	#	# per 1,000 Population	#	# per 1,000 Population	#	# per 1,000 Population
Camden County	0	0.00	0	0.00	0	0.0
<i>Regional Total</i>	9	n/a	7	n/a	n/a	n/a
Pamlico County	1	0.08	1	0.08	0	-4.96
State of NC	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1

Source: *Physical Activity Levels and Outlets*. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas>.

CHAPTER SIX: COMMUNITY INPUT

SMALL GROUP DISCUSSIONS SUMMARY

The information in this section was summarized by the secondary data consultant team from a report of a primary data gathering activity facilitated by another vendor. The complete report for Camden County is appended to this document.

Methodology

ARHS partnered with Sentara Albemarle Medical Center to collect primary data by conducting ten small-group discussions throughout Camden County. Discussions included listening sessions and focus groups were led by trained moderators to learn about the community’s definitions and understandings of health, illness and services that affect health attitudes, beliefs and behaviors.

The Center for Survey Research at East Carolina University provided moderator trainings and an accompanying interview guide to ensure consistent and effective data collection methods.

Discussion questions were researched, selected and approved by the CHA Lead Team. Discussions were recorded and lasted around one hour. Results were then transcribed and analyzed.

A total of 82 Camden County residents participated in the small-group discussions, which were composed according to detail provided in the following table.

Table 191. Participants in Camden County Small-Group Discussions

Camden County Small-Group Discussions	Date	Participants
Camden Senior Center	1/27/15	1 Male; 5 Females
Sawyer’s Creek Baptist Church	3/13/15	1 Male; 10 Females
Camden Senior Center	4/30/15	2 Males; 6 Females
Camden Open Door Church	5/26/15	1 Male; 10 Females
Ebenezer Baptist Church	6/17/15	2 Males; 6 Females
South Mills VFD	7/21/15	7 Males; 1 Female
Sleepy Hollow Neighborhood	9/09/15	2 Males; 7 Females
Camden Library	10/19/15	6 Females
Grandy Primary School Media Center	10/26/15	2 Males; 7 Females
Camden Schools	11/03/15	3 Males; 5 Females

The following list describes the demographic profile of the small group discussion participants:

- 22% Black (compared to 14% in the county)
- 77% white (compared to 82% in the county)
- 0 Hispanic participants (compared to 2.4% in the county)
- 25% male (compared to 50% in the county)

- 0% unemployed (compared to 5.9% unemployment rate)
- 54% with bachelor's degree or higher (compared to 19% in the county)
- 1% currently without health insurance (compared to 9% in the county)
- 36% retired
- 56% earning more than \$50,000 household income

Results

No results in the following summary are quantifiable. The source document does not include any specific numbers with the responses, and terms like “most frequently” are not used with clarity of quantity. Therefore it is difficult to draw any conclusions regarding consensus or majority in response to any particular question.

Q 1: Tell us what you think is the best thing about living in this community.

- The safe environment and sense of community
- Community members are accountable and dependable
- The rural landscape, waterways, hunting and fishing
- The rural location is close to other desirable areas (beaches, larger cities)
- Strong church presence, good school system, laid back environment
- People relocate to Camden County from urban areas because of the small town atmosphere

Q2: What do people in this community do to stay healthy?

- Physical activity and organized recreational activities
- Run, bike, hike, walk, swim, water ski, kayak, garden, yoga
- Zumba classes, youth athletics
- Nutrition classes at Cooperative Extension
- Fresh produce from farmers markets and home gardens
- Many locals follow healthy eating practices and utilize available health resources
- School system promotes exercise in PE classes and sponsors weight loss programs

Q3: In your opinion, what are the serious health-related problems in your community?

The following table lists the community health problems identified by the participants.

Table 192. Participant-Identified Community Health Problems in Camden County

Physical	Social	Mental
Cancer	Poverty	Stress
Diabetes	Availability of doctors	Depression
Heart Disease	Lack of sidewalks	Substance abuse
Obesity		Addiction
High Cholesterol		Alzheimer's disease
Hypertension		Suicide
Asthma		
Joint Pain		
Body Pain		
Arthritis		

Q4: What keeps people in your community from being healthy?

- Lack of access to medical care
 - Not enough primary care providers
 - Affordability of health insurance
 - Long wait periods for appointments
- Lack of access to healthy foods
 - Unhealthy foods are cheaper
 - Not enough time to prepare meals at home
 - Local food traditions are unhealthy
- Other lifestyle choices
 - Substance abuse
 - Technology overindulgence

Q5: What could be done to solve these problems?

- Many proposed solutions focused on education
 - Community not aware of some resources: food banks, public transportation
 - Encourage home gardens
- School system could provide healthier lunches and more health education
- Healthcare providers could strengthen relationships with community
 - Address stigma associated with seeking healthcare treatment
 - Build trust and comfort
- Need more providers, especially dentists

Q6: Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?

- Long wait times
 - In ER, doctors' offices, urgent care centers
 - EMS slow to respond and have limited hours
- Limited access to doctors
 - Too few providers
 - Providers not accepting new patients

- Difficulty contacting providers (e.g. for Rx refills)
- Difficulty establishing PCP and accessing specialists in the county
- Limited local availability requires travel out of the county
- High costs, esp. for parents, the elderly, and the uninsured
- Lack of insurance limits access to dental and vision care
- Lack of resources for children with special needs and elderly who need assisted living

Q7: Are there any home remedies you use in place of traditional healthcare and/or medicine?

The following table summarizes the predominant responses.

Table 193. Home Remedies Reported by Participants

Home Remedy	Targeted Ailment
Whiskey	Coughs
Cloves	Toothache
Honey	Miscellaneous
Herbal Teas	Miscellaneous
Baking soda and salt water	Eczema, Sore throat
Kerosene	Congestion
Vick's VapoRub	Congestion, toe fungus
Deodorant	Bug bites, itching
Ammonia	Bug bites, stings
Nail polish	Red bugs
Bengay	Congestion
Red onion	Sore throat, ear infections
Essential Oils	Miscellaneous
Urine	Ear problems
Peroxide	Miscellaneous
Garlic	Blood pressure, foot fungus
Sugar	Hiccups
Milk and bread	Skin infections
Rubbing Alcohol	Fever
Tobacco	Bee stings

Q8: What are the strengths related to health in your community?

- Health-related programming in and out of county
 - Health education programs by health department
 - Mobile dental units
 - Walking programs supported by local employers
- Country atmosphere
 - Fresh air, very little pollution
 - Outdoor exercise opportunities (boating, walking, biking, yard work)
 - People feel safe
- The people
 - Health-related support from school nurses and teachers
 - People encourage each other

- Availability of healthy food options and some healthcare services
 - Home gardens
 - Limited fast food options
 - Vaccinations and asthma care available

Q9: Cancer and heart disease are the leading causes of death in your county. In your opinion, what makes these the leading causes of death in your county?

- Unhealthy behaviors and habits
 - Smoking, drinking, unhealthy diet
 - Irregular doctor visits
 - Lack of exercise
 - Lack of self-care leads to stress
- Lack of information and resources
 - People don't know how to be healthy or access affordable healthcare services
 - Limited doctors and slow response time
- Use of harmful substances in food and farming
 - Processed foods full of hormones and preservatives
 - Local water contaminated with pesticides and chemicals from farms
 - Farming community exposed to harmful substances

Q10: How does living in a rural area affect health?

- Benefits:
 - locally grown foods
 - less pollution
 - slower paced lifestyle good for mental health
- Concerns:
 - limited healthcare resources
 - lack of transportation
 - poverty

CHAPTER SEVEN: PRIORITIES IDENTIFICATION

PRIORITIES-SETTING PROCESS BY HEALTHY CAROLINIANS OF THE ALBEMARLE

A vital phase of the Community Health Assessment (CHA) involves reporting out to the communities being served and to those residents who participated in the data gathering process. Community health presentations were held to provide the opportunity for community residents and key stakeholders to learn about the health-related primary and secondary data from the 2016 CHA process. The data was presented by Mrs. Sheila Pfaender, Public Health Consultant, during seven presentations conducted over a one-week period, geographically dispersed throughout the Albemarle Region.

The presentations were widely promoted through email invitations, newspaper announcements, the ARHS website, social media outlets, and by partnering organizations in an effort to bring the community together and strengthen an environment where the individuals were empowered in the decisions highlighted through the prioritization process. To maximize the potential audience reached by these presentations, each was live-streamed on Facebook in real time. In addition, each streamed presentation included a link to a web-based ballot via which the viewing community could indicate their choices for health priorities. Persons attending the presentations in-person completed the prioritization ballot immediately following each presentation.

Below is the list of presentations:

Monday, August 22, 2016:

Currituck County Cooperative Extension, Currituck County Center, Barco, NC
Camden County Public Library, Camden, NC

Tuesday, August 23, 2016:

Pasquotank County Health Department, Elizabeth City, NC

Wednesday, August 24, 2016:

Merchants Millpond State Park, Gatesville, NC (Gates County)

Thursday, August 25, 2016:

Perquimans County Recreation Department, Hertford, NC
Shepard Pruden Library, Edenton, NC (Chowan County)

Friday, August 26, 2016:

Bertie County Department of Social Services, Windsor, NC

As noted above, after reviewing the CHA presentation for each county, participants were asked to list what they thought were the three most important health issues for the county while utilizing the following criteria:

- ***Magnitude of the Problem:*** The size or extent of the problem as it relates to your county
- ***Consequences of the Problem:*** How the economic, social, cultural, and political issues within your county might be influenced by addressing this issue

- **Feasibility:** Are there enough resources in the county to address this issue and is the community ready to address this issue?
- **Duplication:** Is this issue already being addressed by other community stakeholders/programs?

A web-based ballot with the same directions was also used to gather additional input from the community. The survey was open to the public for ten days.

After the post-presentation ballot results and web-based surveys were collected, the top ten health issues were tallied. For Healthy Carolinians of the Albemarle (Camden, Currituck, Pasquotank and Perquimans Counties) those ten were, in no particular order:

- Heart disease
- Substance abuse/Mental Health access and resources
- Infant and maternal health/Smoking during pregnancy
- Lung disease
- Access to care (medical and dental)
- Obesity
- Diabetes
- Cancer
- Suicide
- Aging problems

On September 16, 2016, the Healthy Carolinians of the Albemarle (HCOTA) Partnership met to finalize the priority selections for, Camden, Currituck, Pasquotank and Perquimans counties.

Members in attendance were: Amy Underhill, Pam Hurdle, Barbara Courtney, Amanda Betts, Rich Olson, Michael Barclift, Janet Jarrett, Amanda Meads, Leslie Otts, and Julie Tunney. During the HCOTA meeting, members participated in a facilitated discussion, answering the following questions:

1. To what degree does (health issue) have a significant impact on our community's health?
2. To what degree should (health issue) be a focus area for our community to address?

After discussions, participants were then asked to use the top ten list that was developed for each county to vote on their top three priority issues by placing a colored sticker next to their choices. The priority areas with the most votes were as follows:

- **Obesity**
- **Diabetes**
- **Heart Disease**

It is important to note that these three priorities have been selected for a diverse four-county coalition, so certain priorities may be more applicable to some counties than to others.

NEXT STEPS

The next step Healthy Carolinians of the Albemarle plans to take is the development of the Community Action Plans which are due in September 2017. The Action Plans will reflect the priority health issues, strategies, and steps to implement change along with our target populations, and resource networking with the various community partners. This is a critical component that the partnership must take in selecting activities that are reasonable and relatively easy to implement and align with the 2020 Healthy People Objectives in Camden, Currituck, Pasquotank and Perquimans counties. Healthy Carolinians of the Albemarle Partnership members will utilize the information gathered during the Community Health Assessment process and the prioritization process to clearly define our community's health priorities, actions, and expected results. All Partnership members will be involved in completing new action plans based on the prioritization of health needs. The completed action plans will include a description of each health issue/problem and will specify the proposed actions and community organizations that will provide and coordinate the interventions and activities. The Action Plans will be developed after carefully considering all the factors that cause and perpetuate the problem being addressed. The Action Plans will also identify how progress towards the outcome will be measured.

DISSEMINATION PLAN

Healthy Carolinians of the Albemarle plans to share results from the Community Health Assessment (CHA) during meetings with county and city governments, local civic groups, faith organizations, and business leaders and through other community outreach events. The CHA documents can be found on the Albemarle Regional Health Services website at www.arhs-nc.org. Efforts will be made with other agencies and local government, including county home pages, to provide links to the information. ARHS also plans to work with the local newspapers to provide news releases to the public about the findings made in each county. HCOTA members and the broader community will have access to the information found in the CHA to use at their discretion for activities such as seeking evidence-based strategies, developing grant proposals, and planning and implementing programs.

REFERENCES

- 1 Camden County, NC. Wikipedia. www.wikipedia.org/wiki/Camden_County_North_Carolina.
- 2 Camden County, NC. www.camdemcountync.gov.
- 3 NC Department of Transportation. www.ncdot.gov.
- 4 Greyhound. www.greyhound.com/en/locations.
- 5 Amtrak. www.amtrak.com/station-search.
- 6 Travelmath. www.travelmath.com/nearest-airport/Camden+County+NC.
- 7 Camden County, NC. Sperling's Best Places. www.bestplaces.net.
- 8 North Carolina History Project. Camden County. www.northcarolinahistory.org/encyclopedia/616/entry.
- 9 Camden County, North Carolina, 1777. Camden County Historical Society Brochure.
- 10 A History of Camden County. www.carolana.com/NC/Towns/Camden_NC.
- 11 Camden County NC, website. www.camdencounty/about/history/school-resource-information/camden-history-information.
- 12 US Census Bureau, American Fact Finder, 2014 ACS 5-year Estimates. Table S1810: Disability Characteristics. <http://factfinder2.census.gov>.
- 13 Person communication from Christy C. Saunders, Coordinator, Pasquotank-Camden-Elizabeth City Emergency Management Agency, to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, November 2, 2015.
- 14 Pasquotank-Camden Library: <http://library.earlibrary.org/pasquotank/>.
- 15 Camden County Senior Center. <http://www.camdencountync.gov/departments/senior-center>.
- 16 Article 3J County Tier Designations (2016). NC Department of Commerce, Research and Publications, Incentive Reports; <http://www.nccommerce.com/research-publications/incentive-reports/county-tier-designations>.
- 17 ICPTA, Inter-County Public Transportation Authority, <http://www.icpta.net/>.
- 18 Food and Nutrition Services. NC Division of Social Services website. Assistance: Food and Nutrition Services (Food Stamps); <http://www.ncdhhs.gov/assistance/low-income-services/food-nutrition-services-food-stamps>.
- 19 Medicaid. NC Division of Social Services website. Assistance: Medicaid. <http://www.ncdhhs.gov/assistance/medicaid>.
- 20 WorkFirst. NC Division of Social Services website. Assistance: Low-Income Services, Work First Cash Assistance. <http://www.ncdhhs.gov/assistance/low-income-services/work-first-cash-assistance>.
- 21 NC Rural Economic Development Center Rural Data Bank; County Profiles; <http://www.ncruralcenter.org/>.
- 22 Public Housing Authority Contact Information. US Department of Housing and Urban Development, Public and Indian Housing website: http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/pha/contacts.
- 23 HUD Homes. US Department of Housing and Urban Development, Public and Indian Housing website: <http://www.hudhomestore.com/Home/Index.aspx>.
- 24 Low-rent Apartment Search. US Department of Housing and Urban Development, Public and Indian Housing website: <http://www.hud.gov/apps/section8/>.
- 25 Multi-family Housing Rentals. US Department of Agriculture, Rural Development Multi-Family Housing Rentals website; http://rdmfhrentals.sc.egov.usda.gov/RDMFHRentals/select_state.jsp.

-
- 26 NC Coalition to End Homelessness, North Carolina Point in Time Count Data; <http://www.ncceh.org/PITdata/>.
 - 27 Personal communication from Dana Hamill, Public Health Educator, Albemarle Regional Health Services, to Sheila S. Pfaender, Public Health Consultant, January 5, 2016.
 - 28 NC Division of Child Development, Parents, Overview; http://ncchildcare.dhhs.state.nc.us/parents/pr_sn2_ov_lr.asp.
 - 29 College of the Albemarle; <http://www.albemarle.edu/>.
 - 30 Roanoke-Chowan Community College; <http://www.roanokechowan.edu>.
 - 31 Chowan University; <http://www.chowan.edu>.
 - 32 Martin Community College; <http://www.martincc.edu>.
 - 33 Elizabeth City State University; <http://www.ecsu.edu/>.
 - 34 East Carolina University; <http://www.ecu.edu>.
 - 35 Personal communication, Dana Hamill, Public Health Educator, Albemarle Regional Health Services, to Sheila S. Pfaender, Public Health Consultant, January 5, 2016.
 - 36 Albemarle Hopeline. <http://www.albemarlehopeline.org/about-us/our-services.html>.
 - 37 Albemarle Hopeline, Fall 2015 Newsletter.
 - 38 State Children's Health Insurance Program; http://en.wikipedia.org/wiki/State_Children's_Health_Insurance_Program.
 - 39 North Carolina Health Choice. Alamance County Department of Social Services; <http://www.alamance-nc.com/dss/programs-and-services/family-services/north-carolina-health-choice/>.
 - 40 Health Check and EPSDT. NC Department of Health and Human Services, Division of Medical Assistance website; <http://dma.ncdhhs.gov/medicaid/get-started/find-programs-and-services/health-check-and-epsdt>.
 - 41 Managed Care in North Carolina. <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/downloads/north-carolina-mcp.pdf>.
 - 42 November 2014 Dentist List. Personal communication from Melissa Stokley, Pasquotank Department of Social Services to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, September 1, 2015.
 - 43 Albemarle Regional Health Services; <http://www.arhs-nc.org/services/>.
 - 44 What are Federally Qualified Health Centers? US DHHS Health Resources and Services Administration Health Information Technology and Quality Improvement website: <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/qualified.html>.
 - 45 HRSA Data Warehouse, Find a Health Center. <http://findahealthcenter.hrsa.gov/>.
 - 46 Camden County Schools website: <http://ccsnc.org/departments/school-health/>.
 - 47 Nursing Homes. NC Department of Health and Human Services, Division of Aging and Adult Services website; <http://www.ncdhhs.gov/aging/nhome.htm>.
 - 48 Adult Care Homes. NC Department of Health and Human Services, Division of Aging and Adult Services website; <http://www.ncdhhs.gov/aging/agh.htm>.
 - 49 Star Rating Program. NC Department of Health and Human Services, Division of Health Service Regulation Adult Care Licensure Section website: <http://www.ncdhhs.gov/dhsr/acls/star/index.html>.
 - 50 Adult Day Care. NC Department of Health and Human Services, Division of Aging and Adult Services website; <http://www.ncdhhs.gov/aging/adcsvc.htm>.
 - 51 Adult Day Health Care. NC Department of Health and Human Services, Division of Aging and Adult Services website; <http://www.ncdhhs.gov/aging/adhsvc.htm>.
 - 52 DayBreak Adult Day Health Center. <http://www.ahc-nc.org/daybreak/>.
 - 53 NC HHS, LME/MCO Directory. <https://www.ncdhhs.gov/providers/lme-mco-directory>.
 - 54 Trillium Health Resources. <http://www.trilliumhealthresources.org/en/About-Us/>.

-
- 55 Smoking during pregnancy. March of Dimes, Pregnancy, Alcohol and Drugs; http://www.marchofdimes.com/pregnancy/alcohol_smoking.html.
 - 56 Low birthweight. March of Dimes, Pregnancy, Your Premature Baby; http://www.marchofdimes.com/baby/premature_lowbirthweight.html.
 - 57 Heart disease. National Institutes of Health, US National Library of Medicine, MedLine Plus Medical Dictionary website; <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>.
 - 58 Cancer. National Institutes of Health, National Cancer Institute, Dictionary of Cancer Terms website; <http://www.cancer.gov/dictionary?Cdrid=45333>.
 - 59 West Virginia Health Statistics Center. Chronic lower respiratory disease, a national burden (2006). West Virginia Department of Health and Human Resources, Bureau of Public Health website; <http://www.wvdhhr.org/bph/hsc/pubs/other/clrd/national.htm>.
 - 60 Cerebrovascular disease. National Institutes of Health, US National Library of Medicine, MedLine Plus Medical Dictionary website; <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>.
 - 61 Pneumonia and Influenza. National Institutes of Health, US National Library of Medicine, MedLine Plus Medical Dictionary website; <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>.
 - 62 Alzheimer's disease fact sheet (June 27, 2012). National Institutes of Health, National Institute on Aging, National Institutes of Health, Alzheimer's Disease Education and Referral Center website: <http://www.nia.nih.gov/alzheimers/publication/alzheimers-disease-fact-sheet>.
 - 63 Definition of nephritis, definition of nephrosis. MedicineNet.com, MedTerms Dictionary website; <http://www.medterms.com/script/main/art.asp?articlekey=4534>.
 - 64 Nephrotic syndrome. PubMed Health, A.D.A.M. Medical Encyclopedia website; <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001520/>.
 - 65 Diabetes. National Institutes of Health, US National Library of Medicine, MedLine Plus Medical Dictionary website; <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>.
 - 66 Sepsis. National Institutes of Health, US National Library of Medicine, MedLine Plus Medical Dictionary website; <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>.
 - 67 Liver disease (hepatic disease). MedicineNet.com, Diseases and Conditions website; http://www.medicinenet.com/liver_disease/article.htm.
 - 68 HIV/AIDS: the basics. National Institutes of Health, AIDS Info website; http://aidsinfo.nih.gov/contentfiles/HIVAIDS_theBasics.pdf.
 - 69 Chlamydia. Centers for Disease Control and Prevention, CDC A-Z Index website; <http://www.cdc.gov/std/chlamydia/default.htm>.
 - 70 Gonorrhea. Centers for Disease Control and Prevention, CDC A-Z Index website; <http://www.cdc.gov/std/Gonorrhea/>.
 - 71 Asthma: basic information. Centers for Disease Control and Prevention website; <http://www.cdc.gov/asthma/faqs.htm>.
 - 72 Your guide to diabetes: Type 1 and Type 2 (2012). National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, National Diabetes Information Clearinghouse; http://www.diabetes.niddk.nih.gov/dm/pubs/type1and2/YourGuide2Diabetes_508.pdf.
 - 73 NC nutrition and physical activity surveillance system (NC-NPASS). NC Department of Health and Human Services, Nutrition Services Branch website: <http://www.nutritionnc.com/nutrsurv.htm>.
 - 74 NC County Level Oral Health Assessments Data by Year, 2008-2009. NC DHHS, Division of Oral Health, References and Statistics, Measuring Oral Health website: <http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm>.

-
- 75 Gray, Allison. Reforming mental health reform: the history of mental health reform in North Carolina. North Carolina Insight Special Report, March 2009; <http://www.nccppr.org/drupal/content/insightissue/88/the-history-of-mental-health-reform>.
- 76 Mental Health Reform in North Carolina. Wikipedia: http://en.wikipedia.org/wiki/Mental_health_reform_in_North_Carolina.
- 77 "State Managed Care Organizations to Consolidate". North Carolina Health News, December 12, 2013; <http://www.northcarolinahealthnews.org/2013/12/20/state-managed-care-organizations-to-consolidate/>.
- 78 Psychiatric hospital admission criteria. NC Division of State Operated Healthcare Facilities website: <http://www.ncdhhs.gov/dsohf/professionals/admissioncriteria-psychohospital.htm>.
- 79 Definition of developmental disability. NC Department of Health and Human Services, Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Developmental Disabilities website: <http://www.ncdhhs.gov/mhddsas/services/developmentaldisabilities/divdefinitionofDD.htm>.
- 80 Toxics release inventory (TRI) fact sheet. US Environmental Protection Agency, Toxics Release Inventory (TRI) Program website: http://www.epa.gov/tri/triprogram/TRI_Factsheet_Jan_2012.pdf.
- 81 TRI Release Reports: Chemical Reports, 2014. US EPA TRI Explorer, Release Reports, Chemical Reports website: http://iaspub.epa.gov/triexplorer/tri_release.chemical.
- 82 SDWIS. US Environmental Protection Agency Envirofacts website: <http://www.epa.gov/enviro/facts/sdwis/search.html>.
- 83 Camden County, NC. Departments, Public Works, Reverse Osmosis Water Treatment Plant. <http://www.camdencountync.gov/departments/public-works/reverse-osmosis-plant>.
- 84 Camden County, NC, Departments, Public Works, Waste Water Treatment Plant. <http://www.camdencountync.gov/departments/public-works/waste-water-treatment-plant>.
- 85 Camden County, NC, County Services, Convenience Sites. <http://www.camdencountync.gov/services/convenience-sites>.
- 86 US EPA, Envirofacts, RCRAInfo. <http://www.epa.gov/enviro/facts/rcrainfo/search.html>.
- 87 Lead. National Institutes of Health, National Institute of Environmental Health Sciences, Health and Education website: <http://www.niehs.nih.gov/health/topics/agents/lead/>.
- 88 NC Division of Public Health, Epidemiology, Diseases and Topics, Vector-borne Diseases; <http://epi.publichealth.nc.gov/cd/diseases/vector.html>.
- 89 SPCA of Northeastern North Carolina. <http://www.petfinder.com/shelters/NC98.html>.
- 90 NC Department of Agriculture, NC FarmFresh. Farms, Roadside Markets, Farmers Markets. <http://www.FarmFresh.com>.

APPENDICES

APPENDIX 1: CONSULTANT'S PRESENTATION

APPENDIX 2: PRIMARY DATA REPORT

APPENDIX 3: PRIORITIZATION TOOL

APPENDIX 4: COMMUNITY RESOURCE INVENTORY



2016

CAMDEN COUNTY

COMMUNITY HEALTH ASSESSMENT

Secondary Data Summary
and Brief Primary Data Results Summary

August, 2016

Sheila S. Pfaender, Public Health Consultant

PURPOSE OF THE COMMUNITY HEALTH ASSESSMENT

- Describe the health status of the community.
- Create a report that will serve as a resource for the Camden County Health Department, local Healthy Carolinians affiliates, area hospitals, and other community organizations.
- Provide direction for the planning of disease prevention and health promotion services and activities.



CONTRIBUTING VIEWPOINTS

Secondary Data	Hospital Data	Citizen Opinion
Demographic Socioeconomic Health Environmental	Emergency department discharges Inpatient hospitalization discharges	Community listening sessions



WE TAKE SPECIAL NOTICE WHEN...

- County statistics deviate from North Carolina, Regional, or peer county statistics, or some other “norm”.
- Trend data show significant changes over time.
- There are significant age, gender, or racial/ethnic disparities.

DEFINITIONS AND SYMBOLS

○ **Arrows**

- Arrow up (▲) indicates an increase.
- Arrow down (▼) indicates a decrease.

○ **Color**

- **Red** indicates a “worse than” or negative difference
- **Green** indicates a “better than” or positive difference
- **Blue** indicates a likely unstable rate or difference based on a small number of events; figures in blue should be used with great caution.

○ **Bold Type**

- Indicates the higher value of a pair, or the highest value among several.



DATA CAVEATS

- Data sources are cited rudimentarily among these slides, but are thoroughly cited in the supporting Data Workbooks.
- Most secondary data originated from authoritative sources in the public domain (e.g., US Census Bureau, US EPA, NC State Center for Health Statistics).
- Most data for the target county is compared also to a peer county, the average of data for the seven counties in the ARHS Region, and to data for North Carolina as a whole.
- All secondary data were mined at a point in time in the recent past, and may not represent present circumstances. That is, numbers, entity names, program titles, etc. that appear in the data may no longer be current.



DEMOGRAPHIC DATA

Total Population, Birth Rate, Population Growth, Minority Populations, Age Groups, Elderly Population, Foreign-Born Populations, Veterans

GENERAL POPULATION CHARACTERISTICS

(2014 ESTIMATES)

- Camden County has approximately equal proportions of males and females.
- The overall median age of the Camden County population is 3.4 years *older* than NC average but 2.0 years *younger* than the regional average.

Location	Total Population	Total Males	Median Age Males	Total Females	Median Age Females	Overall Median Age
Camden County	10,331	5,179	40.9	5,152	42.1	41.6
Regional Avg.	19,258	9,467	42.0	9,791	45.1	43.6
Pamlico County	12,948	6,641	48.5	6,307	52.6	50.7
NC	9,943,964	4,844,593	36.7	5,099,371	39.7	38.2

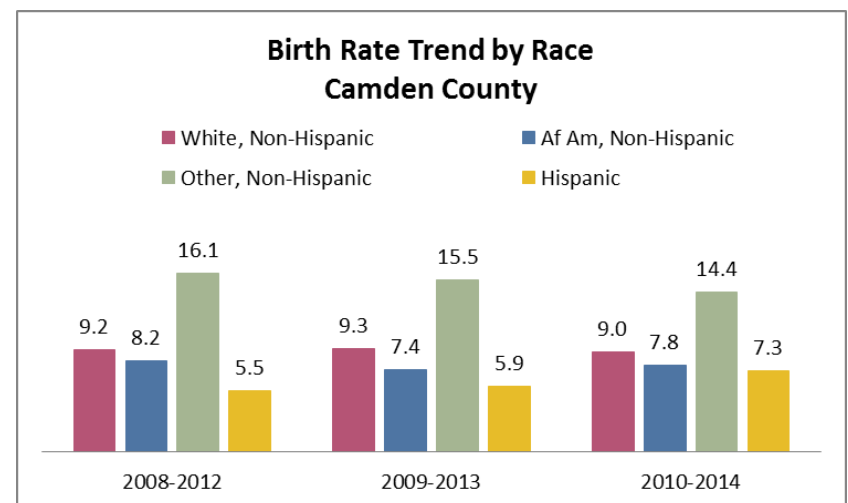
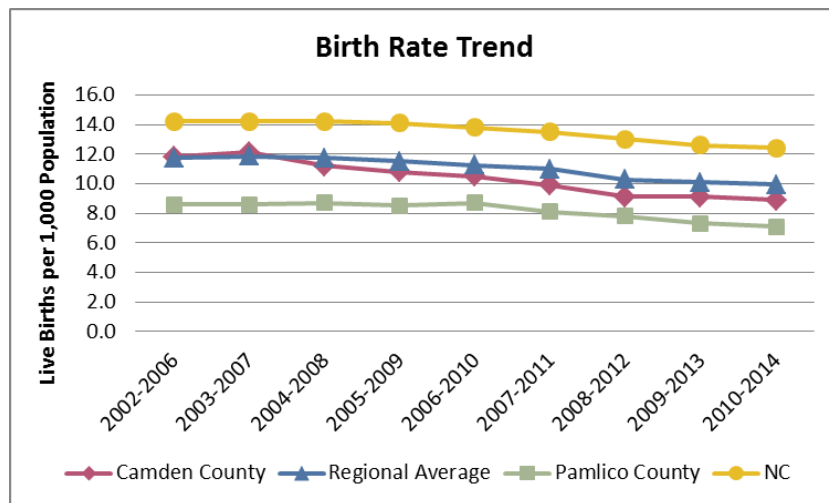
POPULATION GROWTH (PROJECTED)

- Camden County's recent population growth is predicted to slow over the coming decades.
- By 2030, the county population is predicted to total 10,818.

Decade	Camden County	Regional Average	Pamlico County	NC
1980-1990	1.3	7.4	9.3	12.8
1990-2000	16.6	10.8	13.8	21.3
2000-2010	45.0	17.3	1.6	18.5
2010-2020	6.2	1.3	1.1	10.9
2020-2030	2.1	3.6	2.0	9.8

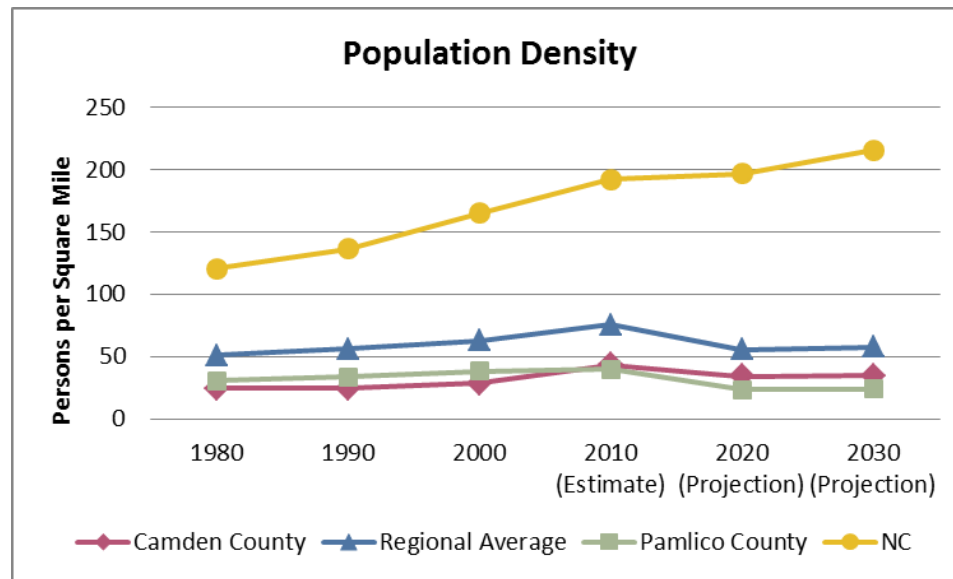
BIRTH RATE

- The Camden County birth rate demonstrated an overall decline over the period presented below, with a similar trend seen in the Region and the State.
- The birth rate has changed only slightly among most racial groups; however the birth rate among Hispanics increased in each of the periods presented.
- In 2010-2014, the highest birth rate in the county (14.4) occurred among Other non-Hispanics.



POPULATION DENSITY

- The population density of Camden County has increased slightly over the period presented but remains lower than population density for the state and the Region.



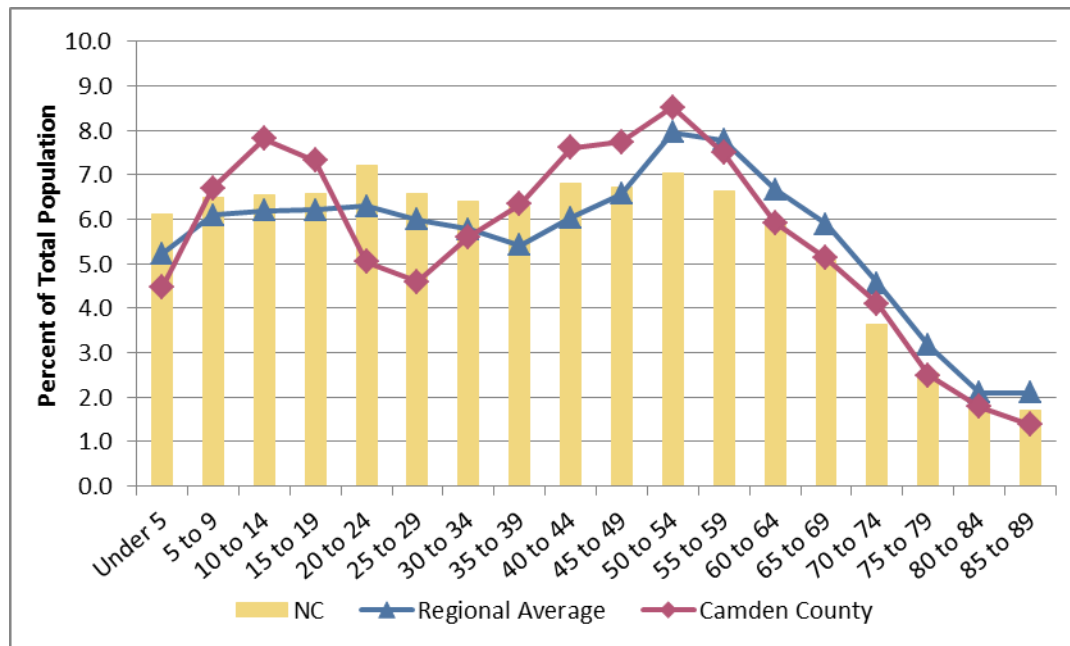
MINORITY POPULATIONS

- White residents compose the largest proportion of the Camden County population.
- Camden County has a higher proportion of Asian residents compared to the Region and Pamlico County and near the proportion for the state as a whole.
- Other minority groups comprise smaller proportions of the population in Camden County than in the comparator jurisdictions.

Location	Percent of Overall Population					
	White	Black	American Indian/Alaskan	Asian	Multiple Races	Hispanic
Camden County	82.3	13.7	0.5	2.2	0.6	2.4
Regional Average	64.8	31.8	0.3	1.0	1.6	3.0
Pamlico County	76.8	19.1	1.0	0.8	1.9	3.3
State of NC	69.6	21.5	1.2	2.4	2.3	8.7

POPULATION AGE DISTRIBUTION

- According to 2014 estimates, compared to NC as a whole Camden County has higher proportions of people 5-19 and 40-59 and lower proportions of people age 20-39 and 60 and older.



GROWTH OF THE *ELDERLY* POPULATION

- The population in every major age group age 65 and older in Camden County is projected to increase between 2000 and 2030, in proportions greater than for the state as a whole.
 - **Age 65-74:** by **70%** (vs. 63% in NC)
 - **Age 75-84:** by **70%** (vs. 67% in NC)
 - **Age 85+:** by **142%** (vs. 75% in NC)
 - **Overall Age 65+:** by **76%** (vs. 66% in NC)
- In 2014 there were an estimated 1,536 persons age 65 and older in Camden County, representing around 15% of the total population.
- By 2030, with the total population predicted to be growing slowly, 2,594 residents over the age of 65 will comprise 24% of the population.

CHARACTERISTICS OF THE ELDERLY POPULATION

(2014 AMERICAN COMMUNITY SURVEY ESTIMATES)

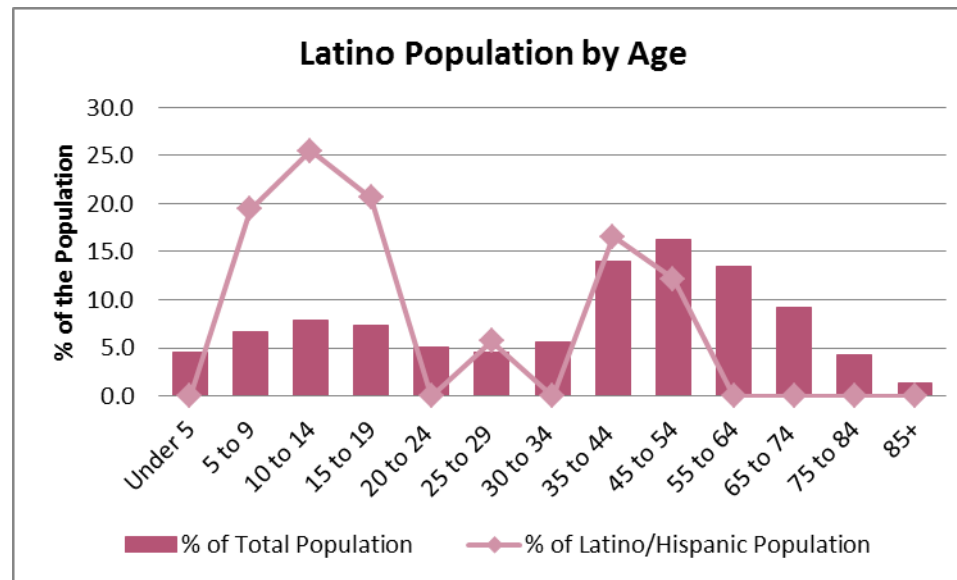
- Among the Camden County population over the age of 65:
 - **27%** have less than a high school diploma (22% in NC)
 - 17% have a graduate or professional degree (**22%** in NC)
 - 6% are below the 100% poverty level (**10%** in NC)
 - **28%** are in the 100% to 199% poverty level (24% in NC)
 - **97%** are homeowners (82% in NC)
 - 26% live alone (**28%** in NC)
 - 15% are in the labor force (**16%** in NC)
 - Have a median household income of **\$45,500** (\$35,024 in NC)
- An estimated 39% of Camden County residents over the age of 65 have a disability (38% in NC).
 - The most common disabilities are ambulatory difficulty (26% vs. 25% in NC) and independent living difficulty (22% vs. 16% in NC).

FOREIGN-BORN POPULATION

- According to 2014 Estimates, 448 individuals living in Camden County were born outside the US.
 - 52% entered before 1990.
- Spanish speakers comprise 2.7% of the total population and 66% of them speak English “less than very well”.
- Asian and Pacific Island Language speakers comprise 2.1% of the total population and 70% of them speak English “less than very well”.
- Other Indo-European Language speakers comprise 0.4% of the population and 22% speak English “less than very well”.

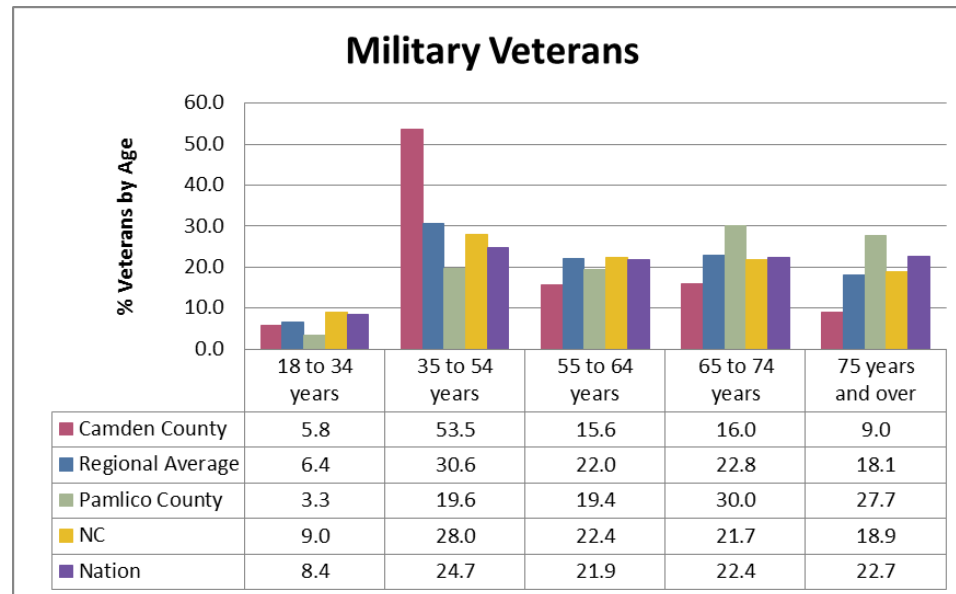
AGE DISTRIBUTION OF LATINO POPULATION

- Compared to the age distribution of the total Camden County population, the Latino population in the county has higher proportions of persons ages 5-19 and ages 35-44.
- Males represent 39% of the Latino population.



MILITARY VETERANS

- Approximately **18%** of the Camden County civilian population is a military veteran. [NC = 10% Region = 12%]
- Veterans over the age of 65 comprise 25% of the county's veteran population. [NC = **41%** Region = **41%**]
- Camden County has a significantly higher proportion of veterans in the 35-54 age group than any other jurisdiction presented.





SOCIOECONOMIC DATA

***Income, Employment, Unemployment,
Poverty, Children and Families,
Housing, Educational Attainment,
Crime and Safety***

COUNTY ECONOMICS

- Total gross monetary collections in Camden County, as displayed in the table below, have fallen each year since 2010-2011.

Location	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Camden County	3,003,630	2,456,555	2,378,786	2,302,563	2,276,736
<i>Regional Average</i>	7,998,729	7,314,849	7,651,788	7,379,530	7,730,478
<i>NC County Average</i>	55,679,535	49,906,563	50,164,100	52,548,980	57,312,401

INCOME (2014 ACS ESTIMATES)

In Camden County:

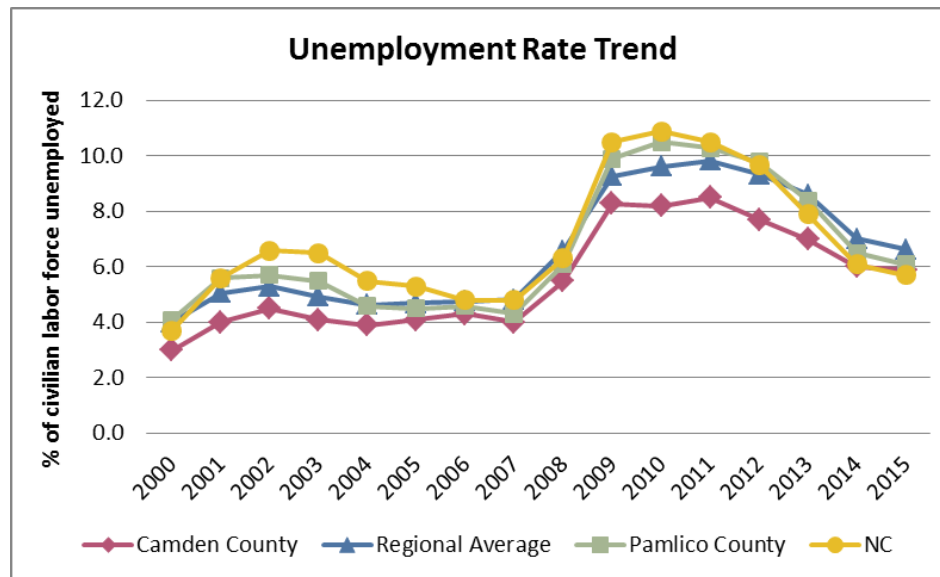
- 2014 Per Capita Income = \$26,388
 - \$780 **above** NC average
- 2014 Median Household Income = \$62,194
 - \$15,501 **above** NC average
- 2014 Median Family Income = \$71,071
 - \$13,743 **above** NC average
- 2014 Mean Retirement Income = \$22,400
 - \$560 **above** NC average

EMPLOYMENT (AS OF 2ND QUARTER 2015)

- The three employment sectors in Camden County with the largest workforce (and their average weekly wage) were:
 - Educational Services: 23.4% of workforce (\$664)
 - Statewide, Educational Services workers represent 9.1% of the workforce and earn \$796 a week.
 - Retail Trade: 12.1% of workforce (\$316)
 - Statewide, Retail Trade workers represent 11.7% of the workforce and earn \$504 a week.
 - Public Administration and Administrative & Waste Services each represent 9.8% of the workforce.
 - Public Administration employees earn \$547 a week compared to \$830 at the state level.
 - Administrative & Waste Services workers earn \$990 a week compared to the state average of \$630.

ANNUAL UNEMPLOYMENT RATE

- The unemployment rate in Camden County has followed a trend similar to that in the other jurisdictions presented, and was lower than the state rate for most of the period presented.
- In 2015 the unemployment rate was 5.9 in Camden County, **6.6** across the ARHS Region and 5.7 in NC.



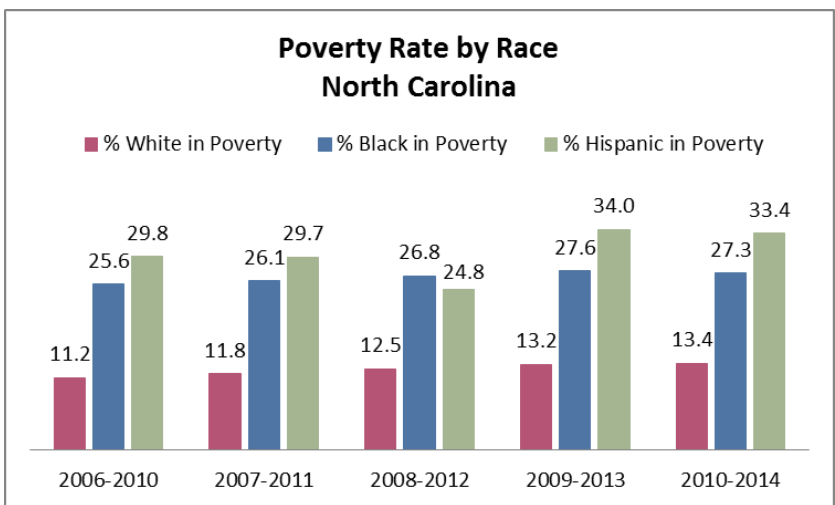
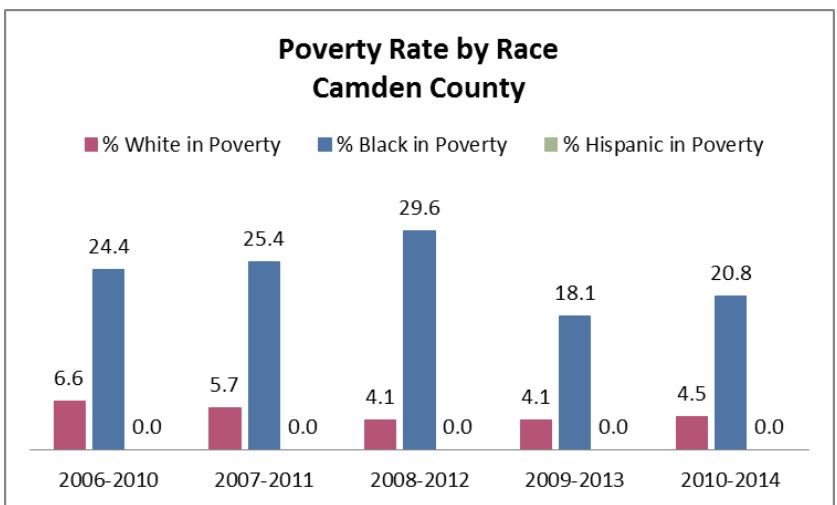
OVERALL POVERTY RATE TREND

- The overall poverty rate (describing the percentage of the total population below the Federally-defined 100% poverty level) in Camden County was lower than the comparable rates in any location and period shown in the table below.
- After four consecutive periods of decrease, the Camden County poverty rate increased in 2010-2014.

	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Camden County	9.3	8.8	7.4	6.0	6.7
Regional Average	16.4	17.5	17.3	18.1	17.7
Pamlico County	10.7	12.2	13.8	13.8	13.3
State of NC	15.5	16.1	16.8	17.5	17.6

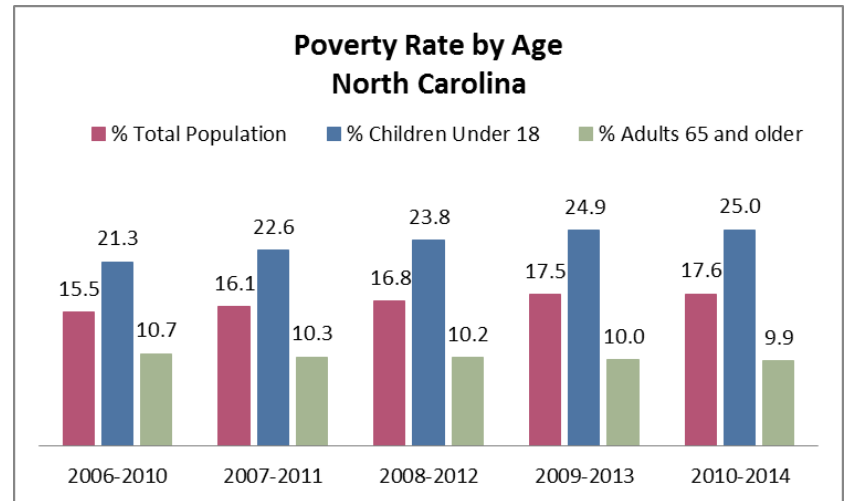
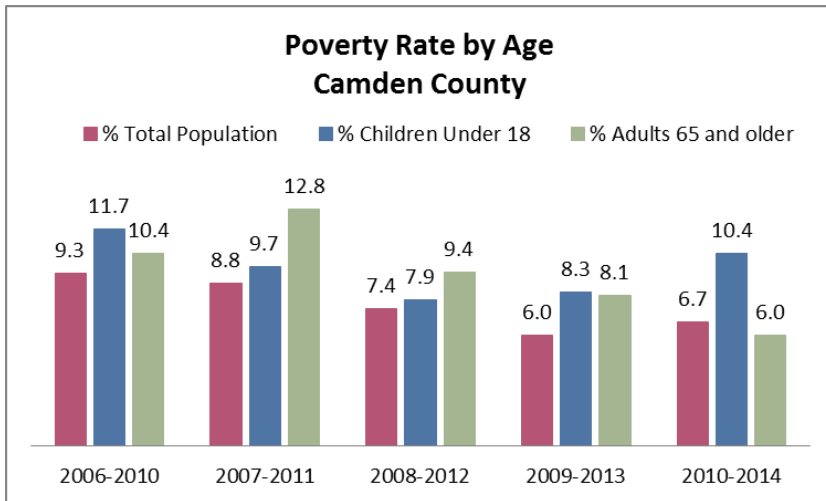
POVERTY AND RACE

- In Camden County over the period cited, the poverty rate among African Americans was from 3 to 7 times the comparable rate for whites.
- In the periods presented, zero percent of Hispanic residents in the county were living below the poverty level.



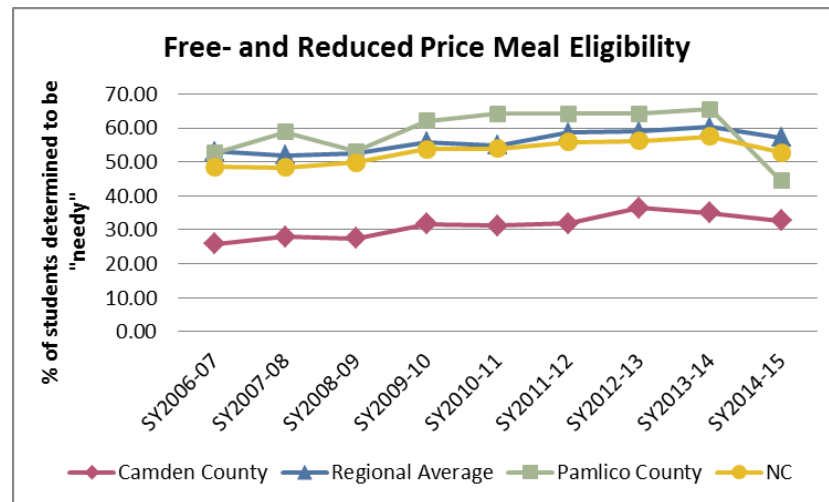
POVERTY AND AGE

- The poverty rates among the oldest and youngest residents of Camden County were variable over the period presented, though the county rates for all groups were lower than almost all comparable state rates.



FREE- AND REDUCED-PRICE MEALS

- Another measure of poverty, particularly among families with children, is the rate of participation in the free- and reduced-price meal programs in the public school system.
- In Camden County, a much lower percentage of students have been identified as “needy”, compared to the State.
- For the 2014-15 school year, approximately 33% of Camden County students were identified as needy, compared to **57%** in the Region and 53% across the state.



HOUSING AND HOUSING COSTS

According to 2014 ACS estimates:

- **85%** of Camden County housing units were owned and 15% were rented. Statewide, 66% of housing units were owned and **34%** were rented.
- 12% of housing units in Camden County were mobile homes, compared to 13.5% statewide.
- The estimated median monthly mortgage cost among Camden County home owners **increased** from \$1,323 in 2005-2009 to
\$1,720 in 2010-2014, **\$448 more than the NC median**
- The estimated median gross monthly rent among Camden County renters **increased** from \$850 in 2005-2009 to
\$1,143 in 2014, **\$353 more than the NC median**
- In 2014, the percentage of Camden County mortgagees spending more than 30% of their monthly income on housing was **37%**, compared to 31% statewide.
- In 2014, the percentage of Camden County renters spending more than 30% of their monthly income on housing was **58%**, compared to 51% statewide.

HOMELESSNESS

- Every January the NC Coalition to End Homelessness conducts a point-in-time count of homeless individuals.
- Camden County was not among the jurisdictions participating in the count in 2009 through 2015.



CHILDREN AND FAMILIES (2014 ESTIMATES)

- There were 2,807 households in Camden County
 - **44%** of households had children under 18 (NC = 43%)
 - **79%** of households were married couples (NC = 73%)
 - 3% of households were single male householders (NC = **7%**)
 - 18% of households were single female householders (NC = **21%**)
 - **32%** of households were married couples with minor children (NC = 28%)
 - 2% of households were single males with minor children (NC = **3%**)
 - 10% of households were single females with minor children (NC = **12%**)

GRANDPARENTS (2014 ESTIMATES)

- An estimated 207 Camden County grandparents were living with their minor grandchildren
- 20% were *also* financially responsible for those grandchildren
 - [NC = 48% Region = **49%**]
 - 0% were over the age of 60 [NC = 35% Region = **38%**]
 - 5% were African American [NC = **36%** Region = 33%]
 - **37%** were disabled [NC = 28% Region = 22%]
 - 24% were below the poverty level [NC = 26% Region = **29%**]



EDUCATIONAL ACHIEVEMENT

- Compared to the NC average, Camden County has:
 - A **lower** proportion of residents with less than a high school education: 13% [NC = 15% Region = **17%**]
 - A **lower** proportion of residents with a bachelor's degree or higher: 19% [NC = **28%** Region = 17%]
 - **Higher** proficiency compared to the state and the region on both math and reading EOG tests among 3rd and 8th graders.
 - **Lower** rate of participation in the SAT and similar average scores.
 - **Lower** local and federal per-pupil expenditures but **higher** state funding.
 - **Higher** graduation for rates for all groups.

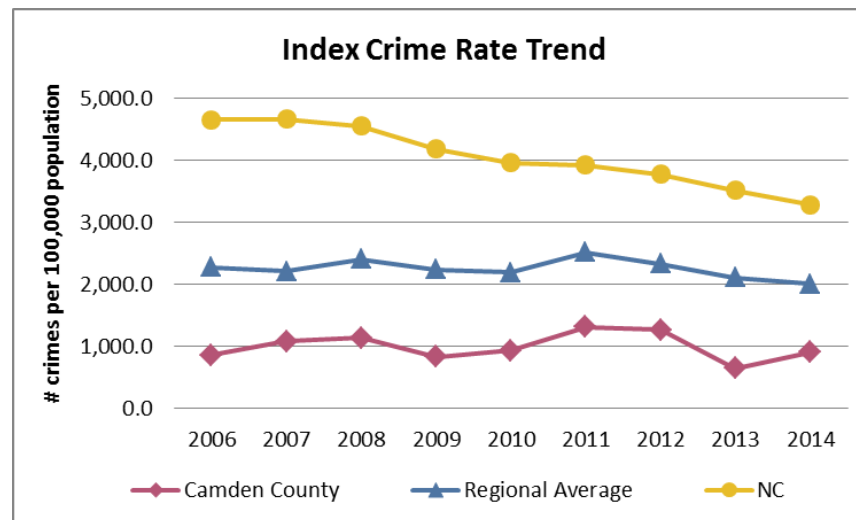
EDUCATIONAL SYSTEM

- The number of students enrolled in Camden County schools has changed little since SY2006-07, fluctuating by fewer than 50 students each year. In the 2014-15 school year 1,943 students were enrolled in Camden County public schools.
- While the county high school drop-out rate varies on a yearly basis, it has decreased overall from a high point of 4.85 in SY2005-06 to 1.96 in SY2013-14. The Camden County rate was lower than the state rate for the entire period presented.
- The high school reportable crime rate in Camden County has been lower compared to NC since at least SY2004-05.



CRIME AND SAFETY

- The “index crime rate” is the rate of the sum of violent crime and property crime. The majority of crimes committed are property crimes.
- Index, Violent and Property crime rates are historically and significantly lower in Camden County compared to State and Regional rates.
- In 2014 the Camden County **index** crime rate was 904.1 crimes committed per 100,000 population, compared to **3,287.2** in NC and 2,006.2 in the ARHS Region.
- In 2014 the Camden County **violent** crime rate rate was 30.1 compared to a state rate of **333.0** and a Regional rate of 214.5.
- The 2014 **property** crime rate was 873.9 in Camden County compared to **2,954.1** in NC and 1,808.4 in the Region.



JUVENILE CRIME

- Between 2010 and 2014 the *number* of individuals who were subjects of complaints of **undisciplined** youth (ages 6-17) was low in Camden County. A total of 12 juveniles were determined to be undisciplined over the five year period.
- Over the same period the *number* and *rate* of complaints of **delinquent** youth in the county fluctuated from a low of 4 and 0.58 respectively in 2012 to a high of 13 and 2.31 in 2014.
- 3 Camden County youths were sent to secure detention between 2010 and 2014.

DOMESTIC VIOLENCE

- The number of domestic violence clients seen by local agencies increased overall in Camden County, from a low of 49 in FY2008-09 to 199 in FY2013-14.
- 822 services were provided to Camden County domestic violence clients in FY2014-15. The most common service was the provision of information, followed by counseling.
- The domestic violence shelter serving Camden County was full on 32 days in FY2014-2015.

SEXUAL ASSAULT

- Data related to sexual assault clients in Camden County was not available before FY2009-10.
- The number of sexual assault clients seen by local agencies is variable in Camden County. Eighteen clients filed complaints in FY2010-11 and 27 did so in FY2014-15.
- The most common type of assault in FY2014-15 was adult survivor of child sexual assault, accounting for 74% of the clients.
- The most common type of offender was a relative (74%).

CHILD MALTREATMENT

- The number of children subject to abuse, neglect, or abuse and neglect in Camden County fluctuates yearly.
- Neglect-only cases composed the most common type of child maltreatment in most years; in 2014-15 seven of the ten substantiated cases involved neglect.
- In Camden County in 2014-15, 100% of the substantiated cases of abuse or neglect were white children, 50% of the victims were female, and 60% were 6-12 years old.

Category	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total No. of Findings of Abuse, Neglect, Dependency	42	28	44	36	30	36	59	17	36	41	41
No. Substantiated ¹ Findings of Abuse and Neglect	0	0	0	1	0	0	0	0	1	0	0
No. Substantiated Findings of Abuse	0	0	0	0	0	0	0	0	0	0	3
No. Substantiated Findings of Neglect	6	0	2	5	3	1	5	1	4	6	7
Services Recommended	0	0	0	0	0	0	6	1	0	1	0
No. Unsubstantiated Findings	36	27	27	29	27	22	38	11	23	26	29
Services Not Recommended	0	1	15	1	0	12	8	4	4	3	0

¹ A "substantiated" report of child abuse, neglect or exploitation indicates that the investigation supports a conclusion that the subject children was/were abused, neglected, or exploited.



HEALTH RESOURCES

*Health Insurance,
Enrollment in Public Programs,
Healthcare Practitioners, Facilities*

HEALTH INSURANCE

- The percent of uninsured adults (age 19-64) in Camden County rose and fell in the periods shown below but was lower than the comparable state and regional figures in all years presented.
- The age group 0-18 tends to have a lower percentage of uninsured than the 19-64 age group, due partly at least to coverage of children through NC Health Choice.
- As of 2014 estimates, 9.4% of Camden County residents were without health insurance and 2.8% under 18 were uninsured. Thirty percent of county residents were insured via public programs, compared to 32% statewide.

Location	2011			2012			2013		
	0-18	19-64	0-64	0-18	19-64	0-64	0-18	19-64	0-64
Camden County	9.0	18.8	15.9	8.8	18.3	15.5	8.6	18.7	15.7
Regional Average	8.2	21.0	17.4	8.0	21.2	17.6	7.4	20.7	17.1
Pamlico County	10.3	21.5	18.7	10.2	22.4	19.3	10.8	22.9	19.9
State of NC	7.9	23.0	18.7	7.9	23.4	19.0	6.9	22.5	18.1

MEDICAID ELIGIBILITY

- Approximately 9% of Camden County residents were eligible for Medicaid in 2014.
- The total number of people in Camden County eligible for Medicaid changed only slightly over the period presented.
- As of January 2013, 85% of Camden County children who were eligible for NC Health Choice were enrolled.
- As of December 2013, 81% of those eligible for Carolina ACCESS were enrolled.

Year	Number of Eligibles, as of December 31 each year													
	Aged	Blind	Disabled	AFDC	Foster Care	Pregnant Women	Family Planning Waiver	Infants & Children	Medicaid CHIP	Medicare Catastrophic	Comprehensive Medicare-Aid (MQBQ-B-E)	Refugees Aliens	BCC	Total Eligibles
2008	87	4	148	261	4	21	n/a	324	33	24	n/a	0	0	906
2009	77	4	150	321	4	13	n/a	360	40	31	n/a	0	0	1,000
2010	73	3	164	312	2	19	n/a	404	32	33	n/a	0	0	1,041
2011	68	3	172	285	3	11	n/a	435	23	40	n/a	0	0	1,040
2012	74	4	178	261	3	21	n/a	433	31	44	n/a	0	0	1,049
2013	83	4	169	267	1	17	n/a	442	35	48	n/a	0	0	1,066
2014	77	4	183	272	0	6	68	377	86	n/a	44	1	1	1,119
October, 2015	77	3	187	350	1	6	83	266	66	n/a	45	0	1	1,087

HEALTH CARE PRACTITIONERS

- 2012 ratios of active health professionals per 10,000 population were **lower** in Camden County than in NC for:
 - MDs: 0.0 [NC=22.31 Region=8.38]
 - Primary Care MDs: 0.0 [NC=7.58 Region=3.53]
 - Dentists: 0.00 [NC=4.51 Region=1.72]
 - Registered Nurses: 17.13 [NC=98.56 Region=53.15]
 - Pharmacists: 2.02 [NC=10.06 Region=4.19]
- These ratios do not take into consideration medical practitioners in neighboring counties accessible to Camden County residents.

HEALTH CARE PRACTITIONERS

- As of 2012, there were **zero** primary care physicians (no Family or General Practice physicians, no Obstetrician/Gynecologists, no Pediatricians) and **zero** specialists in Camden County.
- In 2012, **zero** dentists and three hygienists were practicing in Camden County.
- The 2012 count of 17 nurses in the county included **zero** nurse practitioners. An additional 3 LPNs were located in Camden County.
- The only other health professionals in Camden County in 2012 were 2 occupational therapists, 2 pharmacists and 1 physical therapist.

OTHER HEALTHCARE PROVIDERS

- As of February 2016, there were no dental providers in Camden County who were currently participating in Medicaid of NC Health Choice.
- As of September 2015 there were 2 mental health providers listed in Camden County accepting Medicaid/NC Health Choice clients.
- The student to school nurse ratio has remained essentially unchanged since SY2009-10: 1 nurse for approximately 633 students. The recommendation ratio is 1 nurse for every 750 students.

OTHER HEALTHCARE FACILITIES

- There is no hospital located in Camden County.
- There are no dialysis facilities in Camden County.
- There are no licensed ambulatory care facilities, cardiac rehabilitation facilities or nursing pools in the county.
- As of February 2016 there was 1 mental health facility in Camden County, providing supervised living for developmentally disabled adults.

LONG-TERM CARE FACILITIES (AS OF FEBRUARY 2016)

- The number of beds in NC-licensed long-term care facilities in Camden County are:
 - Adult Care Homes/Homes for the Aged (1 facility): 24 beds
 - Family Care Homes (1 facility): 6 beds
 - There are no nursing home beds in Camden County.
- Both long-term care facilities in the county are located in Shiloh.

HOSPITAL UTILIZATION SUMMARY: EMERGENCY DEPARTMENT

Below is the overall gender and age-group profile of ED utilization at the three hospitals in the study region seeing more than 20 Camden County ED patients over two years.

No. ED Discharges by Gender and Age Group						
Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Females	Males	< 18	18-64	≥ 65	
2013	1,954	1,543	769	2,259	469	3,497
2014	1,911	1,480	781	2,132	478	3,391
Total	3,865	3,023	1,550	4,391	947	6,888

HOSPITAL UTILIZATION SUMMARY: EMERGENCY DEPARTMENT

Below is the overall racial and ethnic profile of ED utilization at the three hospitals in the study region seeing more than 20 Camden County ED patients over two years.

Fiscal Year	No. ED Discharges by Racial/Ethnic Group							Total No. Discharges
	Am. Indian/ Alaskan	Asian	Black	Hispanic	Other	Unknown	White	
2013	2	11	742	38	21	9	2,674	3,497
2014	0	19	687	36	14	14	2,621	3,391
Total	2	30	1,429	74	35	23	5,295	6,888

HOSPITAL UTILIZATION SUMMARY: EMERGENCY DEPARTMENT

Below is the overall payor profile of ED utilization at the three hospitals in the study region seeing more than 20 Camden County ED patients over two years.

Fiscal Year	No. ED Discharges by Payor Group								Total No. Discharges
	Commercial	Medicaid	Medicaid Managed Care	Medicare	Medicare Managed Care	Self-Pay	Military	Other	
2013	781	180	600	570	0	707	478	181	3,497
2014	735	213	502	591	8	671	500	171	3,391
Total	1,516	393	1,102	1,161	8	1,378	978	352	6,888
Group % of Total	22.0	5.7	16.0	16.9	0.1	20.0	14.2	5.1	100%

HOSPITAL UTILIZATION SUMMARY:

INPATIENT HOSPITALIZATIONS

Below is the overall gender and age-group profile of IP utilization at the one hospital in the study region seeing more than 20 Camden County IP patients over two years.

No. IP Discharges by Gender and Age Group						
Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Females	Males	< 18	18-64	≥ 65	
2013	286	226	71	213	228	512
2014	265	203	63	220	185	468
Total	551	429	134	413	413	980

HOSPITAL UTILIZATION SUMMARY:

INPATIENT HOSPITALIZATIONS

Below is the overall racial and ethnic profile of IP utilization at the one hospital in the study region seeing more than 20 Camden County IP patients over two years.

Fiscal Year	No. IP Discharges by Racial/Ethnic Group							Total No. Discharges
	Am. Indian/Alaskan	Asian	Black	Hispanic	Other	Unknown	White	
2013	0	3	105	4	2	6	392	512
2014	0	3	91	1	4	2	367	468
Total	0	6	196	5	6	8	759	980



HOSPITAL UTILIZATION SUMMARY:

INPATIENT HOSPITALIZATIONS

Below is the overall payor profile of IP utilization at the one hospital in the study region seeing more than 20 Camden County IP patients over two years.

Fiscal Year	No. IP Discharges by Payor Group								Total No. Discharges
	Commercial	Medicaid	Medicaid Managed Care	Medicare	Medicare Managed Care	Self-Pay	Military	Other	
2013	89	55	37	241	0	41	28	21	512
2014	126	36	12	206	5	30	33	20	468
Total	215	91	49	447	5	71	61	41	980
Group % of Total	21.9	9.3	5.0	45.6	0.5	7.2	6.2	4.2	100%



HEALTH STATISTICS

Health Rankings

HEALTH RANKINGS

- According to *America's Health Rankings* (2014)
 - NC ranked 37th overall out of 50 (where 1 is “best”)
- According to *County Health Rankings* (2015) for NC, Camden County was ranked:
 - 19th overall out of 100 (where 1 is best) for **health outcomes**
 - 15th in length of life
 - 37th for quality of life
 - 4th overall out of 100 for **health factors**
 - 5th for health behaviors
 - 37th for clinical care
 - 3rd for social and economic factors
 - 19th for physical environment



MATERNAL AND INFANT HEALTH

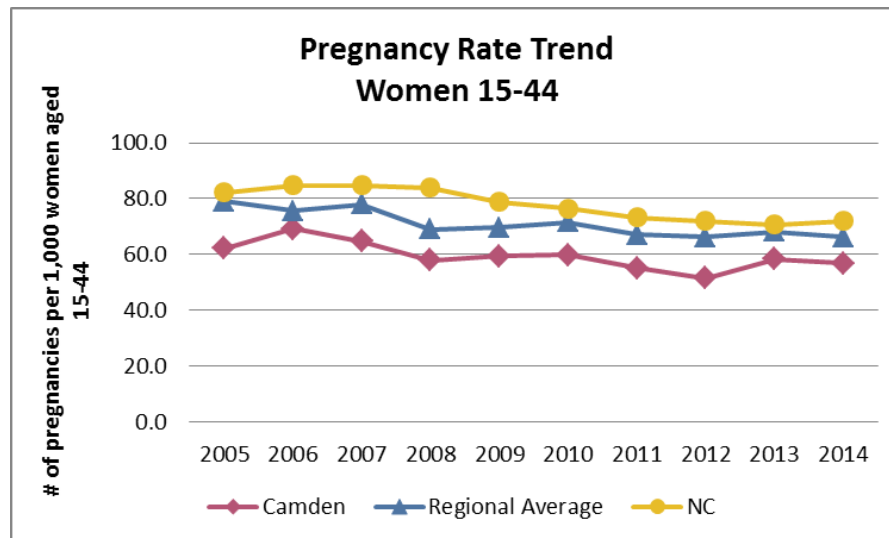
***Pregnancy Rate, Risk Factors,
Outcomes, Infant Mortality***

**All data from the NC State Center for Health Statistics
unless otherwise cited.**

PREGNANCY RATE: WOMEN 15-44

Pregnancies per 1,000 Women Age 15-44

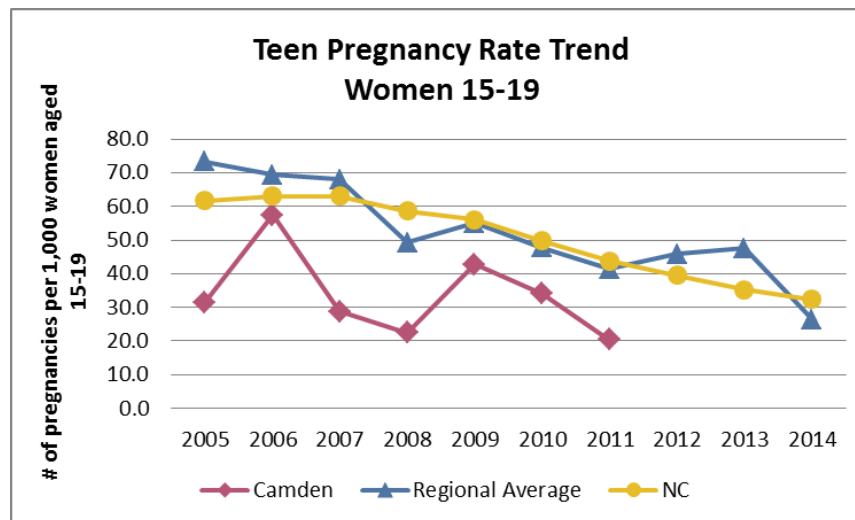
- Total pregnancy rates fluctuate in Camden County on a yearly basis but have demonstrated a slight decline over the period cited and have remained lower than NC and Regional rates throughout that period.
- Total pregnancy rates in the ARHS Region and NC have fallen overall since 2006.
- The 2014 pregnancy rate was 56.9 in Camden County, compared to 66.3 in the Region and **72.1** in NC.



PREGNANCY RATE: WOMEN 15-19

Pregnancies per 1,000 women Age 15-19 (Teens)

- Teen pregnancy rates in Camden County have decreased overall since 2006; they were lower than the state rate from 2005 through 2011.
- In 2011 (the last year in which the SCHS published unstable rates) the teen pregnancy rate was 20.4 in Camden County, compared to 41.5 for the Region and **43.8** for the state.



PREGNANCY RATE: BY RACE/ETHNICITY

- Discussion of racially stratified pregnancy rates is complicated by unstable and suppressed rates as well as changes in the way the SCHS has handled racial identity.
- There are too few stable rates available in comparable racial categories over the periods published to present a meaningful analysis of pregnancy by race in Camden County.



TEEN AND ADOLESCENT PREGNANCIES

- The *number* of teen (women aged 15-19) pregnancies in Camden County was variable between 2003 and 2013. An average of 11 teen pregnancies occurred each year.
- There was 1 pregnancy among Camden County adolescent girls (age 14 and younger) in 2003. There has not been another such pregnancy since then.

ABORTION TREND

- The Camden County abortion rate among women aged 15-44 fluctuates each year and has been unstable since 2011; it increased overall since 2005.
 - In 2011, the Camden County rate was 10.1 compared to 10.2 in the Region and **11.4** in NC.
- Among teenage women the abortion rate fluctuates widely, likely due to unstable rates based on very low numbers, but has increased overall since 2005.
 - In 2011 (the last year for which rates are available) the Camden County rate was **14.6**, compared to 9.7 across the Region and 8.7 for NC.

PREGNANCY RISK FACTORS: SMOKING DURING PREGNANCY

- The percentage of Camden County women who smoked during pregnancy increased from 7.1% in 2011 to 11.2% in 2014 and was higher than the comparable state figure in the most recent period.

Location	Percent of Births to Mothers Who Smoked While Pregnant			
	2011	2012	2013	2014
Camden County	7.1	9.6	9.5	11.2
Regional Average	11.3	10.4	10.6	13.6
Pamlico County	25.8	18.4	17.7	13.2
State of NC	10.9	10.6	10.3	9.8

PREGNANCY RISK FACTORS: INADEQUATE PRENATAL CARE

- For much of the period cited below the percentage of women receiving early prenatal care was lower in Camden County than statewide.
- The percentage of Camden County women receiving prenatal care in the first trimester increased from 47.0% in 2012 to 74.5% in 2014.
- Definitive discussion of prenatal care stratified by race is not possible due to fluctuating and unstable stratified rates.

County	Percent of Pregnancies Receiving Prenatal Care in 1 st Trimester			
	2011	2012	2013	2014
Camden County	60.0	47.0	61.1	74.5
Regional Average	53.3	49.0	55.6	70.5
Pamlico County	69.7	75.5	63.3	63.7
State of NC	71.2	71.3	70.3	68.2

PREGNANCY OUTCOMES:

LOW WEIGHT BIRTHS

- **Low Weight Births (≤ 2500 grams/5.5 lbs.) in 2010-2014**
 - Overall Camden = 8.6% [NC = 9.0% Region = **9.4%**]
 - The rate declined slightly overall since 2001-2005.
 - Highest (unstable) rate is among Other non-Hispanics (22.2%).

- **Very Low Weight Births (≤ 1500 grams/3.3 lbs.) in 2010-2014**
 - Overall Camden = 1.5% [NC = 1.7% Region = **1.8%**]
 - The variable rate has increased overall since 2001-2005.
 - Highest (unstable) rate is among African American non-Hispanics (3.8%).

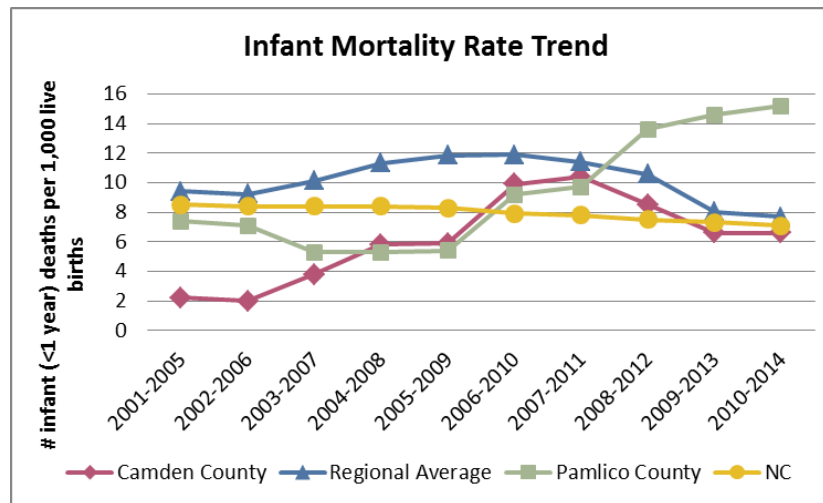
PREGNANCY OUTCOMES: HOSPITAL DISCHARGES FOR NEWBORNS AND NEONATES WITH CONDITIONS ORIGINATING IN THE PERINATAL PERIOD

According to data from the one hospital in the study region seeing more than 20 Camden County inpatients over two years, the number of discharges associated with newborns or neonates with prematurity or some kind of problem originating in the perinatal period totaled 38% of all newborns over the period cited.

Year	Number of Hospital Discharges by DRG (Diagnosis Related Group) Diagnosis					
	Normal Newborns	Extreme Immaturity or Respiratory Distress	Prematurity with Major Problems	Prematurity without Major Problems	Full-Term Neonate with Major Problems	Neonate with Other Significant Problems
2013	40	0	0	9	1	17
2014	38	0	0	1	2	17
Total	78	0	0	10	3	34

PREGNANCY OUTCOMES: INFANT MORTALITY

- All of the Camden County infant mortality rates are unstable, so the trend presented should be interpreted with caution.
- The Camden County infant mortality rate was lower than both the state and the regional rate over much of the period shown but appears to have increased over time.
- The total infant mortality rate in Camden County increased from 2.2 in 2001-2005 to 6.6 in 2010-2014 [when NC = 7.1 and Region = 7.7]
- Note that according to the CDC the 2013 infant mortality rate in NC was the 10th highest in the nation.



PREGNANCY OUTCOMES: INFANT MORTALITY BY RACE

- No stable minority infant mortality rates are available for any racial group in Camden County; no infant deaths have occurred among minority groups in the county since 2006-2010.
- In 2008-2012, the infant mortality rate among white non-Hispanic residents of Camden County was **10.7** compared to 7.6 in the Region and 5.6 in NC.





MORTALITY

***Life Expectancy, Leading Causes of Death,
Hospital Utilization by Cause, Trend Data,
Gender and Racial Disparities***

LIFE EXPECTANCY

Life Expectancy for persons born in 2012-2014

- Among comparators, life expectancy for persons born in 2010-2014 is longest in Camden County for all groups except African Americans.
- Life expectancy has improved over time among all groups presented.

Location	Life Expectancy in Years									
	Person Born in 1990-1992					Person Born in 2012-2014				
	Overall	Male	Female	White	African-American	Overall	Male	Female	White	African-American
Camden County	75.8	71.6	80.5	77.5	71.0	80.3	77.7	83.2	81.2	75.5
<i>Regional Average</i>	<i>73.7</i>	<i>69.8</i>	<i>77.7</i>	<i>75.1</i>	<i>70.3</i>	<i>78.3</i>	<i>75.8</i>	<i>81.0</i>	<i>79.0</i>	<i>76.5</i>
Pamlico County	75.1	71.5	78.7	76.7	70.7	77.5	75.2	80.3	77.2	77.6
State of NC	74.9	71.0	78.7	76.4	69.8	78.3	75.8	80.7	79.1	75.9



LEADING CAUSES OF DEATH: OVERALL

Age-Adjusted Rates (2010-2014)	Camden County No. of Deaths	Camden County Mortality Rate	Camden Rate Difference from NC
1. Heart Disease	95	187.8	+13.2%
2. Total Cancer	89	154.8	-9.9%
3. Chronic Lower Respiratory Diseases	24	46.7	+1.5%
4. Cerebrovascular Disease	19	35.2	-18.1%
5. Pneumonia and Influenza	11	23.0	+30.7%
6. Alzheimer's Disease	10	22.1	-24.3%
7. Suicide	11	21.0	+69.4%
8. Nephritis, Nephrotic Syndrome, and Nephrosis	9	19.6	+15.3%
9. Diabetes Mellitus	10	17.0	-23.1%
10. All Other Unintentional Injuries	7	12.6	-57.4%
11. Septicemia	5	9.6	-26.2%
12. Unintentional Motor Vehicle Injuries	5	9.2	-31.9%
13. Chronic Liver Disease and Cirrhosis	3	4.4	-54.6%
14. Acquired Immune Deficiency Syndrome	0	0.0	na
15. Homicide	0	0.0	na

HOSPITAL ACTIVITY ASSOCIATED WITH LEADING CAUSES OF DEATH (LCD)

- Below is data on *emergency department* discharges from the three hospitals in the study region seeing more than 20 Camden County patients in the ED over the two years cited. The diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death (LCD).
- The largest number of ED discharges in the table below are associated with injuries and poisoning, followed by COPD.

Year	Number of Emergency Department Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Pneumonia /Influenza	Alzheimer's Disease	Diabetes	Injuries/ Poisoning
2013	34	2	66	6	18/26	0	12	747
2014	26	3	75	8	22/11	0	6	715
Total	60	5	141	14	40/37	0	18	1,462

HOSPITAL ACTIVITY ASSOCIATED WITH LEADING CAUSES OF DEATH (LCD)

- Below is data on *inpatient hospitalization* discharges from the one hospital in the study region seeing more than 20 Camden County inpatients over the two years cited. The diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death.
- The largest number of IP discharges in the table below are associated with heart disease, followed by COPD.

Year	Number of Inpatient Hospitalization Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Pneumonia /Influenza	Alzheimer's Disease	Diabetes	Injuries/ Poisoning
2013	81	14	37	20	17/0	0	10	18
2014	73	20	28	14	11/0	0	3	18
Total	154	34	65	34	28/0	0	13	36

LEADING CAUSES OF DEATH: GENDER COMPARISON

Camden County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rank Among Males	Rank Among Females	% Male Rate Difference from Females
1. Heart Disease	1	2	+80.2%
2. Total Cancer	2	1	+19.8%
3. Chronic Lower Respiratory Diseases	n/a	n/a	n/a
4. Cerebrovascular Disease	n/a	n/a	n/a
5. Pneumonia and Influenza	n/a	n/a	n/a
6. Alzheimer's Disease	n/a	n/a	n/a
7. Suicide	n/a	n/a	n/a
8. Nephritis, Nephrotic Syndrome, and Nephrosis	n/a	n/a	n/a
9. Diabetes Mellitus	n/a	n/a	n/a
10. All Other Unintentional Injuries	n/a	n/a	n/a
11. Septicemia	n/a	n/a	n/a
12. Unintentional Motor Vehicle Injuries	n/a	n/a	n/a
13. Chronic Liver Disease and Cirrhosis	n/a	n/a	n/a
14. Acquired Immune Deficiency Syndrome	n/a	n/a	n/a
15. Homicide	n/a	n/a	n/a

LEADING CAUSES OF DEATH: RACE COMPARISON

Camden County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rank Among White Non-Hispanic	Rank Among Black non- Hispanic	% Blacks Rate Difference from Whites
1. Heart Disease	1	1	+2x
2. Total Cancer	2	n/a	n/a
3. Chronic Lower Respiratory Diseases	3	n/a	n/a
4. Cerebrovascular Disease	n/a	n/a	n/a
5. Pneumonia and Influenza	n/a	n/a	n/a
6. Alzheimer's Disease	n/a	n/a	n/a
7. Suicide	n/a	n/a	n/a
8. Nephritis, Nephrotic Syndrome, and Nephrosis	n/a	n/a	n/a
9. Diabetes Mellitus	n/a	n/a	n/a
10. All Other Unintentional Injuries	n/a	n/a	n/a
11. Septicemia	n/a	n/a	n/a
12. Unintentional Motor Vehicle Injuries	n/a	n/a	n/a
13. Chronic Liver Disease and Cirrhosis	n/a	n/a	n/a
14. Acquired Immune Deficiency Syndrome	n/a	n/a	n/a
15. Homicide	n/a	n/a	n/a

LEADING CAUSES OF DEATH – BY AGE

Age Group	Rank	Cause of Death in Camden County (2010-2014)
00-19	1	Congenital anomalies Motor vehicle injuries Suicide
	2	Anemias Other Unintentional Injuries Complications of medical and surgical care SIDS
20-39	1	Cancer (all sites)
	2	Suicide
40-64	1	Cancer (all sites)
	2	Diseases of the heart
	3	Suicide
65-84	1	Diseases of the heart
	2	Cancer (all sites)
	3	Chronic lower respiratory diseases
85+	1	Diseases of the heart
	2	Cancer (all sites)
	3	Nephritis, nephrotic syndrome & nephrosis



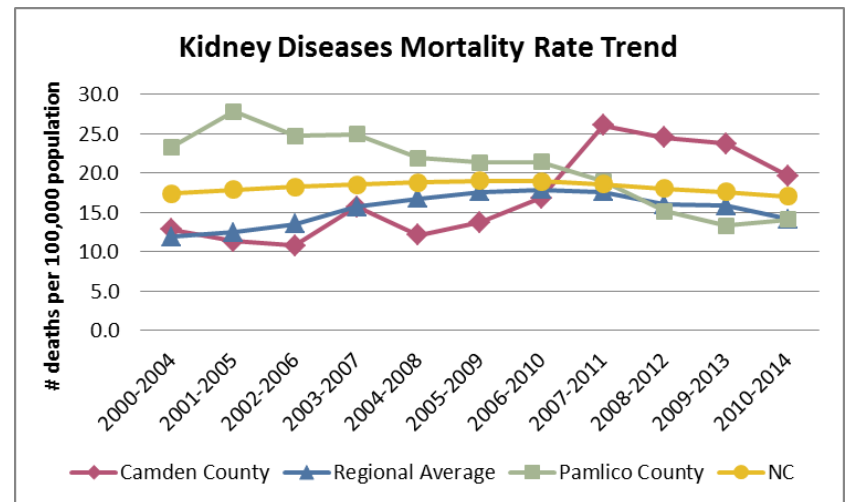
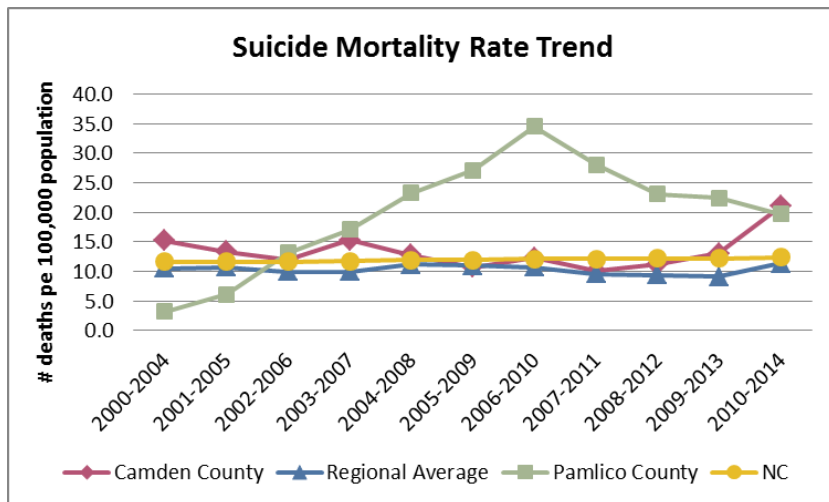
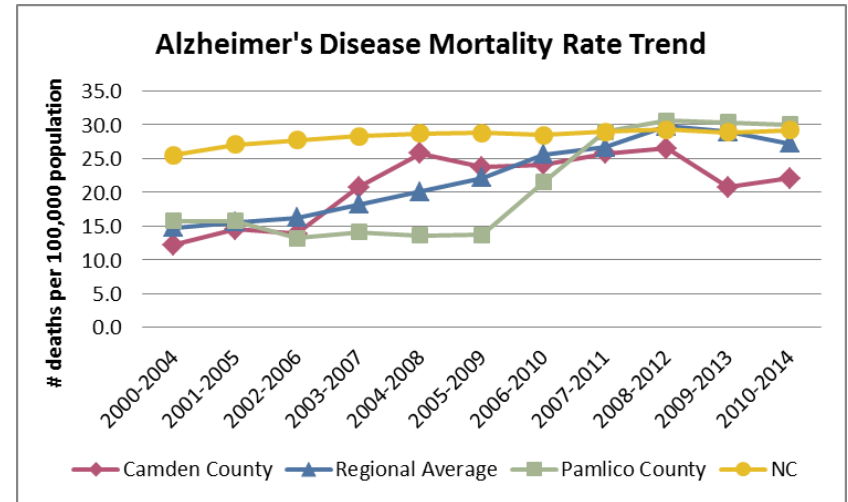
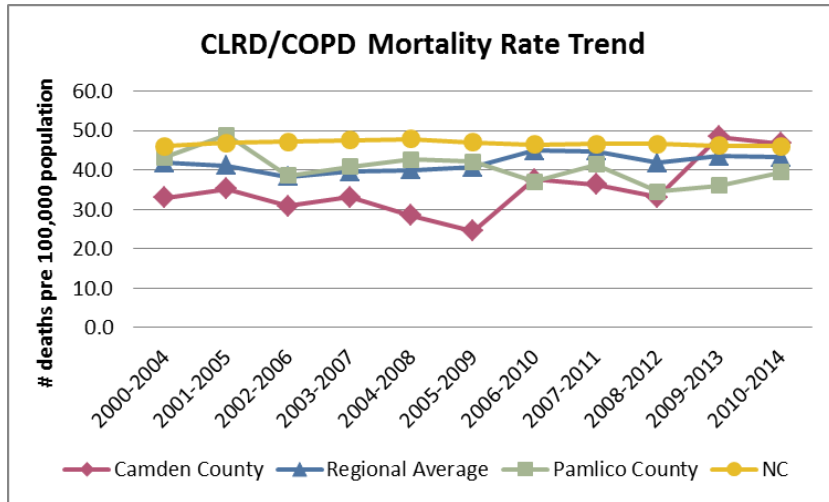
OVERALL SHORT-TERM MORTALITY RATE TRENDS: 2007-2011 AND 2010-2014

Camden County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rate in 2007-2011	Rate in 2010-2014	Percent Difference
1. Heart Disease	160.3	187.8	+17.2%
2. Total Cancer	160.2	143.8	-10.2%
3. Chronic Lower Respiratory Diseases	36.3	46.7	+28.7%
4. Cerebrovascular Disease	47.1	35.2	-25.3%
5. Pneumonia and Influenza	20.4	23.0	+12.7%
6. Alzheimer's Disease	25.8	22.1	-14.3%
7. Suicide	10.0	21.0	+110.0%
8. Nephritis, Nephrotic Syndrome, and Nephrosis	26.0	19.6	-24.6%
9. Diabetes Mellitus	23.0	17.0	-26.1%
10. All Other Unintentional Injuries	29.5	12.6	-57.3%
11. Septicemia	13.2	9.6	-27.3%
12. Unintentional Motor Vehicle Injuries	15.9	9.2	-42.1%
13. Chronic Liver Disease and Cirrhosis	5.2	4.4	-15.4%
14. Acquired Immune Deficiency Syndrome	n/a	0.0	n/a
15. Homicide	n/a	0.0	n/a

OVERALL LONG-TERM MORTALITY RATE TRENDS: 2000-2004 TO 2010-2014

Camden County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Overall Trend Direction (determined by Excel trendline)
1. Heart Disease	▼
2. Total Cancer	▼
3. Chronic Lower Respiratory Disease	▲
4. Cerebrovascular Disease	▼
5. Pneumonia and Influenza	▲
6. Alzheimer's Disease	▲
7. Suicide	▲
8. Nephritis, Nephrotic Syndrome, and Nephrosis	▲
9. Diabetes Mellitus	▲
10. All Other Unintentional Injuries	Little change
11. Septicemia	▼
12. Unintentional Motor Vehicle Injuries	▼
13. Chronic Liver Disease and Cirrhosis	▲
14. Acquired Immune Deficiency Syndrome	▼
15. Homicide	▼

MORTALITY RATE TRENDS OF CONCERN: INCREASING COUNTY RATES



TRENDS IN RACIAL DISPARITIES IN HOSPITAL DISCHARGES FOR COPD

- Because the CLRD mortality rate in Camden County has increased since 2005-2009 and currently is higher than the comparable NC rate, it may be illustrative to examine hospital discharges for COPD, especially bronchitis and emphysema (ICD-9 Codes 490-492xx). The data are from Sentara Albemarle Medical Center.
- The total number of ED discharges under these code for whites far surpassed the number for blacks. The total number of IP discharges for blacks represented 32% of all IP discharges under these codes, while blacks compose 14% of the overall Camden County population.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	1	8	10	6	12	18
2014	0	9	9	6	14	20
Total	1	17	19	12	26	38

TRENDS IN GENDER DISPARITIES IN HOSPITAL DISCHARGES FOR COPD

- These data are for ICD-9 Codes 490-492xx. The data are from Sentara Albemarle Medical Center.
- The numbers of ED and IP discharges under this code for females surpassed the numbers of ED and IP discharges for males.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Female	Male	Total	Female	Male	Total
2013	9	1	10	10	8	18
2014	8	1	9	11	9	20
Total	17	2	19	21	17	38

HOSPITAL DISCHARGES ASSOCIATED WITH SUICIDE IDEATION

- Because the suicide mortality rate in Camden County appears to have risen lately, it may be illustrative to examine hospital discharges associated with suicide ideation (ICD-9 Code V62.84). The ED data are from Vidant Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center; the IP data are from Sentara Albemarle Medical Center only. Note that the numbers in the table are too small to justify gender or racial/ethnic stratification.

Fiscal Year	No. ED Discharges	No. IP Discharges
2013	2	0
2014	7	0
Total	9	0

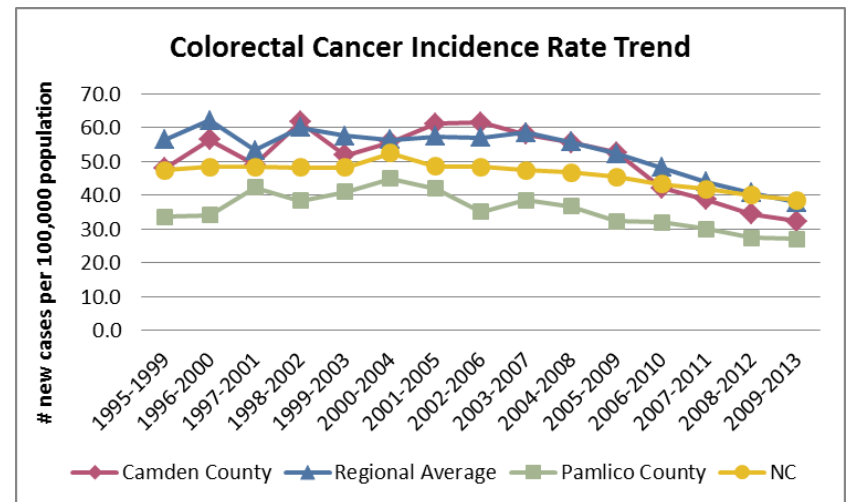
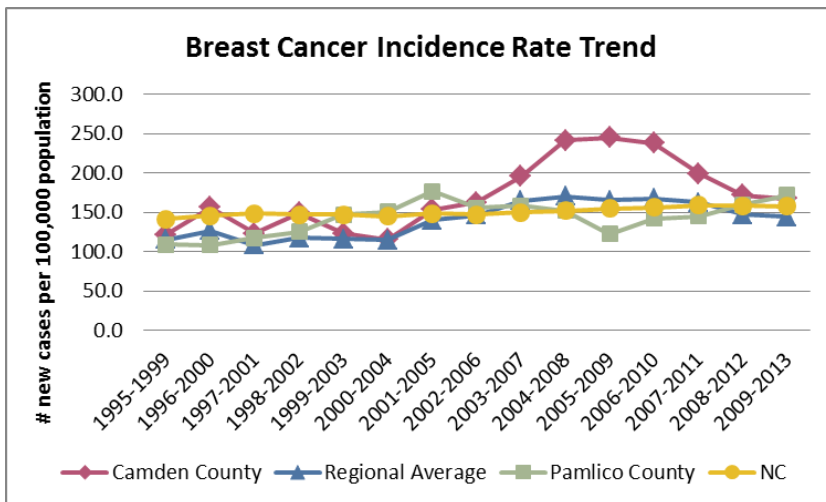
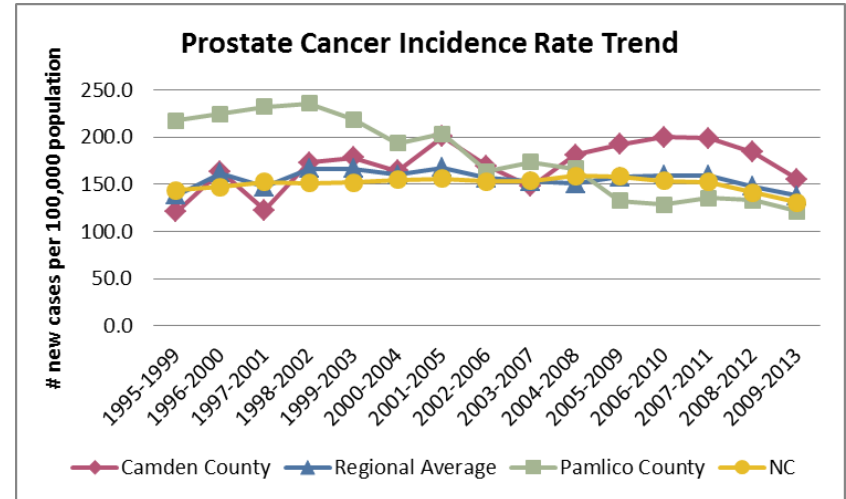
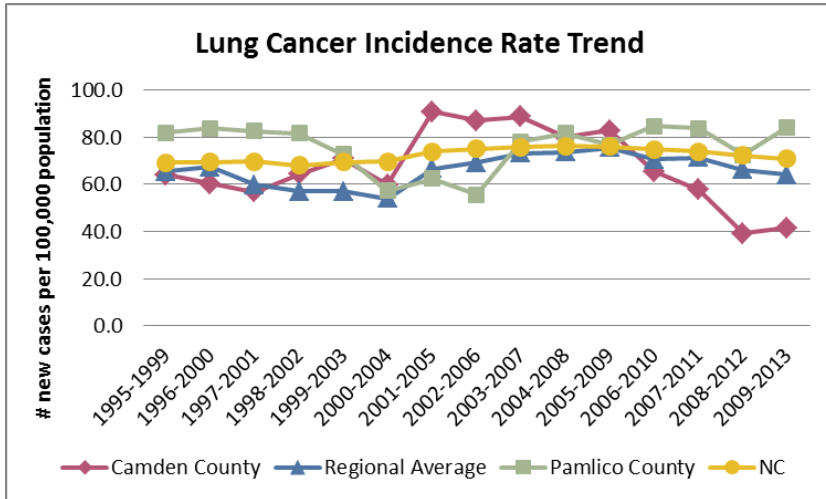
SITE-SPECIFIC CANCER TRENDS: INCIDENCE AND MORTALITY RATES

Incidence: 1995-1999 to 2009-2013

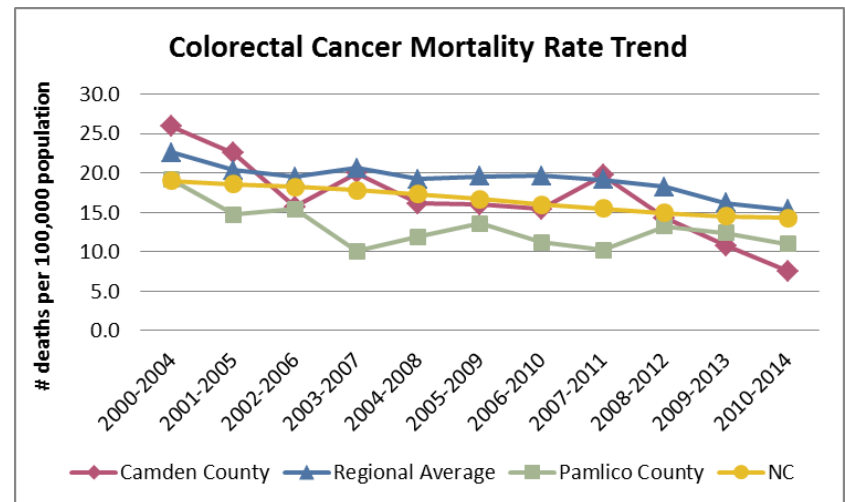
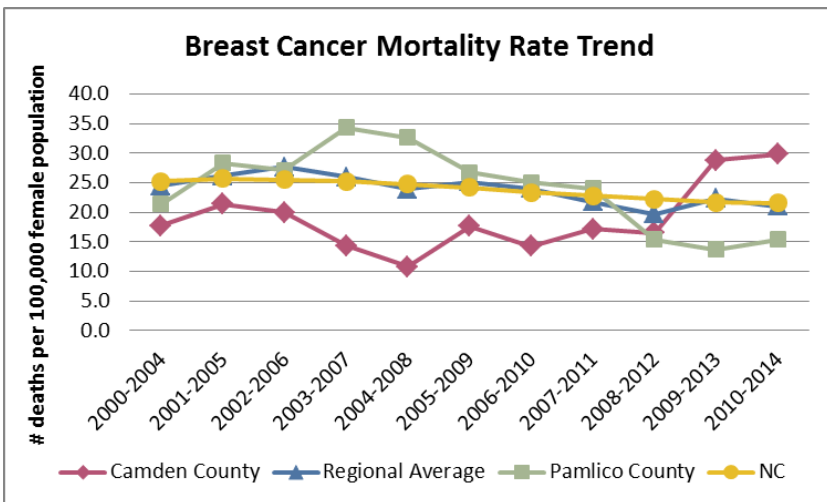
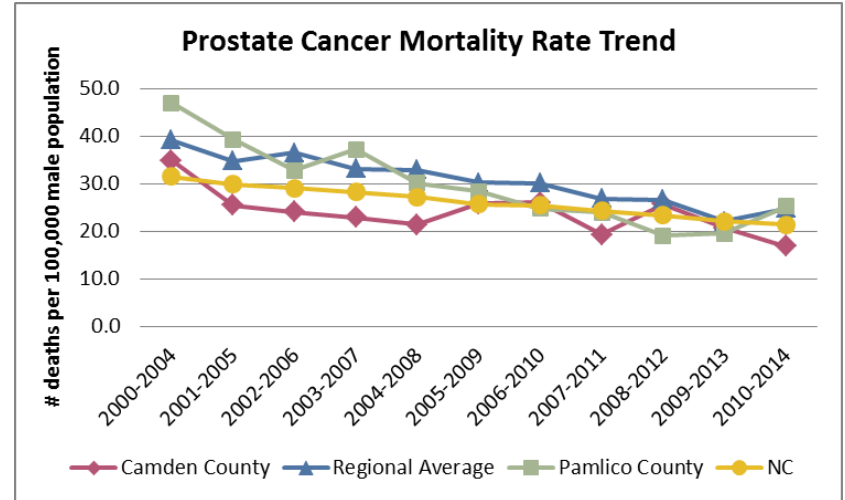
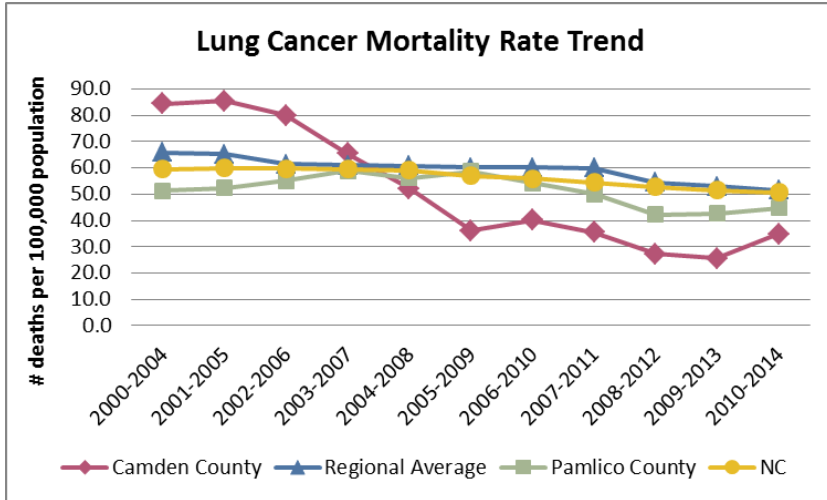
Mortality: 2000-2004 to 2010-2014

Cancer Site	Parameter	Overall Trend Direction
Total Cancer	Incidence	▲
	Mortality	▼
Lung Cancer	Incidence	▼
	Mortality	▼
Prostate Cancer	Incidence	▲
	Mortality	▼
Breast Cancer	Incidence	▲
	Mortality	▲
Colorectal Cancer	Incidence	▼
	Mortality	▼

SITE-SPECIFIC CANCER INCIDENCE RATES



SITE-SPECIFIC CANCER MORTALITY RATES





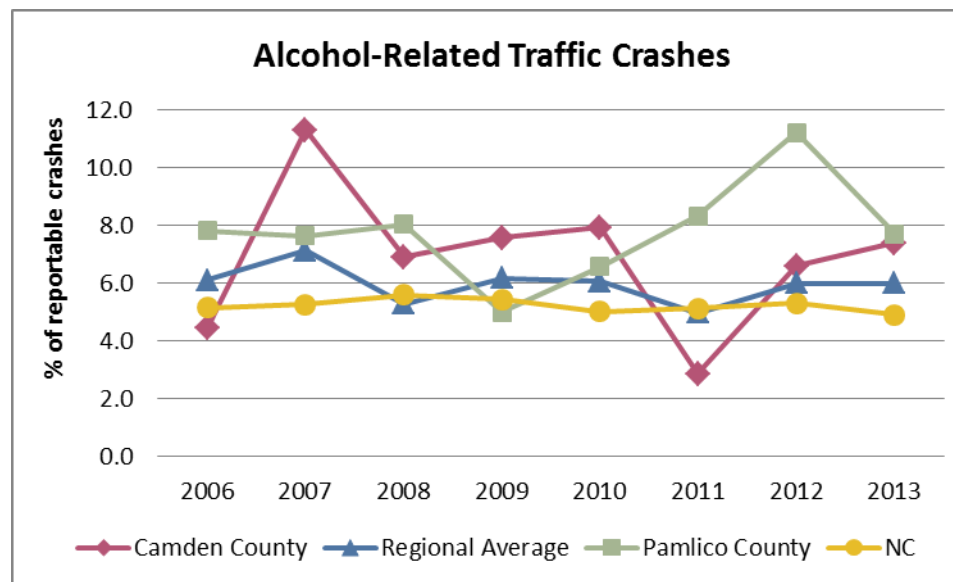
MORBIDITY

***Sexually Transmitted Infections, Diabetes,
Obesity, Mental Health***

VEHICULAR INJURY

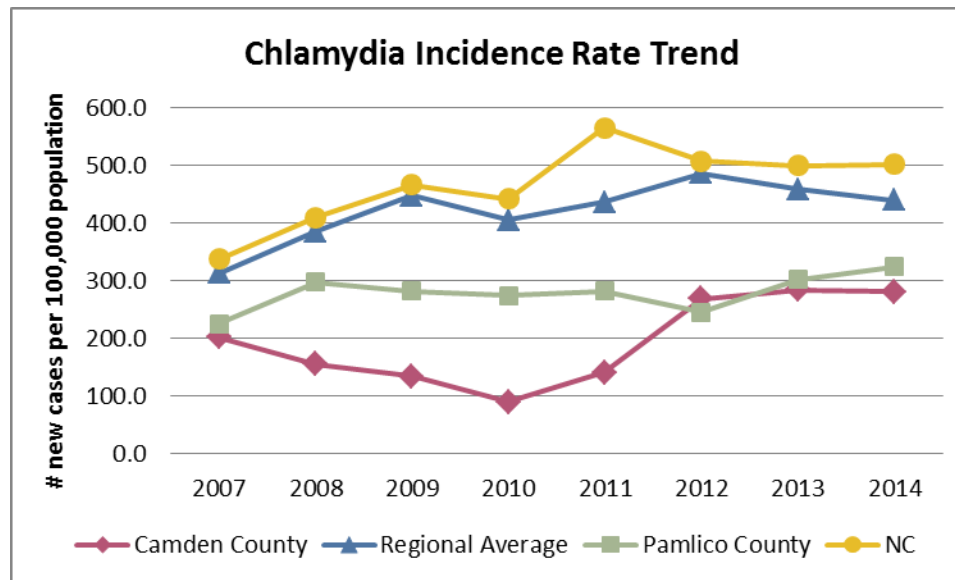
ALCOHOL-RELATED MOTOR VEHICLE CRASHES

- According to the NC Highway Safety Research Center, over the period from 2006 through 2013 an annual average of **6.9%** of all traffic crashes in Camden County were alcohol-related. Statewide the comparable figure was 5.2% and it was 6.0% across the ARHS Region.



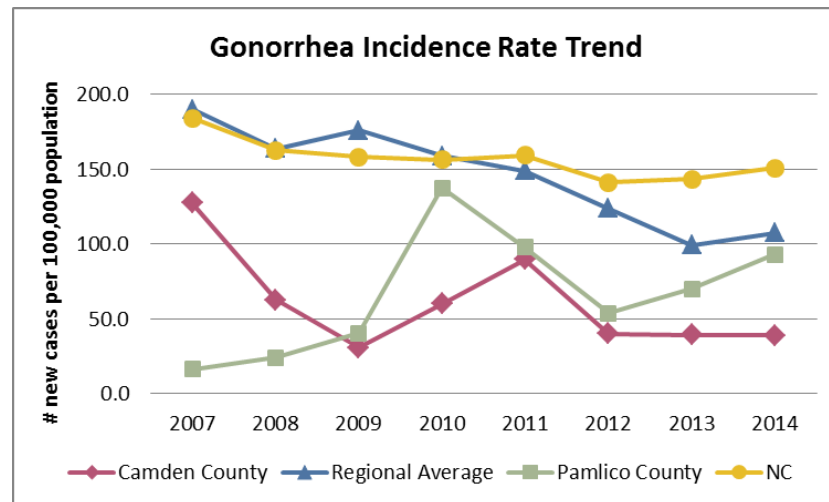
SEXUALLY TRANSMITTED INFECTIONS: CHLAMYDIA

- The chlamydia infection rate in Camden County has increased recently after a period of decrease, though it remains much lower than the state and Regional rates.
- In 2014, there were 29 new cases of chlamydia in Camden County, calculating to a rate of 280.7 compared to **501.9** statewide.



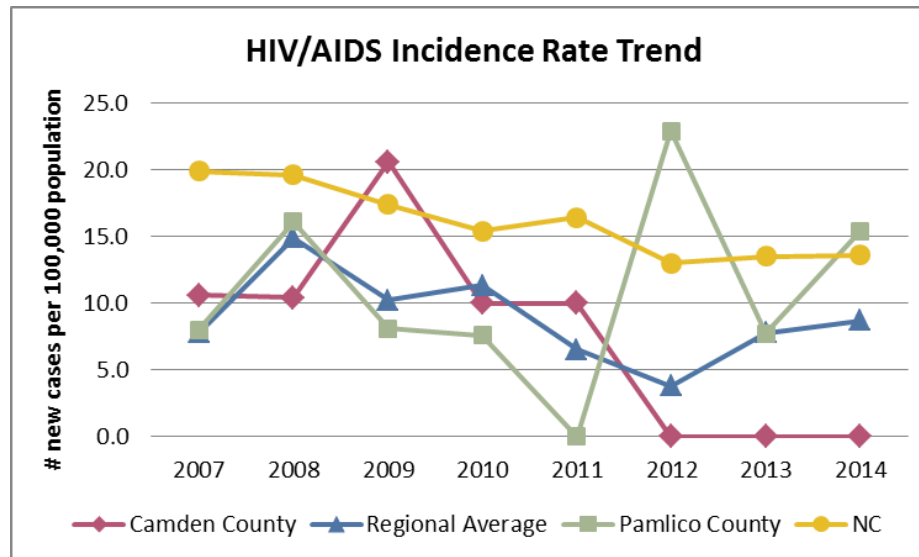
SEXUALLY TRANSMITTED INFECTIONS: GONORRHEA

- The gonorrhea infection rate in Camden County had decreased since 2011 and was lower than the state and Regional rates for the entire period cited.
- In 2014, there were 4 new cases of gonorrhea in Camden County, calculating to a rate of 38.7, compared to the state rate of **150.4**.
- The gonorrhea rate in the county was highest among African Americans in 2006-2010 (the last year for which stratified data is available): **222.9** compared to 62.5 overall.



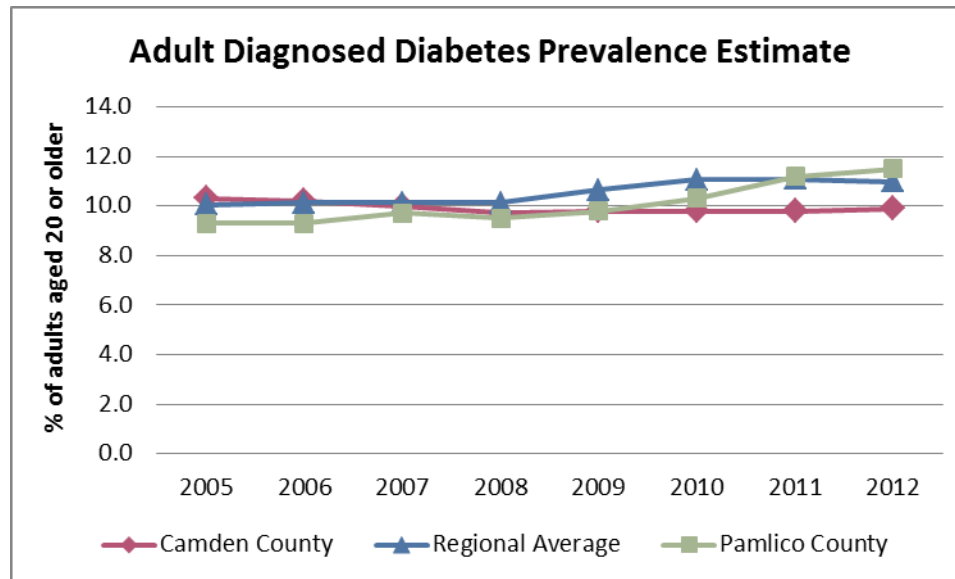
SEXUALLY TRANSMITTED INFECTIONS: HIV/AIDS

- The numbers of HIV cases in Camden County are too low to yield stable rates for newly diagnosed HIV infections. There was a total of 6 newly diagnosed cases over the entire period presented.
- At the end of 2014, 12 people in Camden County were living with HIV.



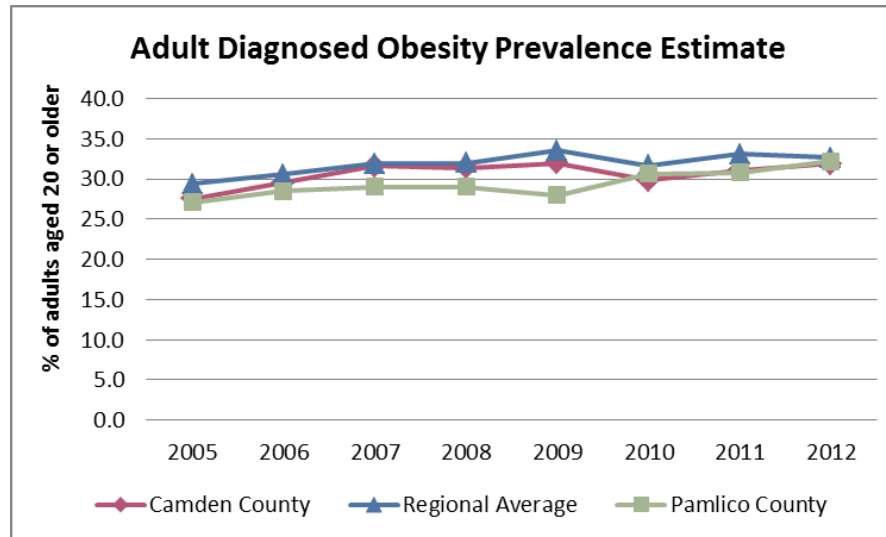
ADULT DIABETES

- The annual estimated prevalence of diabetes among Camden County adults has changed little over time and was lower than the Region for much of the period shown. (Comparable state data is not available).
- Over the 8-year period presented, the average annual estimated prevalence of adult diabetes in Camden County was 9.9%, compared to **10.5%** Region-wide.



ADULT OBESITY

- The average annual estimated prevalence of adult obesity in Camden County was 30.6% in the period from 2005 through 2012, compared to **31.8%** in the Region. (Comparable state data is not available).
- The Camden County the annual estimated prevalence of adult obesity was lower than the regional figure for most of the period presented and increased slightly overall.



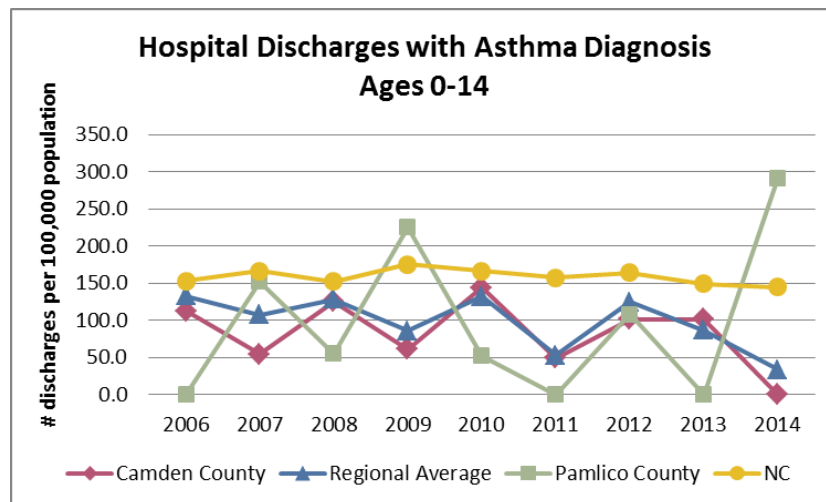
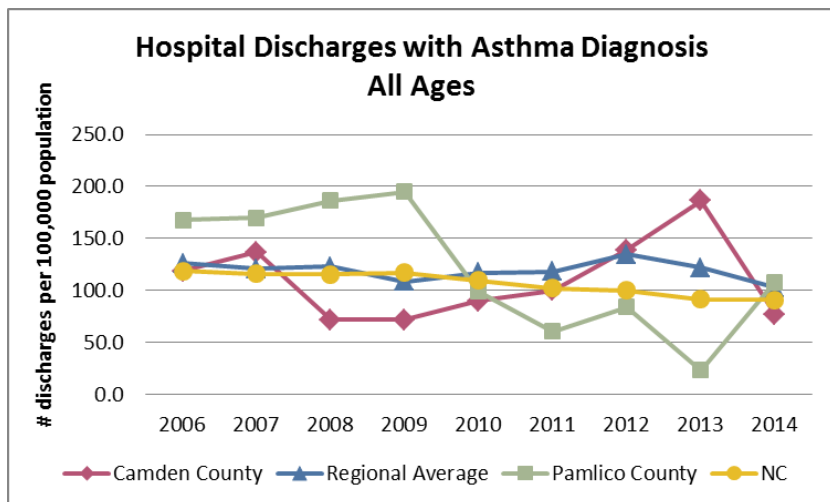
CHILD OBESITY (AGES 2-4)

- There is limited data on the prevalence of childhood obesity in Camden County. NC NPASS data is cataloged for three age groups (2-4, 5-11, 12-18) and covers only children seen in health department WIC and child health clinics and certain other facilities and programs. The most recent data available is for 2012.
- According to this NC-NPASS data, in Camden County in 2012
 - 11.5% of the participating children age 2-4 were “overweight” and 16.9% were “obese” (total = 28.4%)
 - For this period NC = 14.9% overweight and 14.5% obese (total = **29.4%**)



ASTHMA

- The Camden County rate of hospital discharges with a primary diagnoses of asthma increased each year between 2008 and 2013 but had dropped below the state rate in 2014 (77.4 vs. 90.9).
- Among children aged 0-14, the hospital discharge rate is highly variable due to small numbers. In 2014 there were no IP hospital discharges due to asthma.



TRENDS AND RACIAL DISPARITIES IN HOSPITAL DISCHARGES FOR ASTHMA

- Because, according to NC SCHS, the hospital discharge rate for asthma in Camden County was increasing for a number of years, it may be illustrative to examine local hospital discharge data for asthma (ICD-9 Code 493xx). The ED data and IP data both are from Sentara Albemarle Medical Center.
- The total number of ED discharges under this code for blacks was 1.4 times the comparable figure for whites.
- The total number of IP discharges under this code for blacks was more than 3 times the comparable figure for whites.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	31	23	55	14	5	19
2014	37	26	65	6	1	8
Total	68	49	120	20	6	27

TRENDS AND AGE DISPARITIES IN HOSPITAL DISCHARGES FOR ASTHMA

- Because, according to NC SCHS, the hospital discharge rate for asthma among children is often higher than the comparable state rate for adults, it may be illustrative to examine hospital discharges for asthma (ICD-9 Code 493xx) stratified by age. The ED data and IP data both are from Sentara Albemarle Medical Center and are specific for residents of Camden County.
- The percentage of ED discharges for children age 14 and younger totaled 32% of all ED discharges under this code; the comparable percentage for *all* remaining age groups was 68%.
- There were only two IP discharges among children age 14 and younger over the period cited.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Age 0-14	Age > 14	Total	Age 0-14	Age > 14	Total
2013	23	32	55	2	17	19
2014	15	50	65	0	8	8
Total	38	82	120	2	25	27

MENTAL HEALTH

- The number of Camden County residents served by the **Area Mental Health Program** has remained relatively steady between 2005 and 2014, fluctuating between a low of 198 in 2009 and a high of 241 in 2008.
- Over the same 10-year period the number of Camden County residents served by **State Psychiatric Hospitals** *decreased* from 13 in 2005 to 0 in 2012 through 2014.
- During the same 10-year period, a total of **41** Camden County residents were served by **NC State Alcohol and Drug Abuse Treatment Centers (ADATCs)**, with the number varying from year to year. A high of 11 were served in 2008; 0 were served in 2013.

TRENDS IN HOSPITAL DISCHARGES FOR MENTAL HEALTH DIAGNOSES

According to data from the ARHS Region hospitals seeing more than 20 Camden County patients in the two years cited:

- ED discharges related to all Mental, Behavioral and Neurological Disorder diagnoses compose an average of 2.3% of *all* ED discharges over the period cited; IP discharges for mental health diagnoses compose an average of 0.6% of all IP discharges.
- Note that these diagnoses (ICD-9 290-319xx) include psychotic and non-psychotic disorders, and conditions associated with alcohol and drug abuse.

Year	No. Emergency Department Discharges	No. In-Patient Hospitalization Discharges
2013	70 (2.0% of all ED discharges)	5 (1.0% of all IP discharges)
2014	85 (2.5%)	1 (0.2%)

CAMDEN COUNTY HEALTH PROBLEM

“WATCH LIST”

- **Suicide** – the county mortality rate is currently higher than NC rate, and has risen significantly since the last CHA.
- **Heart disease** – county mortality rate is higher than NC rate and heart disease is disproportionately fatal among males and African Americans; the county mortality rate has increased since the last CHA.
- **Lung diseases**
 - **CLRD** – county mortality rate has increased over time; COPD diagnoses account for a large number of ED discharges
 - **Asthma** – accounts for a high number of ED discharges; frequency of hospital visits is disproportionately high among African Americans
 - **Pneumonia and influenza** – long-term mortality rate demonstrates an overall increase

CAMDEN COUNTY HEALTH PROBLEM “WATCH LIST”

- **Diabetes** – although diabetes prevalence in Camden County has been stable, the long-term mortality rate trend demonstrates an overall increase.
- **Cancer** – While the total cancer mortality rate in Camden County has decreased since the last CHA, and the long-term mortality rate trend demonstrates a decrease, some site-specific cancers remain problems:
 - Long-term incidence trend for total cancer and prostate and breast cancers demonstrate an increase
 - Long-term mortality rate for breast cancer demonstrates an increase
- **Overweight and obesity** – Prevalence is high among both children and adults.

POPULATIONS “AT RISK” FOR POOR HEALTH OUTCOMES IN CAMDEN COUNTY

- The uninsured and under-insured; people without a medical home
- Persons living in poverty
- Minorities
- Males, who generally have poorer health outcomes than female
- Persons with poor access to transportation, because travel outside the county may be necessary to reach certain healthcare providers
- The elderly, because healthcare services may not be sufficient to accommodate their needs as their population grows
- Newborns, many of whom are born with medical problems; infant mortality rate in the county has risen over time



PRIMARY DATA SUMMARY

**Small-Group Discussions
Conducted in 10 locations in 2015
82 participants**

METHODOLOGY

- ARHS partnered with Sentara Albemarle Medical Center to collect primary data by conducting ten small-group discussions throughout Camden County. Discussions included listening sessions and focus groups were led by trained moderators to learn about the community's definitions and understandings of health, illness and services that affect health attitudes, beliefs and behaviors.
- The Center for Survey Research at East Carolina University provided moderator trainings and an accompanying interview guide to ensure consistent and effective data collection methods.
- Discussion questions were researched, selected and approved by the CHA Lead Team. Discussions were recorded and lasted around one hour. Results were then transcribed and analyzed. **A total of 82 Camden County residents participated in the small-group discussions.**

SMALL GROUP DISCUSSIONS

Camden County Small-Group Discussions	Date	Participants
Camden Senior Center	1/27/15	1 Male; 5 Females
Sawyer's Creek Baptist Church	3/13/15	1 Male; 10 Females
Camden Senior Center	4/30/15	2 Males; 6 Females
Camden Open Door Church	5/26/15	1 Male; 10 Females
Ebenezer Baptist Church	6/17/15	2 Males; 6 Females
South Mills VFD	7/21/15	7 Males; 1 Female
Sleepy Hollow Neighborhood	9/09/15	2 Males; 7 Females
Camden Library	10/19/15	6 Females
Grandy Primary School Media Center	10/26/15	2 Males; 7 Females
Camden Schools	11/03/15	3 Males; 5 Females

PARTICIPANT DEMOGRAPHICS

- 22% Black (compared to 14% in the county)
- 77% white (compared to 82% in the county)
- 0 Hispanic participants (compared to 2.4% in the county)
- 25% male (compared to 50% in the county)
- 0% unemployed (compared to 5.9% unemployment rate)
- 54% with bachelor's degree or higher (compared to 19% in the county)
- 1% currently without health insurance (compared to 9% in the county)
- 36% retired
- 56% earning more than \$50,000 household income

Q1: TELL US WHAT YOU THINK IS THE BEST THING ABOUT LIVING IN THIS COMMUNITY.

- The safe environment and sense of community
- Community members are accountable and dependable
- The rural landscape, waterways, hunting and fishing
- The rural location is close to other desirable areas (beaches, larger cities)
- Strong church presence, good school system, laid back environment
- People relocate to Camden County from urban areas because of the small town atmosphere

Q2: WHAT DO PEOPLE IN THIS COMMUNITY DO TO STAY HEALTHY?

- Physical activity and organized recreational activities
- Run, bike, hike, walk, swim, water ski, kayak, garden, yoga
- Zumba classes, youth athletics
- Nutrition classes at Cooperative Extension
- Fresh produce from farmers markets and home gardens
- Many locals follow healthy eating practices and utilize available health resources
- School system promotes exercise in PE classes and sponsors weight loss programs

Q3: IN YOUR OPINION, WHAT ARE THE SERIOUS HEALTH-RELATED PROBLEMS IN YOUR COMMUNITY?

Physical	Social	Mental
Cancer	Poverty	Stress
Diabetes	Availability of doctors	Depression
Heart Disease	Lack of sidewalks	Substance abuse
Obesity		Addiction
High Cholesterol		Alzheimer's disease
Hypertension		Suicide
Asthma		
Joint Pain		
Body Pain		
Arthritis		

Q4: WHAT KEEPS PEOPLE IN YOUR COMMUNITY FROM BEING HEALTHY?

- Lack of access to medical care
 - Not enough primary care providers
 - Affordability of health insurance
 - Long wait periods for appointments
- Lack of access to healthy foods
 - Unhealthy foods are cheaper
 - Not enough time to prepare meals at home
 - Local food traditions are unhealthy
- Other lifestyle choices
 - Substance abuse
 - Technology overindulgence

Q5: WHAT COULD BE DONE TO SOLVE THESE PROBLEMS?

- Many proposed solutions focused on education
 - Community not aware of some resources: food banks, public transportation
 - Encourage home gardens
- School system could provide healthier lunches and more health education
- Healthcare providers could strengthen relationships with community
 - Address stigma associated with seeking healthcare treatment
 - Build trust and comfort
- Need more providers, especially dentists



Q6: HAVE YOU OR SOMEONE CLOSE TO YOU EVER EXPERIENCED ANY CHALLENGES IN TRYING TO GET HEALTHCARE SERVICES? IF SO, WHAT HAPPENED?

- Long wait times
 - In ER, doctors offices, urgent care centers
 - EMS slow to respond and have limited hours
- Limited access to doctors
 - Too few providers
 - Providers not accepting new patients
 - Difficulty contacting providers (e.g. for Rx refills)
 - Difficulty establishing PCP and accessing specialists in the county
 - Limited local availability requires travel out of the county
- High costs, esp. for parents, the elderly, and the uninsured
- Lack of insurance limits access to dental and vision care
- Lack of resources for children with special needs and elderly who need assisted living

Q7: ARE THERE ANY HOME REMEDIES YOU USE IN PLACE OF TRADITIONAL HEALTHCARE AND/OR MEDICINE?

Home Remedy	Targeted Ailment
Whiskey	Coughs
Cloves	Toothache
Honey	Miscellaneous
Herbal Teas	Miscellaneous
Baking soda and salt water	Eczema, Sore throat
Kerosene	Congestion
Vick's VapoRub	Congestion, toe fungus
Deodorant	Bug bites, itching
Ammonia	Bug bites, stings
Nail polish	Red bugs
Bengay	Congestion
Red onion	Sore throat, ear infections
Essential Oils	Miscellaneous
Urine	Ear problems
Peroxide	Miscellaneous
Garlic	Blood pressure, foot fungus
Sugar	Hiccups
Milk and bread	Skin infections
Rubbing Alcohol	Fever
Tobacco	Bee stings

Q8: WHAT ARE THE STRENGTHS RELATED TO HEALTH IN YOUR COMMUNITY?

- Health-related programming in and out of county
 - Health education programs by health department
 - Mobile dental units
 - Walking programs supported by local employers
- Country atmosphere
 - Fresh air, very little pollution
 - Outdoor exercise opportunities (boating, walking, biking, yard work)
 - People feel safe
- The people
 - Health-related support from school nurses and teachers
 - People encourage each other
- Availability of healthy food options and some healthcare services
 - Home gardens
 - Limited fast food options
 - Vaccinations and asthma care available

Q9: CANCER AND HEART DISEASE ARE THE LEADING CAUSES OF DEATH IN YOUR COUNTY. IN YOUR OPINION, WHAT MAKES THESE THE LEADING CAUSES OF DEATH IN YOUR COUNTY?

- Unhealthy behaviors and habits
 - Smoking, drinking, unhealthy diet
 - Irregular doctor visits
 - Lack of exercise
 - Lack of self-care leads to stress
- Lack of information and resources
 - People don't know how to be healthy or access affordable healthcare services
 - Limited doctors and slow response time
- Use of harmful substances in food and farming
 - Processed foods full of hormones and preservatives
 - Local water contaminated with pesticides and chemicals from farms
 - Farming community exposed to harmful substances

Q10: HOW DOES LIVING IN A RURAL AREA AFFECT HEALTH?

○ Benefits:

- locally grown foods
- less pollution
- slower paced lifestyle good for mental health

○ Concerns:

- limited healthcare resources
- lack of transportation
- poverty



2016

Camden County
Primary Data Report



CAMDEN
COUNTY
new energy. new vision.

2016 CHA PRIMARY DATA COLLECTION PROCESS

Process Overview

ARHS partnered with Sentara Albemarle Medical Center to collect primary data for the 2016 CHA process for Camden County. Data that are collected firsthand are known as primary data. For past CHA processes, surveys were conducted to collect primary data. However, the CHA Lead Team elected to collect primary data by conducting ten small-group discussions throughout Camden County for the 2016 CHA. Small-group discussions including listening sessions and focus groups were led by trained moderators to learn more about the community's definitions and understandings of health, illness, and services that affect health attitudes, beliefs, and behaviors. The CHA Lead Team collected data directly from county residents to better understand their health status, needs, and county resources. Data was collected from a wide variety of county residents to assure that the data represent all parts of the county population.

ARHS contracted with the Center for Survey Research at East Carolina University to provide two moderator trainings, and to conduct, transcribe, and analyze a portion of the discussions. The training sessions were conducted using a curriculum developed and approved by the CHA Lead Team. The training sessions and accompanying interview guide were provided to ensure moderators and assistant moderators used effective and consistent data collection methods. The CHA Lead Team assigned responsibility for completing discussions to each partnering agency according to their geographical area of service. Each partner designated staff to facilitate each discussion. Partners were also responsible for ensuring that their discussions were conducted and transcribed within established timelines. A complete list of team members from the Center for Survey Research is presented below.

Mandee F. Lancaster, MA
Randy Knebel

Justin M. Raines, MA
Tiffany Pires

Methods

The CHA Lead Team met in October 2014 for a Road Mapping Session led by Leah Mayo Acheson, MPH, and trained as a Strategic Planning Facilitator to (a) identify groups and organizations to participate in the discussions, (b) identify suitable locations for the discussions, and (c) set deadlines for the data collection process. Road Mapping Sessions are strategic, outcome-focused stakeholder meetings and provide a month-to-month agenda, basis for meeting planning, calendar for all partners, and helps maintain focus and pace.

A formal letter of invitation was prepared and distributed via e-mail and led by Healthy Carolinians Coordinators to participate in a discussion. Demographic characteristics of participants were considered to ensure that results portrayed an accurate representation of Camden County as a whole.

Discussion questions were researched and selected by the CHA Lead and approved by the CHA Lead Team. After the questions were established, ten small-group discussions with community members were scheduled at various locations throughout Camden County (see Table 1). At least two moderators facilitated each session by asking the predetermined series of questions (see Appendix A). Discussions were recorded and lasted approximately one hour. Results were then transcribed and analyzed.

Table 1. Small-Group Discussion Summary Table

Camden County Small-Group Discussions	Date	Participants
Camden Senior Center	1/27/15	1 Male; 5 Females
Sawyer's Creek Baptist Church	3/13/15	1 Male; 10 Females
Camden Senior Center	4/30/15	2 Males; 6 Females
Camden Open Door Church	5/26/15	1 Male; 10 Females
Ebenezer Baptist Church	6/17/15	2 Males; 6 Females
South Mills VFD	7/21/15	7 Males; 1 Female
Sleepy Hollow Neighborhood	9/09/15	2 Males; 7 Females
Camden Library	10/19/15	6 Females
Grandy Primary School Media Center	10/26/15	2 Males; 7 Females
Camden Schools	11/03/15	3 Males; 5 Females

Primary Data Demographics and Results

Demographics

Discussion participants completed a demographic form at the beginning of each session. As shown in Table 2, the majority of participants were female (75 percent), White (77 percent), and married (61 percent). Furthermore, the majority of participants had attained at least a college degree (61 percent).

Table 2. Camden County Demographics

Race/Ethnicity	N	Percent
Asian	0	0
Black	18	22
Hispanic	0	0
Native American	1	1
Other	0	0
White	64	77

Gender/Sex	N	Percent
Male	21	25
Female	63	75

Marital Status	N	Percent
Divorced	5	6
Married	50	61
Never Married	14	17
No Response	0	0
Other	0	0
Separated	2	3
Widowed	11	13

Education	N	Percent
< 9 th Grade	0	0
High School – No Diploma	4	6
High School – Diploma	18	22
College – No Degree	9	11
Associate Degree	6	7
Bachelor’s Degree	26	32
Graduate or Professional Degree	18	22
No Response or Other	0	0

Most participants reported that they work full-time (60 percent) or are retired (36 percent; see Table 3). Moreover, annual household income was evenly distributed, with over half of participants reporting an annual household income of \$50,000 or more (56 percent). Additionally, nearly all participants reported that they currently possess health insurance (99 percent) and have not gone without insurance in the past 12 months (96 percent). Finally, nearly all participants reported that they have access to the internet (95 percent).

Table 3. Camden County Demographics

Employment Status	N	Percent
Disabled; Unable to Work	0	0
Full-Time	50	60
Homemaker	4	5
Part-Time	4	5
No Response	0	0
Retired	30	36
Student	0	0
Unemployed	0	0

Household Income	N	Percent
< \$20,000	4	6
\$20,000 - \$29,999	5	7
\$30,000 - \$49,999	14	20
\$50,000 - \$74,999	19	27
\$75,000 - \$100,000	13	18
> \$100,000	8	11
Don't Know	2	3
No Response	6	8

Health Insurance/Health Coverage	N	Percent
Yes	76	99
No	1	1

Time Without Insurance (past 12 months)	N	Percent
Yes	3	4
No	74	96
Don't Know	0	0

Internet Access	N	Percent
Yes	73	95
No	4	5
No Response	0	0

Results

An aggregated report of results from Camden County discussions is presented below. As these data may be limited in various ways, results only aim to portray a snapshot of community perceptions.

What is the best thing about living in this community?

Participants were first asked to discuss the positive aspects of their community by reporting what they believe is the best thing about living in Camden County. Overall, participants viewed the safe environment and sense of community as the best things about living in Camden County. Specifically, participants stated that they appreciate the accountability and dependability of fellow community members.

“I don’t have to worry about my daughter being safe. Someone is always home, and everybody looks out for everybody.”

“We don’t have a lot of problems, but if you need somebody, they are always there to help.”

Participants also stated that they enjoy the county’s rural landscape and waterways, which affords community members the opportunity to hunt and fish. Moreover, participants expressed that Camden County is unique in the fact that the rural county landscape is located close to other desirable areas, such as the beach and larger cities.

“I love seeing all the animals and rural country, and we’re close to the beach and big cities.”

Furthermore, participants expressed that community members enjoy the strong church presence, good school system, and laid back environment of the community. Many participants also reported relocating to Camden County from more urban areas because of factors such as the sense of community and small town atmosphere in the county.

“I chose to come back here after I retired because of the small town atmosphere and neighbors who care.”

“Everyone knows everyone and there is a family beyond the four walls of your home.”

A word cloud of responses is shown in Figure 1. Larger words represent words stated more frequently in small-group discussions. For example, participants frequently reported enjoying the outdoors.

Figure 1. The best things about living in this community



What do people in this community do to stay healthy?

Next, participants were asked to report what activities community members engage in to stay healthy. The most common responses were related to physical activity and organized recreational opportunities. Specifically, participants suggested that community members run, bike, hike, walk, swim, water ski, kayak, garden, and practice yoga (see Figure 2). Moreover, participants discussed organized opportunities to stay healthy, such as Zumba classes, athletics programs for kids, and nutrition classes at the Cooperative Extension.

“We have a large military community so there are lots of us that bike, hike, and swim. There’s a lot of stuff to do out here.”

Figure 2. Staying healthy in the community



The word cloud contains the following activities: work, Zumba, hike, run, yard-work, yoga, check-up, Walk, sail, encourage, ski, sports, kayak, bike, garden, swim, exercise, and bowl. The words are arranged in a roughly rectangular shape, with 'work' and 'Zumba' at the top left, 'hike' and 'run' in the top middle, 'yard-work' at the top right, 'yoga' and 'check-up' in the middle left, 'Walk' and 'sail' in the middle middle, 'encourage' in the middle right, 'ski' and 'sports' in the bottom left, 'kayak' and 'bike' in the bottom middle, 'garden' and 'swim' in the bottom right, and 'exercise' and 'bowl' at the very bottom.

Participants also suggested that community members attempt to stay healthy by eating fresh fruits and vegetables from local farmers’ markets and home gardens. Many participants stated that community members utilize gardening as both a form of exercise and source of fresh foods.

“All of the farmers have fresh produce stands.”

“We were raised in the country so we have been raised on country eat, like vegetables, and no fast food.”

Participants stated that community members avoid processed foods and monitor their food intake; however, some participants suggested that not all community members make an effort to practice healthy eating habits.

“We live in the South, so it’s all fried everything.”

Furthermore, participants stated that community members utilize available healthcare resources, such as annual physical exams and workplace exercise programs. Moreover, participants discussed the role that the school system plays in the health of children by promoting exercise through physical education classes and sponsoring weight loss programs.

“We stay healthy by going to gyms, such as Planet Fitness, and participating in health challenges like the Biggest Loser Contest at school.”

What are the serious health-related problems in your community?

When asked to list the serious health-related problems in Camden County, the most frequently cited health problems were *cancer, diabetes, heart disease, and obesity*.

Overall, participants discussed problems related to physical health; however, problems associated with mental health and social issues were also reported. When discussing physical health, participants cited the aforementioned conditions, as well as *high cholesterol, hypertension, asthma, joint and body pain, and arthritis* as serious health-related problems in Camden County. Participants also discussed several behavioral factors that may lead to the health-related problems in the county, such as eating unhealthy fast food, smoking, not exercising, and not having the motivation to live a healthy lifestyle.

“I don’t think people eat healthy enough...they go to the drive-thru too often.”

“You have local gyms that target lower income families, which is good, but you have to want to get there.”

Additionally, participants cited social health-related issues that accompany the physical health-related issues in the county. For example, participants stated that there is *poverty* that prevents some community members from accessing care, as well as a *limited number of doctors taking new patients* and a *lack of sidewalks and walking paths in the area*.

Participants also cited a variety of mental health issues that are believed to be prevalent in the community. The most frequently cited mental health-related problems were *stress, depression, substance abuse and addiction, Alzheimer’s disease, and suicide*. Furthermore, participants stated that there is a lack of mental health resources to provide community members with the necessary support.

“So many people are suffering from stress.”

“I think a lot of people are becoming depressed because of the stress. Not being able to handle it and wanting to get away.”

Physical	Social	Mental
Cancer	Poverty	Stress
Diabetes	Availability of doctors	Depression
Heart Disease	Lack of sidewalks	Substance abuse
Obesity		Addiction
High Cholesterol		Alzheimer’s disease
Hypertension		Suicide
Asthma		
Joint Pain		
Body Pain		
Arthritis		

What keeps people in your community from being healthy?

Next, participants were asked to describe barriers that prevent community members from being healthy. Participants mentioned the prevalence of accessibility issues in Camden County, both in terms of medical care and proper nutrition. For example, participants stated that the prevalence of primary care physicians in Camden County is insufficient.

"There are not a lot of primary care physicians in our area, and a lot of doctors that are around here don't accept new patients."

"I think the biggest thing is the remote-ness. Not everyone has access to good medical care, not everyone has transportation."

Furthermore, participants stated that not all community members are able to afford health insurance and the associated costs (e.g., prescription copays); therefore, many community members go without annual checkups and the proper care they need. Participants also discussed the long wait periods to initially see a doctor.

Participants also frequently cited challenges associated with accessing healthy foods, especially at a comparable cost to unhealthy food options. Moreover, participants stated that community members feel that they do not have enough time to prepare healthy meals at home; therefore, the convenience of fast food makes eating unhealthy an attractive option.

"We don't have access to good quality food. The good food is expensive. The fast food is cheap."

"The woman is just about required to work these days. It makes a big difference if you have to work until 5-o'clock. It's much easier to drop in at Burger King."

Similarly, participants highlighted the traditional style of food preparation in Camden County as a barrier to good health. Participants stated that many individuals, especially older adults, utilize unhealthy meal preparation methods and that this keeps people in the community from being healthy. Participants also stated that these unhealthy habits might be passed down to future generations.

"Most elderly people in the community cook with fat back. Seniors still cook this way."

"There is a culture of eating fast foods and foods high in carbohydrates and sugars. Sometimes an unhealthy mentality is passed down, such as cooking the way that your parents cooked for you."

Lastly, other barriers to health that participants reported included lifestyle habits, such as substance abuse and technology overindulgence.

"If you have poor health it won't change [for the better] if you are smoking and drinking. It is not just the fattening meat. You have to look at your habits."

"Technology keeps people from being active. I can sit at my desk and pull up anything on my computer instead of getting up and walking."

What could be done to solve these problems?

In addition to describing Camden County's barriers to health, participants also proposed potential solutions to the serious health-related problems in the county. Many of the proposed solutions focused on education. Specifically, participants expressed concern that a lack of education prevents community members from utilizing their health-related resources and opportunities, such as food banks and public transportation.

"We have to try to get the community educated. The whole purpose of having information is that the information needs to get out there."

"Transportation is huge. A lot of people don't have it, don't know how to access it, or don't know how to use it."

Moreover, participants stated that Camden County would be healthier if community members grew vegetables in their home gardens, as a way to avoid costly grocery store produce.

"Growing your own vegetables. A pack of seeds might be a little cheaper than buying all of your produce at once."

Also, participants discussed the school system's role in providing health education and care to children. Specifically, participants were unhappy with the lunches provided by the school system and suggested that children need more health education than what they are currently receiving.

"These meals they are getting consist of chicken nuggets, fish sticks, tacos, and pizza that is like cardboard. They are conditioning these kids to eat fast food."

"The education should start at home, with parents educating their own children. It's great to have education in the school, but if they go home and that is all they have, they are destined to fail."

Participants also believed that healthcare providers should develop personal relationships with community members in an attempt to de-stigmatize the healthcare system and seeking healthcare treatment.

"Providers need to develop relationships with community members so that they feel comfortable going to the doctor and get quality care."

"You have to have doctors that you know and trust who can answer questions you may have and talk to you about your health."

Finally, participants stated that providing programs that aim to increase the health-related literacy of community members and providing preventative care to community members would positively impact the community. Specifically, many participants discussed the community's need for dentistry services.

"Dental care is a huge need here. We need to secure a dentist and more doctors."

Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?

Participants were then asked to report any challenges they have experienced when accessing healthcare services in Camden County. Participants voiced a variety of concerns and provided personal examples of challenges that they have experienced. Specifically, participants addressed the topics of *long wait times*, *limited access to doctors*, *transportation*, *costs associated with healthcare*, and *insurance*. Furthermore, participants identified several groups of community members who experience greater challenges than others.

First, a large portion of participants expressed concern regarding wait times at healthcare facilities. For example, participants stated that there are long wait times at the emergency department, doctors' offices, and the urgent care facility. Moreover, participants stated that emergency services in the area are slow to respond and only do so within limited hours.

"The wait in the ER is absolutely horrible. I waited for four hours."

"It takes too long for emergency services to get to your house here...and emergency services are only [available] 12 hours out of 24."

Next, participants discussed the challenges associated with a limited number of healthcare providers. For example, participants stated that there are a limited number of doctors and specialists in the area, and that doctors who are in the area do not accept new patients. In turn, participants stated that they have experienced problems with contacting doctors for services, such as prescription refills; establishing a primary care physician; and accessing specialty care without having to travel outside of the county.

"My problem has been primary care, when I called my insurance provider I was told that no one was taking new patients."

"There are limited healthcare services here. A lot of the time you have to go to Virginia to receive proper healthcare."

Participants also cited challenges associated with transportation. Specifically, participants suggested that due to the limited availability of healthcare providers in the county, many community members must travel long distances when seeking healthcare services. As a result, community members who do not have reliable access to transportation options struggle to access the care they need.

Furthermore, participants stated that many community members struggle to afford healthcare services. For example, participants suggested that parents, the elderly, and the uninsured are populations that experience challenges with paying for healthcare. Moreover, participants discussed that some community members may have limited health insurance, which prevents them from accessing services such as dental and vision care. Lastly, participants cited challenges associated with a lack of resources for children who have special needs and elderly community members who require assisted living.

"There is a lack of quality assisted living for senior citizens."

Are there any home remedies you use in place of traditional healthcare and medicine?

In addition to asking about challenges experienced when seeking healthcare services, participants were also asked about alternative practices they utilize in place of traditional healthcare. As many participants expressed that traditional healthcare is inaccessible due to factors such as high costs and long wait times, a variety of alternative practices were cited that are viewed as more convenient, accessible and affordable. Furthermore, participants expressed a lack of trust in healthcare providers, which may encourage the use of home remedies. Participants provided a list of such remedies that they use for various health conditions, which can be seen in Table 4.

"The trust is lost in providers and costs continue to increase."

"I think people are using more alternative ways now and home remedies are pushed more."

"Home remedies are easier."

The various home remedies that participants reported include commonly used natural remedies, over-the-counter medicines, and less commonly used home remedies. For example, participants cited commonly used natural remedies, such as cloves for toothaches, herbal teas for miscellaneous conditions, and salt water for sore throats. Furthermore, over-the-counter medicines included Vick's VapoRub for congestion and toe fungus, Bengay for congestion, and rubbing alcohol for fevers. Lastly, participants reported less commonly used home remedies, such as urine for ear problems, kerosene for congestion, and tobacco for bee stings.

Table 4. Home remedies and Targeted Ailments

Home Remedy	Targeted Ailment
Whiskey	Coughs
Cloves	Toothache
Honey	Miscellaneous
Herbal Teas	Miscellaneous
Baking soda and salt water	Eczema, Sore throat
Kerosene	Congestion
Vick's VapoRub	Congestion, toe fungus
Deodorant	Bug bites, itching
Ammonia	Bug bites, stings
Nail polish	Red bugs
Bengay	Congestion
Red onion	Sore throat, ear infections
Essential Oils	Miscellaneous
Urine	Ear problems
Peroxide	Miscellaneous
Garlic	Blood pressure, foot fungus
Sugar	Hiccups
Milk and bread	Skin infections
Rubbing Alcohol	Fever
Tobacco	Bee stings

What are the strengths related to health in your community?

Next, participants were asked to discuss the strengths related to health in the community. Participants discussed a variety of community strengths, including the presence of health-related programs, as well as the country atmosphere and people located in Camden County. Furthermore, participants discussed the availability of healthy foods and certain healthcare services.

Specifically, participants frequently stated that the county has a variety of health-related programs that support the community. For example, participants mentioned health education programs conducted by the health department, mobile dental units that serve local schools, and walking programs supported by local employers. Moreover, participants stated that such programs are made available to all community members, including senior citizens and school-aged children.

“I think our local health departments do an excellent job at getting the proper information out there to the community with the health fairs.”

“We have a walking program at work that gives us a half an hour to go to the walking track.”

Next, participants discussed the strengths provided by the country atmosphere in Camden County. In particular, participants stated that the county has fresh air, very little pollution, and provides community members with opportunities to exercise outdoors. For example, participants stated that because of the environmental strengths of the county, community members are able to engage in boating and water activities, biking and walking on designated paths, and yard work. Moreover, participants expressed that community members feel safe when exercising and working outdoors.

“They have a bicycle path up at South Mills that goes along the canal; people can walk or ride a bicycle, it’s pretty.”

Participants also discussed the strengths provided by the people in Camden County. For example, participants stated that there is a large amount of health-related support provided by school nurses and teachers in the county. For example, participants stated that such individuals help others focus on healthy eating habits, provide certain types of medical care when necessary, and encourage others.

“Our people are our strength. Those who speak out and encourage others.”

“It’s a big plus. Some kids might not get to see a healthcare physician and so at least they do get to see the nurse.”

Lastly, participants discussed the availability of healthy food options and certain healthcare services as strengths of the community. Specifically, participants mentioned that community members are able to grow their own fruits and vegetables, and noted that there is a limited availability of unhealthy, fast food options in the county. Additionally, participants stated that healthcare services, such as vaccinations and asthma care, are available in the area. However, not all participants shared this viewpoint, as one participant stated that they believe Camden County does not have any strengths, due to a limited number of doctors and other healthcare providers in the area.

“Camden County doesn’t have any doctors or anything, so I don’t think we have any strengths.”

Cancer and heart disease are the leading causes of death in your county. In your opinion, what makes these the leading causes of death in your county?

Next, participants were asked what makes cancer and heart disease the leading causes of death in Camden County. Participants provided multiple explanations that potentially contribute to these leading causes of death, such as *unhealthy behaviors and habits, a lack of information and resources, and the use of harmful substances in food and farming.*

Participants expressed a variety of unhealthy behaviors and habits as contributing factors to the leading causes of death in Camden County, including smoking, drinking, an unhealthy diet, irregular doctor visits, and a lack of exercise. Specifically, participants suggested that the overall lack of self-care is a contributing factor to cancer and heart disease.

"As a caregiver, I overlooked my own signs and symptoms of stress."

"I have a brother who thinks he is invincible and it's hard to convince him to go get checkups."

Furthermore, participants suggested that the lack of self-care and unhealthy behaviors might be due to other factors such as a lack of information and resources about healthy habits and healthcare. Multiple participants expressed that Camden County lacks the proper knowledge about how to be healthy and how to access affordable healthcare services. In fact, participants expressed that healthcare services are limited due to delayed response times and a limited amount of doctors.

"EMS is too slow and there are not enough doctors."

Next, participants discussed the use of harmful substances in food and farming as a contributing agent to the leading causes of death in Camden County. For example, many participants stated that the majority of foods consumed are processed foods that are full of hormones and preservatives, and that the local water is contaminated with pesticides and other chemicals from nearby farms. Additionally, participants expressed that as a farming community, many people are exposed to harmful substances in their occupations, such as pesticides.

"A lot of the farmers do their own maintenance and they get exposed to those chemicals."

Lastly, participants discussed other factors such as affordability and time constraints as limitations. For example, although participants acknowledged that the substances used in fast food contribute to the leading causes of death in Camden County, participants expressed that there are limited alternatives because of the high cost and inconvenience of healthy foods. Furthermore, participants expressed that, due to time constraints, fast food is overall more convenient than home cooking.

"Convenience foods are a problem. It costs more to buy fresh food at the time you need it."

"Moms do not have time to cook, instead they use fast food dollar menu items."

How does living in a rural area affect health?

In the final question, participants were asked to discuss how living in a rural area affects health. Participants listed multiple pros and cons associated with living in a rural area, such as the benefits of agriculture, less pollution, and a slower paced lifestyle, and the concerns of limited healthcare resources, lack of transportation, and poverty.

More specifically, participants stated living in a rural area could be beneficial in multiple ways. For example, participants expressed that it allows residents to grow their own gardens, which results in fresher and higher quality foods without the harmful substances used by large farms.

"More folks are growing vegetables. Grocery store produce is not good."

"We do have the ability to grow our food opposed to buying all of the other foods with preservatives."

Additionally, participants stated that living in a rural area has less pollution and a slower pace of life. Specifically, participants expressed that some of the benefits associated with living a slower paced life include less stress and a more suitable environment for good mental health.

"I think it's helped because there is a slower pace, we are more relaxed and have less stress."

"Rural areas have less depression and suicide due to less congestion in cities."

In contrast, participants discussed that some of the negative aspects of living in a rural area include a lack of resources, limited transportation, and poverty. For example, participants suggested that rural areas tend to have limited healthcare resources and emergency services, as well as long wait times at doctors' offices. In addition to limited healthcare services, participants discussed a lack of healthy food options as a barrier to health in rural areas. Participants also stated that transportation is an issue in rural areas and that the limited amount of public transportation in the area prevents people from accessing the few healthcare services that are available.

"You have to drive yourself to the hospital and then you might not get seen quickly."

"If you don't have transportation, then you probably won't get the healthcare that you need."

Lastly, participants stated that poverty makes accessing resources, such as healthy food and healthcare services, even more difficult for rural community members. Specifically, participants believed that since healthy food options are limited in rural areas, such options are more expensive. In turn, community members are prone to purchasing cheaper and unhealthier food choices. Furthermore, participants expressed that poverty prevents community members from accessing transportation due to a lack of public transportation and the inability to purchase a personal vehicle.

"People are hesitant to take themselves or their children to the doctor because they really don't have the funds or transportation."

Summary and Next Steps

There were many common, identifiable themes among the Camden County small-group discussions. When asked to discuss the **best things about living in the county**, participants frequently spoke about the *safe, serene environment* and *strong sense of community* in Camden County. Furthermore, when speaking about the **health-related strengths of the community**, participants again discussed the county's favorable *environment* and the many outdoor activities that are available in the area. Moreover, participants discussed the many *health-related programs* offered throughout the county that help community members remain healthy.

When asked about **health-related weaknesses of the community**, participants discussed a variety of **serious health-related problems** in the community, such as *cancer, diabetes, heart disease, and obesity*. Participants also discussed **barriers to health** in Camden County and cited many *accessibility issues*, both in terms of *medical care* and *proper nutrition*. For example, participants expressed that the county has an *insufficient number of medical professionals* when one considers the entire county population. Participants also stated that community members' lifestyle habits, such as *tobacco use* and *an excessive use of technology*, act as **barriers to health**.

In turn, participants provided a variety of **solutions to the serious health-related problems** in Camden County. For example, participants stated that community members would benefit from *educational resources* concerning the health-related assets and opportunities already available to them, such as food banks. Moreover, participants expressed that community members should *grow vegetables in their home gardens* and *develop personal relationships with medical professionals* to make health more accessible.

At the conclusion of each discussion, the moderators explained the CHA would be available on ARHS's website in March 2017 and the website address was given, as well as the contact information for the CHA Lead.

Appendix A: Focus Group Script

GUIDELINES:

1. All cell phones need to be on silent or vibrate.
2. Be respectful to each other. Do not talk over each other or be dismissive of others' opinions.
3. Be open and honest in your responses.
4. Ask for clarification of questions if needed.
5. Share your opinion. Every participant brings a unique perspective and we want to hear from each person.
6. Refrain from using individual's names when sharing information during the session.
7. Refrain from sharing confidential information that may be discussed during the session.
8. Use appropriate language.

QUESTIONS:

1. Introduce yourself and tell us what you think is the best thing about living in this community.
2. What do people in this community do to stay healthy?
3. In your opinion, what are the serious health-related problems in your community?
4. What keeps people in your community from being healthy?
5. What could be done to solve these problems?
6. Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?
7. Are there any home remedies you use in place of traditional healthcare and/or medicine?
8. What are the strengths related to health in your community?
9. Cancer and heart disease are the leading causes of death in your county. In your opinion, what makes these the leading causes of death in your county?
10. How does living in a rural area affect health?

CONTACT INFORMATION:

Dana Hamill
Albemarle Regional CHA Lead
Email: dhamill@arhs-nc.org; Phone: 426-2115

2016 Community Health Assessment

Priority Selection Worksheet

County: _____

After reviewing the CHA Presentation, please tell us what you think are the three most important health issues for your county.

When choosing these issues, please consider the following:

- **Magnitude of the Problem:** The size or extent of the problem as it relates to your county
- **Consequences of the Problem:** How the economic, social, cultural, and political issues within your county might be influenced by addressing this issue
- **Feasibility:** Are there enough resources in the county to address this issue and is the community ready to address this issue?
- **Duplication:** Is this issue already being addressed by other community stakeholders/programs?

Top Health Issues	
1.	
2.	
3.	



Camden County Community Resource Inventory

Camden County Sheriff's Office

117 North NC 343
Camden, NC 27921
Phone: 252-338-5046
Fax: 252-335-4300

Fire Departments

<http://www.firedepartment.net/directory/north-carolina/camden-county>

South Camden Fire Department

117 NC Highway 343 N
PO Box 327
Camden, NC 27921
Phone: (252) 338-3722
Fax: (252) 338-3722

South Mills Volunteer Fire Department

105 Halstead ST
South Mills, NC 27976
Phone: (252) 771-2772

Public Libraries

There is one public library that serves the people of Camden County: the Pasquotank-Camden Public Library, physically located in Elizabeth City.

Pasquotank-Camden Public Library

100 E Colonial Ave, Elizabeth City, NC 27909
Phone: (252) 335-2473
Website: <http://library.earlibrary.org/pasquotank/>

Other Community Services and Organizations

Camden County Community Resource Directories and Guides

Camden County Government Directory of Services Alphabetical list of live links to services provided by the county. Portal: <http://www.camdencountync.gov/>.

Albemarle Smart Start Partnership Community Resource Guide

Searchable on-line directory of programs and services available throughout the Albemarle Region. Currently catalogs annotated listings for 125 local and regional agencies and organizations. Portal - <http://www.albemarlessp.org/resource-guide>. Also available as a printable version at:
<http://www.albemarlessp.org/sites/default/files/community-resource-guide.pdf>.

North Carolina Arts Council

The NC Arts Council maintains a resource list of cultural, arts, and civic organizations that is searchable by county. Portal: <http://www.ncarts.org/county.cfm?county=Camden>.

Camden County Public Schools**Camden High School**

103 US Hwy 158 West

Camden, NC 27921

Phone: 252-338-0114

Email: webmaster@camden.k12.nc.us

Website: <http://cchs.ccsnc.org/>

Camden Intermediate

123 Noblitt Drive

Camden, NC 27921

Phone: 252-335-7808

Fax: 252-335-4327

Email: webmaster@camden.k12.nc.us

Website: <http://cis.ccsnc.org/>

Camden Middle

248 Scotland Road

Camden, NC 27921

Phone: 252-338-3349

Fax: 252-331-2253

Email: webmaster@camden.k12.nc.us

Website: <http://cms.ccsnc.org/>

CamTech High School

103A US Hwy 158 West

Camden, NC 27921

Phone: 252-335-7219

Email: webmaster@camden.k12.nc.us

Website: <http://cths.ccsnc.org/>

Grandy Primary

175 North Hwy 343

Camden, NC 2791

Phone: 252-331-4838

Fax: 252-338-5449

Email: webmaster@camden.k12.nc.us

Website: <http://gps.ccsnc.org/>

Camden County Private Schools

New Life Academy

1958 N. Road Street
Elizabeth City, NC 27909
Phone: 252-335-5812
Website: <http://www.newlifeacademyec.com/>

Victory Christian School

684 Old Hertford Hwy
Elizabeth City, NC 27909
Phone: 252-264-2011 or 252-264-2468
Email: info@victorybaptistministries.com
Website: <http://www.victorybaptistministries.com/about-our-school.html>

Albemarle School

1210 US Hwy 17 South
Elizabeth City, NC 27909
Phone: 252-338-0883
Website: <http://thealbemarleschool.org/>

Higher Education

Chowan University

One University Dr.
Murfreesboro, NC 27855
Phone: 252-398-6436
Toll-Free: 1-888-4-CHOWAN
Fax: 252-398-1190
Website: <https://www.chowan.edu/>

Martin Community College - Bertie Campus

409 West Granville St.
Windsor, NC 27983
Phone: 252-794-4861
Website: <http://www.martincc.edu/>

Martin Community College - Williamston Campus

1161 Kehukee Park Rd.
Williamston, NC 27892
Phone: 252-792-1521
Fax: 252-792-0826
Website: <http://www.martincc.edu/>

Commented [PR1]: College of the Albemarle

Elizabeth City Campus
1208 N. Road St
PO Box 2327
Elizabeth City, NC 27909
P: 252-335-0821
F: 252-335-2011

Dare County Campus

132 Russell Twiford Road
Manteo, NC 27954
P: 252-473-2264
F: 252-473-5497

Roanoke Island Campus

205 Highway 64 S.
Manteo, NC 27954
F: 252-473-6002

Edenton-Chowan Campus

800 N. Oakum St
Edenton, NC 27932
P: 252-482-7900
F: 252-482-7999

Regional Aviation & Technical Training Center

107 College Way
Barco, NC 27917
P: 252-453-3035
F: 252-453-3215

<http://www.albemarle.edu/>

Roanoke Chowan Community College

109 Community College Rd.

Ahoskie, NC 27910

Phone: 252-862-1200

Website: <https://www.roanokechowan.edu/>

College of the Albemarle - Elizabeth City Campus

1208 N. Road St

PO Box 2327

Elizabeth City, NC 27909

Phone: 252-335-0821

Fax: 252-335-2011

Website: <http://www.albemarle.edu/about-coa/elizabeth-city-campus>

College of the Albemarle - Dare County Campus

132 Russell Twiford Road

Manteo, NC 27954

Phone: 252-473-2264

Fax: 252-473-5497

Website: <http://www.albemarle.edu/about-coa/dare-campus>

College of the Albemarle - Roanoke Island Campus

205 Highway 64 S.

Manteo, NC 27954

Fax: 252-473-6002

Website: <http://www.albemarle.edu/>

College of the Albemarle - Edenton-Chowan Campus

800 N. Oakum St

Edenton, NC 27932

Phone: 252-482-7900

Fax: 252-482-7999

Website: <http://www.albemarle.edu/about-coa/edenton-chowan-campus>

Regional Aviation & Technical Training Center

107 College Way

Barco, NC 27917

Phone: 252-453-3035

Fax: 252-453-3215

Website: <http://www.albemarle.edu/currituck>

East Carolina University

East Fifth Street

Greenville, NC 27858

Phone: 252-328-6131

Website: <http://www.ecu.edu/>

Commented [PR2]: East Carolina University

East Fifth Street

Greenville, NC 27858

Phone: 252-328-6131

<http://www.ecu.edu/>

Other Community Resources

Albemarle Hopeline, Inc.

Albemarle Hopeline, a private, non-profit organization founded in 1981, is the only program of its kind in the Albemarle region, with outreach through four satellite offices (Chowan, Currituck, Gates and Perquimans counties), a shelter/direct service facility, and a thrift store. The agency is guided by the mission of “providing comprehensive direct and preventive services to victims of family violence, sexual assault and teen dating violence” in the counties of Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans.

Services include: 24-hour crisis line; emergency Hope House shelter; food, clothing and transportation; crisis intervention; court advocacy; individual and group counseling for adults and children; Displaced Homemaker Program; information and referral; outreach; and prevention through awareness and education to school, church and civic groups and the community-at-large. Since the opening of an enlarged 14,200 square foot Hope House facility in 2006, Hopeline has been able to consolidate services to both residential and non-residential victims, and improve coordination and effectiveness. All services are designed to meet basic safety needs of victims of domestic and sexual violence, empowering them to establish and maintain healthy, violence-free lives.

Mailing address:

PO Box 2064

Elizabeth City, NC 27906

Phone: 252-338-5338

24-hour crisis line: 252-338-3011

Fax: 252-338-2952

Website: www.albemarlehopeline.org

Hopeline's Clothesline Thrift Store

923 Halstead Blvd

Elizabeth City, NC

Phone: 252-338-3107

Community Care of North Carolina/Carolina ACCESS

Phone: 252-847-6430

Non-Profit Organizations

Wheels For Wishes

Nonprofit car donation program that helps charities such as local chapters of Make-A-Wish.

Phone: 1-855-922-9474

Website: <http://eastnc.wheelsforwishes.org/>

Northeastern SPCA

100 Wilson St.
Elizabeth City, NC 27909
Phone: 252-338-5222
Hours: Saturday – Wednesday 10am-3:30pm
Thursday - Friday 10am-6pm
Website: <http://spcaofnenc.org/>

Kids First Inc.

Evaluation and treatment services for children who have been abused or neglected.
Phone: 252-338-5658
Website: <http://www.kidsfirstinc.org/>

Other Points of Interest**Elizabeth City/Pasquotank County Economic Development Commission**

405 East Main Street, Suite 4
Elizabeth City, NC 27909
Phone: 252-338-0169
Toll-Free: 1-888-338-1678
Fax: 252-338-0160
Email: info@elizabethcitypasquotankcdc.com
Website: <http://elizabethcitypasquotankcdc.com/>

Elizabeth City Chamber of Commerce

502 East Ehringhaus Street
Elizabeth City, NC 27909
Phone: 252-335-4365
Fax: 252-335-5732
Email: dayna@elizabethcitychamber.org
Website: <http://www.elizabethcitychamber.org/>

North Carolina Highway Historical Marker Program

<http://www.ncmarkers.com/Home.aspx>

Battle of South Mills

Confederates repelled Union Army in 1862, prevented demolition of Dismal Swamp Canal locks.
NC 343 southeast of South Mills
Camden, NC

Dismal Swamp Canal

Connects Albemarle Sound with Chesapeake Bay.
1243 (Old NC 343) at South Mills
Camden, NC

Other Results listed at <http://www.ncmarkers.com/search.aspx>

Camden County Heritage Museum

The museum is housed in the former Camden County jail. It is well preserved, documents the history of Camden County, and local methods of incarceration in the early 1990s.

117 North NC Hwy 343
Camden, NC 27976

Mailing Address:
2356 Hwy 17 N
Camden, NC 27976
Phone: 252-771-8333
Toll-Free: 877-771-8333
Email: dscwelcome@camdencountync.gov

Parks and Recreation Department

Develops recreation programs, resources, special events, coordinating the expansion of Community Park including walking trails, regulation high school track, picnic shelter, playground, and parking areas.

117 North NC 343
PO Box 190
Camden, NC 27921
Phone: 252-338-1919

Subdivision Walking Maps

<http://www.camdencountync.gov/departments/parks-recreation/subdivision-walking-maps>

Camden County Activities and Programs

<http://www.camdencountync.gov/departments/parks-recreation/athletics>

Dismal Swamp State Park

2294 US 17 North
South Mills, NC 27976
Phone: 252-771-6593
Email: dismal.swamp@ncparks.gov
Website: <http://www.ncparks.gov/dismal-swamp-state-park>

Dismal Swamp Canal Welcome Center

US Hwy 17N
South Mills, NC 27976
Open Daily 9am-5pm
Website: www.dismalswampwelcomecenter.com

Camden County Dismal Swamp 2016 Brochure:
<http://dismalswampwelcomecenter.com/wp-content/uploads/2013/07/CamdenBrochure2016pdf.pdf>

Camden Community Park

175 N Carolina Hwy 343 S
Camden, NC 27921
Facebook Page: <https://www.facebook.com/pages/Camden-Community-Park/150236095039528>

Partnerships to Improve Community Health (PICH)

This project focuses on addressing risk factors for chronic disease with coalitions compiled of representatives from health departments, faith-based institutions, local governments, community colleges, health and human service agencies, and community organizations which will implement strategies to reduce secondhand smoke exposure and improving nutrition
Website: <http://healthync.org/>

Farmers Markets, Farmstands, and Roadside Stands

Bray's Farmstand

442 East Hwy 158
Camden, NC 27921
Phone: 252-338-0240
Facebook: www.facebook.com/BrayFarmStand

Poor Boys

US Hwy 158
Camden, NC 27921
Facebook: www.facebook.com/Poor-Boys-Produce/759612910757260

Huck's Produce

NC 343 N 783
Camden, NC
Phone: 252-312-6487
Facebook: <https://www.facebook.com/Hucks-Produce-Hassell-Farms-467250853367117/>

William's Strawberries

1383 North 343
Camden, NC
Franklin Williams Phone: 252-771-2647
Facebook: <https://www.facebook.com/Hucks-Produce-Hassell-Farms-467250853367117/>

Hospital

There is no hospital in either Camden County or Pamlico County.

Hospitals/Clinics in Surrounding Areas**Bertie County - Vidant Bertie Hospital**

1403 South King Street

PO Box

Windsor, NC 27983

Phone: 252-794-6600

Website: <https://www.vidanthealth.com/bertie/>

Vidant Family Medicine – Windsor

Located at the Vidant Bertie Hospital

Phone: 252-794-6775

Chowan County - Vidant Chowan Hospital

211 Virginia Road

P.O. Box 629

Edenton, NC 27932

252-482-8451

Website: <https://www.vidanthealth.com/chowan/>

Vidant Pediatrics - Edenton

203 Earnhardt Drive

Edenton, NC 27932

252-482-7407

Vidant Family Medicine - Edenton

201 Virginia Road

Edenton, NC 27932

252-482-2116

Vidant Internal Medicine & Cardiology - Edenton

105 Mark Drive

Edenton, NC 27932

252-482-3047

Vidant Women's Care - Edenton

203-A Earnhardt Drive

Edenton, NC 27932

252-482-2134

Vidant General Surgery - Edenton

203-B Earnhardt Drive

Edenton, NC 27932

252-482-5868

Dare County - The Outer Banks Hospital, Inc.

4800 S. Croatan Hwy
Nags Head, NC 27959
Phone: 877-359-9179
Website: <https://www.theouterbankshospital.com/>

Cancer Care

4810 South Croatan Hwy, Suite 220
Nags Head, NC 27959

Hertford County - Vidant Roanoke-Chowan Hospital

500 South Academy Street
PO Box 1385
Ahoskie, NC 27910
Phone: 252-209-3000
Website: <https://www.vidanthealth.com/roanokechowan/>

Martin County - Martin General Hospital

310 S. McCaskey Rd., Williamston, NC 27892
Phone: 252-809-6300
Website: <http://www.martingeneral.com/Martin-General-Hospital/Home.aspx>

Pasquotank County – Sentara Albemarle Medical Hospital

1144 N. Road Street
Elizabeth City, NC 27909
Phone: 252-335-0531
Website: <http://www.sentara.com/albemarle-north-carolina/hospitalslocations/locations/new-sentara-albemarle-medical-center.aspx>

Pitt County - Vidant Medical Center

2100 Statonsburg Rd
PO Box 6028
Greenville, NC 27835
Phone: 252-847-4100
Website: <https://www.vidanthealth.com/medicalcenter/services.aspx>

Washington County - Washington County Hospital

958 US Hwy 64 East
Plymouth, NC 27962
Phone: 252-793-4135
Website: <http://wchonline.com/Home.aspx>
Residents of Camden County also seek medical services in southeastern VA, primarily in the area referred to as the Tidewater Region.

Visit <http://www.theagapecenter.com/Hospitals/Virginia.htm> for a list of hospitals in Virginia.

Pasquotank-Camden Emergency Medical Service

Located in Sentara Albemarle Medical Center
1144 -C North Road Street
Elizabeth City, NC 27909
Phone: 252-335-1524
Website: <http://www.pasquotankcamdenems.com/>

Public Health Department:

Albemarle Regional Health Services Albemarle Regional Health Services (ARHS) is a regional Public Health agency in rural, northeastern NC serving the seven counties of Bertie, Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans. ARHS has provided over 70 years of service to the Albemarle Region.

The regional Public Health agency provides the following healthcare services: immunizations, diabetes care and management, women's preventive health, maternal health, including high-risk perinatal services, child health, WIC and nutrition counseling, pediatric asthma management, services for people with communicable diseases including STDs, adult day health care, children's developmental services, Public Health preparedness and response, public information, interpreter assistance, home health care, and hospice.

Albemarle Regional Health Services also administers the following programs: Environmental Health, Regional Landfill, Solid Waste Authority and Recycling, LifeQuest Worksite Wellness, and the Inter-County Public Transportation Authority. The more than 29 ARHS operational sites are completely networked by technology to increase the efficiency and effectiveness of service delivery across the agency.

Camden County Health Department

The Health Department offers clinical services such as adult health, child health, immunizations, general communicable disease, sexually transmitted disease, women's preventive health, and maternal health. Other services are Women, Infants and Children (WIC), Diabetes Care, Health Education and Health Promotion, Environmental Health Services, Public Health Preparedness and Response, Inter-County Public Transportation Authority (ICPTA), and Children's Developmental Services Agency.
160 U.S. 158, Building B
Camden, NC 27921
Phone: 252-338-4460
Website: <http://www.arhs-nc.org/contact/#Health%20Departments>

Federally-Qualified Health Centers (FQHC)

The US Health Resources and Services Administration (HRSA) lists no FQHC in Camden County. However, HRSA lists FQHC in Albemarle Region of NC.

Gateway Community Health Center – Tyner Clinic

Located in the Northern Chowan Community Center

This clinic provides primary care to patients 18 years old and up. Services include sick visits, wellness and preventative visits, chronic disease management, health education, and laboratory testing. Staff includes a full time Adult Nurse Practitioner, a Registered Nurse, and support personnel.

2869 Virginia Rd, Tyner, NC 27980

Phone: 252-221-2171

Gateway Community Health Center of Gatesville

This clinic provides primary and minor emergency care for patients of all ages, including babies and children. Services include sick visits, wellness and preventative visits, chronic disease management, health education, stitches, X-rays, and laboratory and EKG testing. Staff includes a full time Family Practitioner medical doctor, a Family Nurse Practitioner, nurses, and support personnel

501 Main St, Gatesville, NC 27938

Phone: 252-357-1226

Colerain Primary Care

109 W River St, Colerain, NC 27924

Phone: 252-356-2404

Website: <http://rcchc.org/colerain-primary-care.html>

Adolescent Care Clinic

This clinic provides primary care to students 10 to 19 years old and school faculty. Services include sick visits, wellness and preventative visits, chronic disease management, sports physicals, mental health counseling, health education, and laboratory testing. Staff includes a halftime Family Nurse Practitioner, a Registered Nurse, and a Licensed Practical Nurse.

88 US-158

Gatesville, NC 27938

Phone: 252-357-1244

Open during the school year only

Monday-Friday 8am-4:30pm

Fees: Based on sliding scale

**Migrant and Seasonal Farm Worker Program
Nuestra Casa de la Comunidad Hispana**

This center provides assistance and health programing focused on the local farm worker and Hispanic communities. Services include medical field clinics with a bilingual Case Manager, Outreach Worker and Registered Nurse/Family Nurse Practitioner providing health assessments and immunizations as well as HIV testing and TB skin testing; assistance in accessing existing health resources from both public agencies and private organizations; case management; interpretation services; advocacy; health education; and a tutoring program for grades K-5.

510 S. Martin Luther King Dr.
Elizabeth City, NC 27909
Phone: 252-384-2651
Hours: Afternoons at various sites in the Elizabeth City area
Fees: Based on a sliding scale

Mental Health Resources

Trillium Health Resources

Manages mental health, substance use, and intellectual/development disability services in a 24-county area. Trillium partners with agencies and licensed therapists to offer services and support to people in need within their community.

Crisis Care & Service Enrollment: 1-877-685-2415

Email: info@trilliumnc.org

Website: <http://www.trilliumhealthresources.org/>

Trillium Access Point

Anonymous, evidence-based, self-conducted screenings online 24hrs a day for depression, bipolar disorder, post-traumatic stress disorder, eating disorders, and alcohol use disorders.

Available in English and Spanish, provides local referral information, and includes learning and resource section.

Website: <http://www.trilliumhealthresources.org/en/Community-Partnerships/Trillium-Initiatives/Access-Point/>

Long-Term Care Facilities

Needham Adult Care Home

916 N Sandy Hook Rd
Shawboro, NC 27973
Phone: 252-336-2700

Albemarle Home Care and Hospice

311 Cedar St
Elizabeth City, NC 27909
Phone: 252-338-4066

Website: <http://www.ahc-nc.org/>

Health Care Providers

Dentists

Dr. Francis A. Bald & Associates Physicians-Oral Surgeons

1221 Carolina Avenue Suite 4
Elizabeth City, NC 27909
Phone: 252-338-8077
Fax: 252-335-1024

Regis Dandar

217 S. Poindexter St
Elizabeth City, NC 27909
Phone: 252-335-4421
Fax: 252-264-5465

Morgan Family Dentistry

153 Worth Guard Rd
Coinjock, NC 27923
Phone: 252-453-2181
Fax: 252-453-2325

10-A Juniper Trail
Kitty Hawk, NC 27949
Phone: 252-261-2358

Website: <http://www.morganfamilydentistrync.com/>

Currituck Dental Clinic

Located in the parking lot of Mt. Zion Methodist Church in Grandy, NC on Highway 158. Patients are seen by appointment.
Tuesday and Thursday 9am-5pm
Phone: 252-599-776

<http://www.currituckfreedentalclinic.com/>

Facebook: <https://www.facebook.com/Community-Dental-Clinic-359483430752852/>

Elizabeth City Dental Robert T. Gillam, III, D.D.S.

508 E. Main St. Suite 322
Elizabeth City, NC 27909
Phone: 252-679-2929
Fax: 252-335-4842

Website: www.elizabethcitydental.com

Dental Transformations - Dentist and Sleep Specialist

408 E. Colonial Avenue
Elizabeth City, NC 27909
Phone: 252-335-4341

Website: <http://www.dentaltransformations.com/dental/about/KarenWuertzDDS.html>

Complete Dental Care: Jones Jr Clifford B DDS

407 S Road St
Elizabeth City, NC 27909
Phone: 252-335-0548

Griffin Jr. Lloyd E DDS

207 E. Church St.
Elizabeth City, NC 27909
Phone: 252-335-7534

Other Camden County Healthcare Practitioners/Practices

Partial list of healthcare practitioners and practices in Camden County that are not affiliated with one of the region's hospitals.

Albemarle Family Practice

160 US Hwy 158 E
Camden, NC 27921
Phone: 252-334-9527

Michelle Creech, Speech-Language Pathology

152 Country Club Rd
Camden, NC 27921
Phone: 252-335-7808

Delaine Tanis, Speech-Language Pathology

207 Billetts Bridge Rd
Camden, NC 27921
Phone: 252-336-9957
Fax: 252-337-7928

Martha Goodman, Counseling

111 Sunset Ave #A
Camden, NC 27921
Phone: 252-336-2457

Lynn Olsefski, Social Work

1321 1st St W
Ahoskie, NC 27910

Phone: 252-209-8932
Fax: 252-209-8933

Other Albemarle Resources

East Carolina Behavioral Health

1708 E. Arlington Blvd
Greenville, NC 27858
Phone: 252-695-6400
Fax: 252-215-6881
24-hour Access/Crisis Number: 877-685-2415

Albemarle Pregnancy Resource Center and Clinic

201 E. Ehringhaus St.
Elizabeth City, NC 27909
Phone: 252-338-1655
Monday through Thursday 9am-4pm
Website: <http://albemarleprc.org/>

Camden County Department of Social Services

PO Box 70
117 NC Hwy 343 North
Camden, NC 27921
Phone: 252-331-4787

NC Cooperative Extension

Camden County Center

120 NC Hwy 343 N
Camden, NC 27921
Phone: 252-331-7630
Fax: 252-338-0277
Website: <https://camden.ces.ncsu.edu/>

Other Health Services

Albemarle Smart Start Partnership

Mission: To improve children's lives in Bertie, Camden, Currituck, Gates, and Pasquotank Counties.

Goals: To make sure children enter school healthy and ready to learn. To provide programs for young children and caregivers to improve quality of child care and funds child care scholarships and programs designed to support families.

1403 Parkview Drive
Elizabeth City, NC 27909
Phone: 252-333-1233
Fax: 252-333-1201

Email: smartstart@albemarlessp.org
Website: <http://www.albemarlessp.org/>

Child Care Centers

www.childcarecenter.us

Camden County Childcare Referral Agency:
Albemarle Smart Start Partnership

Precious Gifts Educational Center, LLC

149 US Hwy 158 W.
Camden, NC 27921
Phone: 252-337-7434

Camden Co. NC Pre-Kindergarten Program

175 Hwy 343 North
Camden, NC 27921
Phone: 252-335-0831

Home Day Care

Cradle to Crayons Learning Center

Otters Place
South Mills, NC 27976
Phone: 757-759-5078

Kay's Child Care

Chantily Rd.
Camden, NC 27921
Phone: 252-338-9503

Camden County Schools: After School Daycare

Download the PDF version of the After School Daycare documents at:
<http://ccsnc.org/departments/school-daycare/>