

2016 COMMUNITY HEALTH NEEDS ASSESSMENT

The Outer Banks Hospital



ACKNOWLEDGEMENTS

This report serves as The Outer Banks Hospital's 2016 Community Health Needs Assessment (CHNA) and is the culmination of a tremendous effort by the Outer Banks Hospital and the members of Healthy Carolinians of the Outer Banks Partnership (HCOB), whose dedicated focus on and support for the health and well-being of the residents of Dare County is indeed remarkable:

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Executive Summary

The 2016 Dare County Community Health Assessment (CHA) is both a process and a document that describes the current health status of Dare County. The document was developed through a partnership between the Dare County Department of Health & Human Services (DCDHHS), The Outer Banks Hospital (OBH) and the Vidant Health System (VHS) and Public Health Consultant (PHC), Sheila S. Pfaender with the oversight of Healthy Carolinians of the Outer Banks (HCOB). All of these parties formed the Dare County CHA team.

Secondary data was collected by PHC using numerous readily available secondary data sources, representing data from the local, state and national level. In addition to the secondary data, primary data was also collected. DCDPH, OBH, and VHS also reached out to Dare County residents to gain a better understanding of their health status including health issues/diagnoses, preventative health activities, identified health needs, and barriers to health within the county. Feedback was obtained through a survey process, as well as small focus group discussions.

After data was compiled, it was reviewed and analyzed for populations at-risk for poor health outcomes. These populations were identified as: uninsured and underinsured; persons living in poverty; minorities; males; persons with poor access to transportation; and the elderly. Next, the CHA team reviewed populations at-risk along with primary and secondary data to establish a watch list of community health concerns. The watch list included chronic diseases, unintentional injuries, mental health, substance abuse and older adult population issues. Community health prevention and promotion resources were analyzed and service inventories focusing on watch list items were conducted by HCOB to identify needs currently being met and potential gaps or opportunities.

After review of the data, populations at-risk for poor health outcomes, and completed service inventories, the HCOB partnership conducted a prioritization process of the health concerns identified on the watch list. Magnitude of the problem, seriousness of the consequences, feasibility of correcting the problem and the overall average of all three criteria were used to rank the health issues.

The HCOB partnership elected to address:

- Chronic diseases & healthy weight by continuing the Healthy Living Taskforce
- Older adult population issues by refocusing the Access to Healthcare Taskforce to a Friendly Aging Taskforce & continuing the Dementia/Alzheimer's Taskforce
- Substance abuse & mental health by inviting the leadership of the existing community-based substance abuse & mental health taskforces to join the HCOB partnership and establish a Behavioral Health Communication Taskforce.

Members of the Dare County community are invited and encouraged to become a part of the journey towards optimal health by joining one of the HCOB taskforces. Community progress made on these health priorities will be available during the years between the CHA by the State of the County Health report.

Background

Local public health agencies in North Carolina (NC) are required to conduct a 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 (NCDPH) and the local public health agency. Furthermore, a CHA is required for local public health department accreditation through the NC Local Health Department Accreditation Board (G.S. § 130A-34.1). As part of the US Affordable Care Act of 2011, non-profit hospitals are also now required to conduct a community health (needs) assessment at least every three years. Recognizing that duplicate assessment efforts are a poor use of community resources, LHDs and non-profit hospitals across the state are developing models for collaboratively conducting the community health assessment process. This document is the culmination of such a partnership between DCDHHS, OBH, and VHS.

In Dare County, the HCOB Partnership serves as a coordinating body between DCDHHS, OBH, and VHS for the CHA. The HCOB Partnership consists of members that represent local agencies and organizations that serve the health and human service needs of the local population, as well as representatives from businesses, communities of faith, schools and civic groups. The partnership was established in 2002 and has remained a community catalyst focused on addressing health needs in Dare County. HCOB has been the team that has coordinated the CHA process since its inception. During assessment years, the partnership meets on a monthly basis to provide oversight, direction, and resources to complete the CHA. This process has strengthened the partnership between HCOB, OBH, and DCDHHS.

The CHA, which is both a process and a document, investigates and describes the current health status of the community, what has changed since the last assessment, and what still needs to change to improve the health of the community. The process involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, 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.

The partners contracted with Sheila S. Pfaender, Public Health Consultant, to assist in conducting the 2016 Community Health Needs Assessment for Dare County. The contract was part of a system-wide effort that included all of Vidant Health's primary service counties. The assessment process incorporated 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 (December 2011). The assessment also adheres to the 2012 standards for community assessment stipulated by the NC Local Health Department Accreditation (NCLHDA) Program and The Internal Revenue Service (IRS) 2014 final ruling implementing requirements for tax-exempt hospitals under Section 501(r) of the Affordable Care Act (ACA).

The CHA coordinators from the DCDHHS, OBH and Vidant Health 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 review demographic, socioeconomic, health and environmental data; (2) a community input phase to receive input from community members utilizing a survey and small group discussions; (3) data synthesis and analysis phase; (3) a period of data reporting and discussion among community partners; (4) a community input phase to elicit opinion and ideas regarding the assessment outcomes among community stakeholders; and (5) a prioritization and decision-making phase. Upon completion of this work the CHA 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 Dare County.

Overall Assessment Methodology

In order to learn about the specific factors affecting the health and quality of life for Dare County residents, the consultant accessed numerous readily available secondary data sources, representing data from the local, state and national level. All data sources are listed in Appendix A of this report. The author has made every effort to obtain the most current data available at the time the report was prepared.

It is instructive in any community health assessment to relate local county level data to similar data in other jurisdictions, Dare County data is compared to "like" data describing the state of NC as a whole, as well as to data from ten counties that comprise the Vidant Health primary service area, referred to as the "region." Where Dare County data is compared to this "region," the regional data includes the compilation of data from Beaufort, Bertie, Chowan, Dare, Duplin, Edgecombe, Greene, Hertford, Hyde and Pitt Counties. In other cases Dare 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 previous assessment three years ago, but as far back as comparable data is available. A summary of the secondary data is included in Appendix B of this report.

In efforts to collect data from residents and their experiences living in Dare County, primary data collection was completed through community surveys and community focus groups. All survey and focus group demographic comparisons, tools, and results are included in Appendix C of this report.

CHAPTER ONE: DEMOGRAPHIC DATA

About Dare County

Dare County is the easternmost county in North Carolina, and covers an area of over 1,000 square miles of which only one-third is land. It is home to approximately 35,000 year round residents and stretches from the northern shores of Duck to the mainland on North Carolina's eastern cost, to the southern shores of Hatteras Island.

General Population Characteristics

The following general population characteristics of Dare County and its comparator counties were based on 2014 US Census data population estimates presented in Table 1.

- As outlined in the July 1, 2014 US Census data estimates, the population of Dare County is estimated to be 35,104.
- The population of Dare County is evenly divided between males and females, which is the typical pattern. The gender balance in the Region is similar with an average of 48% males and 52% females.
- The overall median age in Dare County was 45.5, approximately 3.8 years older than the median age in the Region, and over seven years older than the median age for NC as a whole.

2014 Population Estimates												
Location	Total	Mal	es	Fema	iles	Age	Under 18	Years	18-64 \	Years	65 Years 8	& Older
	#	#	%	#	%	Median *	#	%	#	%	#	%
Dare	35,104	17,353	49.4	17,751	50.6	45.5	6,886	19.6	21,668	61.7	6,550	18.7
Regional Total	458,613	221,596	48.3	237,017	51.7	41.7	100,240	21.9	287,278	n/a	71,095	15.5
State Total	9,943,964	4,844,593	50.8	5,099,371	53.5	38.2	2,287,549	23.0	6,193,053	62.3	1,463,362	14.7
State Average	99,440	48,446	n/a	50,994	n/a	n/a	22,875	23.0	61,931	n/a	14,634	n/a

Table 1. General Demographic Characteristics (2010 US Census data and 2014 Population estimates). Note: Percentages by gender are calculated. *Metric for Regional Total Median Age calculated as the arithmetic mean of county values. Source: US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010; 2014 Population Estimates: April 1, 2010 to July 1, 2014 (PEPAGESEX), http://factfinder2.census.gov.

Minority Populations

The population of Dare County is not as racially or ethnically diverse as NC as a whole (or as the Region). According to the U.S. Census Bureau 2014 Population Estimates, the non-white population in Dare County is approximately 6% of the overall population. In the Region, the non-white population is approximately 39% of the population, compared to the state at 28.5%.

- Whites composed 94% of the total population; the Regional comparable figure was 60.9% and the statewide figure was 71.5%.
- Blacks/African Americans composed 3% of the total population; the Regional comparable figure was 35.4% and the statewide figure was 22.1%.
- American Indians and Alaskan Natives composed 0.6% of the total population; the Regional comparable figure was 0.8% and the statewide figure was 1.6%.
- Asians, Native Hawaiians and Other Pacific Islanders composed 0.7% of the total population; the Regional comparable figure was 1.3% and the statewide figure was 2.8%.
- Hispanics/Latinos of any race composed 6.8% of the total population; the Regional comparable figure was 8% and the statewide figure was 9%.

Population Growth

Dare County's population growth is expected to slow over the coming decades. The population in the Region and state is also expected to grow at a slower rate during this same time. Between 2000 and 2030, the county

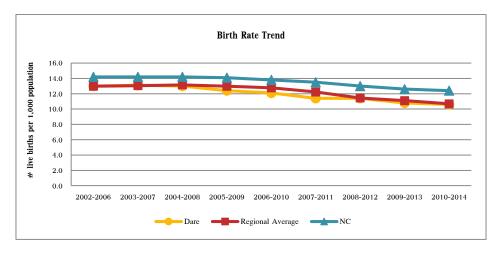
population is expected to increase by 23.3% overall, while the Region increases by 20% and NC grows by 44%. (Table 2).

% Total Population Growth								
Location 2000 to 2010 2010 to 2020 2020 to 2030 2000 to 2030								
Dare	11.7	6.0	2.0	23.3				
Regional Total	14.6	2.8	1.8	19.9				
State Total	15.6	10.9	9.8	44.2				

Table 2. Population Growth in Overall Population, by Decade (2000 through 2030). Note: percentage change is calculated. Source: Profile of General Demographic Characteristics: 2000 (DP-1), SF1 and Profile of General Population and Housing Characteristics: 2010 (DP-1). U.S. Census Bureau, American FactFinder: http://factfinder2.census.gov; Age, Race, and Sex Projections, Age Groups — Total, July 1, 2020 County Total Age Groups — Standard last updated October 7, 2015. North Carolina Office of State Budget and Management County/State Population Projections: https://www.osbm.nc.gov/demog/countytotals_standardagegroups

Birth Rate

Overall population growth is a function both of increase (via immigration and birth) and decrease (via emigration and death). Graph 1 illustrates that the birth rate is declining in Dare County, the Region, and the state. A closer examination by racial group reflects that birth rates in Dare County have decreased overall among all racial groups compared for most of the period presented. A similar trend is seen across the Region and the state. The highest birth rate occurred among the Hispanic population.

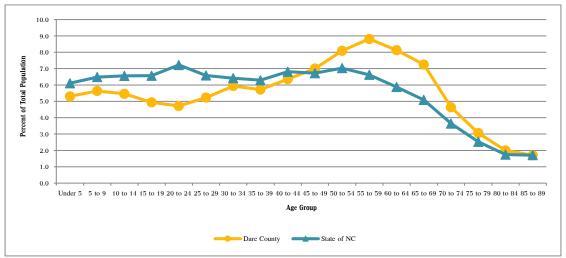


Graph 1. Birth Rate Trend, Live Births per 1,000 Total Population (Nine 5-Year Aggregates, 2002-2006 through 2010-2014). Source: NC State Center for Health Statistics, Health Data, County Level Data, County Health Databooks 2008, 2009, 2010, 2011, 2012, 2013; 2014; http://www.schs.state.nc.us/schs/data/databook/.

Age

The following information about the age (and gender) distribution of the Dare County population was derived from the US Census Bureau 2014 Population Estimates. Generally, these data demonstrate that Dare County has a population distribution skewed older than the distribution for the state as a whole.

- In terms of both numbers (3,094) and percent (8.8%), the largest segment of the population in Dare County was the age group 55-59. This differed significantly from NC as a whole, where the segment composing the largest number and percent (7.2%) of the state's population was the younger age group, 20-24.
- Persons 65 years of age or older composed 18.7% of the population in Dare County, compared to 14.6% of the population of NC.
- Persons 19 years of age and younger composed 21.3% of the population in Dare County, compared to 25.8% of the population of NC.



Graph 2. Population Distribution by Age and Gender, Number and Percent (US Census July 1, 2014 Estimates). Source: US Census Bureau, American FactFinder, 2010 Census, 2010 Demographic Profile Data, Summary File DP-1, Profile of General Population and Housing Characteristics: 2010; http://factfinder2.census.gov.

Elderly Population

Because the proportion of the Dare 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 future health and human service needs.

The following information regarding the elderly population in Dare County was extracted from the 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 major age group in Dare 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 20 years between 2010 and 2030 is the group aged 85 and older, which is predicted to grow by 220% over that period, from 1.0% to 3.2% 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, which is predicted to grow by 146% over that period, from 4.1% to 10.1% of the total county population. In third position is the segment aged 65-74, which is predicted to grow by approximately 61%, from 8.7% to 14.0% of the total county population.

Children and Families

According to the U.S. Census Bureau figures for 2010-2014, there were 14,852 households in Dare County. A household includes all the people who occupy a housing unit, which may be a single family, multiple families, one person living alone, or any other group of unrelated people who share a living space. A family household consists of a householder and one or more people living in the same household who are related by birth, marriage or adoption.

When examining the households in Dare County, 27% of the households were family households with children under 18 years of age. Sixty-five percent of the family households with children under 18 years were headed by a married couple as compared to 58% in the region, and 65% within the state. Twenty-three percent were headed by a female householder (no husband present) compared to 34% in the Region and 27% in the state. Twelve percent of these households were headed by a male householder (no wife present) completed to 8% in the Region and 8% in the state. The head of household may have implications for the care of children as studies have shown that different genders approach health prevention and maintenance differently.

In addition to this data, a further examination of children and families revealed that 43% of the estimated 687 grandparents in Dare County are living with their minor grandchildren and also are financially responsible for their care. Grandparents are considered responsible for grandchildren if they are financially responsible for food, shelter, clothing, day care, etc. for any/all grandchildren. This data also has implications for care as the elderly population has its own unique health challenges. It is important to note that Dare County's percentage of grandparents living with and financially responsible for their minor grandchildren is less than the Region (52%) and the state (48%).

Military Veterans

A population group that sometimes needs special health services is military veterans. An analysis of the 2010-2014 population estimates demonstrated that Dare County did not have the largest population of military veterans among the Regional comparisons. Veterans composed 11.1% of Dare County's overall adult civilian population in the period cited, which was consistent with the Regional percentage of 11.2% and higher than the state at 9.6%.

Although it was not home to the largest contingent of veterans, Dare County did have the largest percentage of veterans over the age of 65 among comparator groups: 53.0% of the veterans in Dare County were age 65 or older, compared to 42% in the Region and 41 % of NC.

Foreign-Born 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 single five-year US Census Bureau estimates (2010-2014), there were 2,269 foreign-born residents residing in Dare County in 2014. Approximately 41% entered the US between 2000 and 2009, while approximately 20% entered between 1990 and 1999

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.

Among the 1,050 households (7% of all households in Dare County) that speak a language other than English, the most common language is Spanish (82%). Among the Spanish-speaking households, 31% would be considered "limited English speaking". No other non-English speakers are considered linguistically isolated within Dare County.

CHAPTER TWO: SOCIOECONOMIC DATA

Tier Designation

The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns a Tier Designation. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2, and the 20 least distressed as Tier 3. The Tier system is incorporated into various state programs, including a system of tax credits (Article 3J Tax Credits) that encourage economic activity and business investment in less prosperous areas of NC. From 2011 – 2016, Dare County has been assigned Tier 2 designation.

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.

In Dare County, the 2014 per capita personal income was \$30,958 which was \$5,350 above the state average. This figure has only increased slightly since 2010. The 2014 Median household income was \$55,520 which is also above the state average by \$8,827. This figure has also increased slightly since 2010. The 2014 Median family income was \$63,629 which is \$6,301 above the NC average. This figure has actually decreased since 2010. It is worth noting that when compared to the Region, Dare County is the only county in the Region with income levels higher than the state average.

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

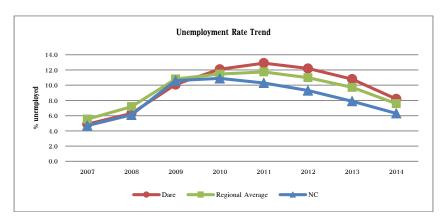
An examination of the various categories of industry by sector in Dare County and its three jurisdictional comparators for 2014 was completed. This analysis included the number employed in each sector, the percentage of all employment that the number represents, and the average annual wage for people employed in each sector.

• The industry in Dare County that employed the largest percentage of the workforce (24.3%) was Accommodation & Food Services. This sector earned an average of \$379 per week.

- Retail Trade accounted for the second largest percentage of the Dare County workforce, at 19.1%, followed by Real Estate & Rental & Leasing, at 12.66%. No other sector accounted for even 10% of the total workforce in Dare County, clearly illustrating the county's economic roots in—and dependence upon—the travel and tourism industry.
- It is important to note that persons working in the Accommodation and Food Services and the Retail Trade sectors tend to lack employment benefits such as health insurance and retirement programs; many in these sectors work for a low-wage, on a part-time basis, and sometimes work multiple jobs. These are sectors whose relative poverty leaves them vulnerable to emotional stress and poor health outcomes.
- In the Region, the sector employing the largest percentage of the workforce (16.55%) was Health Care and Social Assistance, followed by Retail Trade (12.73%), Manufacturing (11.95%) and Educational Services (11.77%).
- Statewide, the sector employing the largest percentage of the workforce was Health Care & Social Assistance (14.29%), followed by Retail Trade (11.79%) and Manufacturing (11.06%).

Unemployment

According to 2014 data, a calculated annual average of 1,623 individuals were unemployed in Dare County, calculating to an unemployment rate of 8.2. Given the tourist industry in Dare County, it is an area clearly impacted by seasonal employment. The monthly average unemployment rate declined each month from 13.8 in January 2015 to a low point of 4.8 in August and then climbed again until it was 9.3 in December 2015 compared to the Region (7.3), the State (5.3), and the Nation (4.8).



Graph 3. Annual Unemployment Rate Trend (2007-2014). Source: NC Employment Security Commission, Labor Market Information, Workforce Information, Employed, Unemployed and Unemployment Rates, Labor Force Statistics, Single Areas for All Years; http://eslmi03.esc.state.nc.us/ThematicLAUS/clfasp/startCLFSAAY.asp.

Poverty

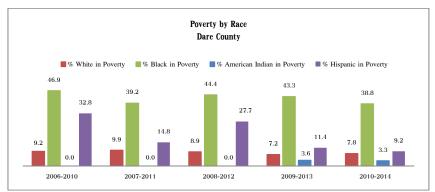
The poverty rate is the percent of the population (both individuals and families) whose money income (which includes job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below a federally established threshold; this is the "100%-level" figure. The overall poverty rate in Dare County was much lower than the comparable state and Regional rate throughout the period of 2006-2010 through 2010-2014. The poverty rate for children under 18 has decreased overall since 2010 and remains lower in Dare County (13.8% in 2010-2014) compared to NC (25.0%) and the Region (35.7%). In 2014, an estimated 3,128 individuals, or 9% of the population, were living below the poverty level in Dare County. It is important to note that poverty may have strong racial and age components that are not discernible in these numbers.

Location	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Dare	10.5	11.1	10.4	8.8	9.1
Regional Average	20.1	21.5	23.5	23.3	23.0
State Average	15.5	16.1	16.8	17.5	17.6

Table 3. Poverty Rate Trend (2006-2010 and 2007-2011 Five-Year Estimates). a - Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show. b - US Census Bureau, American Fact Finder, American Community Survey, 2010 American Community Survey 5-Year Estimates, Data Profiles, County, North Carolina (Counties as listed); http://factfinder2.census.gov. c - US Census Bureau, American Fact Finder, American Community Survey, 2011 American Community Survey 5-Year Estimates, Data Profiles, County, North Carolina (Counties as listed); http://factfinder2.census.gov.

Poverty & Race

The poverty rate among African Americans in Dare County exceeded the comparable poverty rates for other racial and ethnic groups throughout most of the period cited. In NC as a whole, the highest poverty rate over most of the period cited occurred among Hispanics, followed by African Americans.

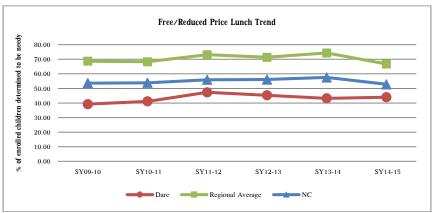


Graph 4. Persons in Poverty by Race (2000; 2006-2010 and 2007-2011 Five-Year Estimates). Source: US Census Bureau, American Fact Finder, ACS 5-Year Estimates, 2010 through 2014, Table S1701 Poverty Status in the Past 12 Months. http://factfinder.census.gov/

Children Receiving Free or Reduced-price School Lunch

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

The percentage of students in Dare County enrolled for free or reduced-price school lunch has increased over time as shown in Graph 5. In Dare County, a lower percentage of students have been identified as "needy", compared to the Region and the State.



Graph 5. Percent of Students Enrolled for Free or Reduced-Price School Lunch (SY2009-2010 through SY2014-15). Source: Free and Reduced Student Data by Site, Public School Year-to-Date Data 2009-2010 [and other years as noted]. Public Schools of North Carolina, Public Schools of North Carolina, Financial and Business Services: http://www.ncpublicschools.org/fbs/resources/data/

Housing Costs

The estimated median monthly mortgage cost among Dare County homeowners, which has changed little over time, was \$1,681 in 2014. This cost is \$409 higher than the NC median. The estimated median gross monthly rent among Dare County renters has increased slightly since 2010 and was \$1,041 in 2014. This figure is \$250 higher than the NC median.

A closer examination of housing costs as related to percentage of monthly income reflects potential challenges individuals face with regard to balancing cost of housing with other expenditures. The percentage of Dare County homeowners spending more than 30% of their monthly income on housing has increased from 53% in 2010 to 66% in 2014 (compared to 31% in NC in 2014). The percentage of renters spending more than 30% of their income on housing has decreased from 52% in 2011 to 39% in 2014 (compared to 46% in NC in 2014).

Homelessness

Every January, the NC Coalition to End Homelessness conducts a point-in-time count of homeless individuals. Between 2009 and 2015, Dare County participated in only the most recent two years. The data reveals that Dare County reported, 12 homeless people in 2014 and 44 in 2015. The majority of the homeless identified were adults (28 in 2015) but children in families are also among the homeless (9 children in 5 households in 2015). Veterans and the chronically homeless are two subpopulations that are important to note. In 2015, 1 veteran was counted and 22 chronically homeless individuals were counted.

Dare County's first homeless shelter initiative, Room in the Inn, opened in Kill Devil Hills in January 2009. This church-based, all-volunteer program was designed to provide temporary food and shelter for homeless people at area churches, primarily during the winter months (15). Host churches provide dinner, overnight accommodations, breakfast, and a bag lunch. Volunteer hosts stay overnight with the guests. The program utilizes a formal intake process off-site from the host church to screen participants; the screening includes a breathalyzer test. The intake worker drives the client to the hosting church and stays for an hour to assure all is well and answer question; the intake worker returns the following morning to return guests to the intake site.

It should be noted that accurate data on the size and nature of the homeless population is elusive at best, especially in a community like Dare County where it is possible to shelter out-of-doors for much of the year. It is likely that Room in the Inn hosted only a fraction of the total homeless population, especially during recent challenging economic times.

Educational Achievement

According to the US Census Bureau and the NC Public Schools data, a comparison of state and county data reveals that Dare County has a lower population who's highest attainment was a high school diploma (or equivalent) only (24.4% in 2014) as compared to the Region (31.9%) and the state (26.9%). Dare County also

has a higher population who had a bachelor's degree or higher (29.4% in 2014) as compared to the Region (16.4%) and the state (27.8%).

When comparing Dare County to the NC average, the 2014-2015 4-year cohort high school graduation rate was higher in Dare County Schools (93.8%) as compared to the Region (83.5%) and the state (85.6%). High school graduation rates were lowest among students with limited English proficiency (Dare 55.6%, region 47.6%, NC 57.8%).

Educational System

The number of students enrolled in Dare County schools fluctuates by less than a hundred students each year. During the 2014-15 school year, 5,144 students were enrolled in Dare County public schools. Statewide, the number of enrolled students has increased each year from 2009-2010 to 2014-15.

The high school drop out rate has decreased overall since 2011-12 to 2013-14, from 2.66 to 1.21, though it remains lower than in the Region (1.93) and the state (2.28) in 2013-14.

The high school reportable crime rate is variable in Dare County. In SY 2013-14 the county rate of 6.32 was much lower than the Regional average of 11.96 and the state rate of 12.37.

Crime and Safety

Two types of crime are generally examined to understand more about a county's crime and safety – violent and property crimes. Violent crimes include offenses of murder, rape, robbery, and aggravated assault. Property crime includes the offenses of burglary, larceny, and motor vehicle theft. For the purposes of this assessment, data was examined by individual type and combined as an "index crime rate."

The "index crime rate" is the rate of the sum of violent crime and property crime. Examining trends over time and comparing those to the state and Region reveals the index crime rate in Dare County was higher than the comparable NC average, as well as the Regional Average, in every year cited from 2001-2014. However, it is important to note in 2014 the Dare County crime rate was the lowest it had been over the 14 year period with 3,597.7 crimes committed per 100,000 population.

A closer examination of crimes by type reveals that the majority of crimes committed are property crimes. While property crimes are more common, the Dare County property crime rate has decreased from a high of 6,359.6 in 2011 to 3,359.5 in 2014, though it has been consistently higher than the Region (2,705.6 in 2014) and NC (2,954.1 in 2014).

Violent crime rates fluctuate within Dare County. However, the county has seen an overall decrease in violent crimes since 2008 and the violent crime rate remains lower (238.1 in 2014) compared to the state (333.0) and the Region (315.5).

Juvenile Crime

In reviewing data from the NC Department of Public Safety with a specific focus on crimes committed by juveniles (ages 6-17), the crimes are reported as "Complaints." The term "Complaint" is defined as 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. Complaints are divided into two categories: "Undisciplined" and "Delinquent."

The term "Undisciplined" refers to disobedience beyond disciplinary control of parent/guardian (e.g., truancy, vagrancy, running away from home for more than 24 hours). Complaints of "undisciplined" youth in Dare County between 2011-2014 did not follow a clear trend. In 2014, 18 youths were undisciplined which calculated to a rate of 3.86. The "rate" equals the number of events per 1,000 youth in the age group.

Over the same period the number and rate of complaints of "delinquent" youth in the county decreased from a high of 186 and 50.12, respectively, in 2011 to 79 and 20.36 in 2014. "Delinquency" refers to acts committed

by youths that would be crimes if committed by an adult. Additional information reflects that 8 Dare County youth were sent to secure detention in 2011; 5 were sent in 2014.

Domestic Violence

Data from the NC Council for Women indicates the number of domestic violence clients seen by local agencies is variable in Dare County, ranging from a high of 571 in 2010-11 to a low of 324 in 2014-15. The number of services provided (advocacy, counseling, legal help, transportation, etc.) is similarly variable. In 2014-15, 1,755 services were provided to domestic violence clients. The domestic violence shelter serving Dare County did not reach full capacity on any day in FY2014-2015.

Child Maltreatment

The responsibility for identifying and reporting cases of child abuse, neglect and exploitation falls to the child protective services program within a county's department of social services. Generally speaking, such a unit will have sufficient staff to handle intake of all reports. However, an agency's ability to investigate and monitor reported cases may vary from year to year, depending on the number of properly trained staff available to it; hence, follow-up on reports may vary independently of the number of reports.

Child welfare data from the NC Social Services Data Warehouse at UNC indicates the numbers of children subject to abuse, neglect, or abuse and neglect in Dare County have fluctuated without pattern over the period cited. A decreasing proportion of reports are eventually substantiated. Neglect-only cases composed the most common type of child maltreatment. In Dare County in 2014-15, 80% of the substantiated cases of abuse, neglect, or dependency (n=5) were white children [NC=57%]. 60% of the victims were male [NC=52%] and 80% were under the age of 5 [NC=52%]

CHAPTER THREE: HEALTH STATISTICS

Health Statistics Methodology

Routinely collected mortality and morbidity surveillance data and behavior survey data can be used to describe the health status of Dare County residents. 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 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

Age-adjustment

Mortality rates, or death rates, are often used as measures of the health status of a community. 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 "young" people, and others have a higher proportion of "old" 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 (NC SCHS). 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. It is particularly important to aggregate data for smaller jurisdictions like Dare County. 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.

Incidence

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

Incidence rate is calculated according to the following formula:

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

The incidence rates for certain diseases, are simple to obtain when data on newly discovered cases is routinely collected (cancer registry). However, locating accurate incidence data on diagnoses of conditions which are not normally reported to central data-collecting agencies is rare.

Mortality

Mortality is calculated by dividing the number of deaths due to a specific disease in a given period by the population size in the same period. Like incidence, mortality is a rate, usually presented as number of deaths per

100,000 residents. Mortality rates are easier to obtain than incidence rates since the underlying (or primary) cause of death is routinely reported on death certificates. However, some error can be associated with cause-of-death classification, since it is sometimes difficult to choose a single underlying cause of death from potentially many co-occurring conditions.

Mortality rate by cause is calculated according to the following formula: $(number\ of\ deaths\ due\ to\ a\ cause/population)\ X\ 100,000 = deaths\ per\ 100,000\ people$

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 prevalence percentage, or a count, but not a rate.

Prevalence

Prevalence, which describes the extent of a problem, 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 NC SCHS 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.

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 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 NC State Center for Health Statistics 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, the NC SCHS has suppressed 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. To be sure that unstable health data do not become the basis for local decision-making, this report will 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. Where exceptions occur, the narrative will highlight the potential instability of the rate 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. 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.)

Final Health Data Caveat

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

Health Rankings

America's Health Rankings

Each year for more than 20 years, America's Health RankingsTM, 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, including *determinants* (socioeconomic and behavioral factors and standards of care that underlie health and well-being) and *outcomes* (measures of morbidity, mortality, and other health conditions). Together the determinants and outcomes help calculate an overall rank. According to the 2015 America's Health Rankings, North Carolina ranked 31st overall out of 50 states where 1st is considered best.

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.

According to the 2015 County Health Rankings for NC, Dare County was ranked out of 100 counties (where 1 is best):

- 15th for health outcomes
- 10th in length of life
- 30th for quality of life
- 24th overall out of 100 for health factors
- 73rd for health behaviors
- 42nd for clinical care
- 13th for social and economic factors
- 6th for physical environment

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.

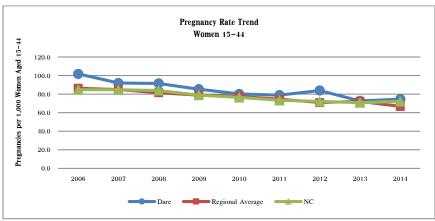
Maternal and Infant Health

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.

The NC State Center for Health Statistics data indicates the total pregnancy rates for Dare County, the region and the state have decreased overall since 2007. The 2014 pregnancy rate was 74.6 in Dare County, compared to 66.8 in the Region and 72.1 in NC.



Graph 6. Pregnancy Rate Trend, Women 15-44 (2006-2014). US Census Bureau, American FactFinder, 2014 Population Estimates, PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex. http://factfinder.census.gov/

Overall teen pregnancy rates in Dare County have trended downward since 2008; however, increased rates in 2009 and 2012 have brought the County rate closer to the rates in the Region and state. The 2014 teen pregnancy rate was 30.0 in Dare County, compared to 39.0 for the Region and 32.3 for the state. Among Dare County women age 15-44 the highest pregnancy rates appear to occur among Hispanics although they have demonstrated an overall decline from 2006-2014. The rate among Hispanic women is higher in Dare County compared to NC. Among Dare County teens, the rates over time appear quite variable and are unstable for most other racial groups. Dare County teen pregnancy rates for minorities tend to be higher than the State.

Pregnancy Risk Factors

Smoking During Pregnancy

The percentage of Dare County women who smoked during pregnancy increased between 2011 and 2014. When compared to Region and state data, the highest percentage of mothers who smoked while pregnant were in Dare County in 2014.

Inadequate Prenatal Care

The percentage of women receiving early prenatal care was lower in Dare County, compared to the Region and the State for most of the period below, but it rose to surpass both in 2014. Among racial groups, a slightly higher proportion of white women got prenatal care in the first trimester (77%) compared to African American women (60%) and Hispanic women (76%) in 2014.

Pre-Term, Low Weight and Very Low Weight Births

In Dare County from 2010-2014, the percentage of Pre-Term Births (babies born at less than 37 weeks) was 8.8%, compared to the Region at 13.4% and the state at 11.8%.

Low Weight Births (babies weighing less than or equal to 2500 grams or 5.5 pounds at birth) occurred in 5.8% of live births in Dare County, compared to the Region (9.9%) and the state (9.0%). The rate of low weight births has declined in Dare County since 2004-2008 and has remained lower than the state. The highest rate of low weight births, although unstable, is among African American mothers (18%).

Very Low Weight Births (babies weighing less than or equal to 1500 grams or 3.3 pounds at birth) occurred in 1.6% of live births in Dare County, compared to the Region (2.3%) and the state (1.7%). The rate has increased slightly overall since 2002-2006 but continues to remain lower than the state. The highest rate of very low weight births, although unstable, is among African American mothers (10%).

Infant Mortality

The total infant mortality rate in Dare County has decreased overall from a high of 7.1 in 2003-2007, but recent years have demonstrated an increase: from 4.1 in 2008-2012 to 5.5 in 2010-2014. It should be noted that all rates are technically unstable and should be interpreted cautiously.

The Dare County infant mortality rate has been consistently lower than the state (7.1 in 2010-2014) and the Regional (9.8 in 2010-2014) averages. According to the CDC, the 2013 infant mortality rate in NC was the 10th highest in the nation.

When infant mortality data was examined by race, none of the stratified rates were stable and therefore, were suppressed after 2008-2012. Although NC SCHS changed the categories used for racial stratifications in 2006-2010, the infant mortality rate tends to be higher among minority women in Dare County. When looking at the number of infant deaths, more infant deaths in Dare County occur among white women: 60% (6 of 10) in 2010-2014.

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 overall life expectancy in Dare County is 79.6. When compared to the Regional Mean (77.7) and the state (78.3), Dare County had the longest life expectancies in all categories (Male, Female, White, Black/African American).

		Se	ex	Race	
Location	Overall	Male	Female	White	African-American
Dare	79.6	77.1	82.2	79.7	78.0
Regional Total	n/a	n/a	n/a	n/a	n/a
Regional Arithmetic Mean	77.7	75.0	80.3	78.4	76.5
State Total	78.3	75.8	80.7	78.9	75.9

Table 4. Dare County, State-Level Life Expectancies by Age, Sex, Race and Race by Sex (2012-2014). Source: North Carolina Center for Health Statistics, Life Expectancy - State & County Estimates: http://www.schs.state.nc.us/data/lifexpectancy/

Mortality

Leading Causes of Death

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

Age- Adjusted Rates (2010-2014)	County # of Deaths	County Mortality	Rate Difference
Diseases of Heart	353	174.0	+4.9%
Cancer	348	156.7	-8.8%
Pneumonia & Influenza	111	59.8	+239.8%
Chronic Lower Respiratory Diseases	87	42.0	-8.7%
All Other Unintentional Injuries	72	39.0	+31.8%
Cerebrovascular Disease	55	28.2	-34.4%
Alzheimer's Disease	40	22.1	-24.3%
Suicide	30	16.8	+35.5%
Unintentional Motor Vehicle Injuries	21	13.4	-0.7%
Chronic Liver Disease & Cirrhosis	32	13.1	-35.1%
Nephritis, Nephrotic Syndrome, & Nephrosis	22	11.4	-32.9%
Septicemia	24	10.8	-16.9%
Diabetes Mellitus	15	7.5	-66.1%
Homicide	3	1.8	-68.4%
Acquired Immune Deficiency Syndrome	4	1.7	-34.6%

Table 5. Dare County, Cause of Death Rank, Age-Adjusted Death Rates by County (2010-2014). Source: North Carolina State Center for Health Statistics (NC SCHS), 2016 County Health Data Book website: http://www.schs.state.nc.us/data/databook/

Table 5 compares the number of deaths and mortality rates for the 15 leading causes of death in Dare County to the state. The causes of death are listed in descending order of rank in Dare County. Differences between Dare County and NC mortality rates are discussed below. During the time period 2010-2014, Dare County experienced a higher mortality rate than the state of NC for pneumonia & influenza, suicide, chronic liver disease & cirrhosis, all other unintentional injuries, and diseases of the heart.

In NC, the top three leading causes of death for each age group are:

- Age 0-19: Conditions originating in the perinatal period; Congenital anomalies; Motor vehicle injuries
- Age 20-39: Other unintentional injuries; Motor vehicle injuries; Suicide
- Age 40-64: Cancer (all sites); Diseases of the heart; Other unintentional injuries
- Age 65-84: Cancer (all sites); Diseases of the heart; Chronic lower respiratory diseases
- Age 85+: Diseases of the heart; Cancer (all sites); Alzheimer's disease

Further examination of the leading causes of death by age reveal the top 3 causes of death in Dare County.

Age Group	Rank	Cause of Death in Dare County (2010-2014)	
00-19	1	Congenital anomalies (birth defects)	
	2	Conditions originating in the perinatal period	
	3	Motor vehicle injuries	
20-39	1 Other unintentional injuries		
	2	Suicide	
	3	Motor vehicle injuries	
40-64	1	Cancer – all sites	
	2	Diseases of the heart	
	3	Other unintentional injuries	
65-84	1	Cancer – all sites	
	2	Diseases of the heart	
	3	Chronic lower respiratory diseases	
85+	1	Diseases of the heart	
	2	Pneumonia & influenza	
	3	Cancer – all sites	

Table 6. Dare County, Ten Leading Causes of Death by County of Residence and Age Group: Ranking, Number of Deaths, and Unadjusted Death Rates per 100,000 Population (2010-2014). Source: North Carolina Center for Health Statistics (NC SCHS), 2016 County Health Data Book website: http://www.schs.state.nc.us/data/databook/

It is important to note that many of the leading causes of death in Dare County have decreased over time. A comparison of the mortality rates for Dare County and NC's leading causes of death from 2002-2006 to 2010-2014 shows that heart disease, pneumonia & influenza, all other unintentional injuries, suicide, and liver disease remain higher than the state rates.

Cause of Death Rank by Descending Overall	Rate in	Rate in	2002-2006 to
Age-Adjusted Rate (2010-2014)	2002-2006	2010-2014	2010-2014
Diseases of Heart	156.0	174.0	+11.5%
Cancer	195.7	156.7	-20.0%
Pneumonia & Influenza	60.6	59.8	-1.3%
Chronic Lower Respiratory Diseases	28.8	42.0	+45.8%

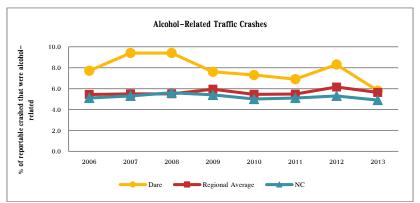
	10.1	•••	
All Other Unintentional Injuries	40.1	39.0	-2.7%
Cerebrovascular Disease	44.9	28.2	-37.2%
Alzheimer's Disease	18.4	22.1	+20.1%
Suicide	10.1	16.8	+66.3%
Unintentional Motor Vehicle Injuries	24.0	13.4	-44.2%
Chronic Liver Disease & Cirrhosis	9.6	13.1	+36.5%
Nephritis, Nephrotic Syndrome, & Nephrosis	10.5	11.4	+8.6%
Septicemia	13.6	10.8	-20.6%
Diabetes Mellitus	16.2	7.5	-53.7%
Homicide	3.1	1.8	-41.9%
Acquired Immune Deficiency Syndrome	1.7	1.7	No Change
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Table 7. Dare County, Cause of Death Rank by Descending Overall, Age-Adjusted Rate (2002-2006; 2010-2014) Source: North Carolina State Center for Health Statistics (NC SCHS), 2016 County Health Data Book website: http://www.schs.state.nc.us/data/databook/

Morbidity

Vehicular and Alcohol-Related Motor Vehicle Crashes

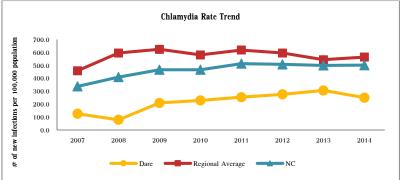
Dare County has a higher incidence of alcohol-related vehicular crashes than the state and region. According to the NC Highway Safety Research Center, over the period from 2006 through 2013, an average of 7.8% of all traffic crashes in Dare County were alcohol-related. Statewide, the comparable figure was 5.2% and it was 6% across the Region.



Graph 7. Alcohol-Related Traffic Crashes (2006-2013). Source: North Carolina Alcohol Facts. Highway Safety Research Center at the University of North Carolina at Chapel Hill: http://www.hsrc.unc.edu/ncaf/crashes.cfm

Sexually Transmitted Infections - Chlamydia

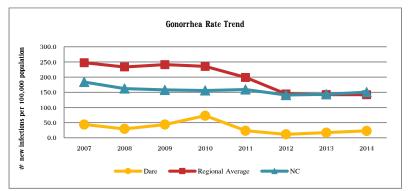
The chlamydia infection rate in Dare County has increased since 2008, though it remains lower compared to the state and the Region. In 2014, there were 88 new cases of chlamydia in Dare County, calculating to a rate of 250.7, compared to 501.9 statewide. Of the 15-24 year olds who were tested for chlamydia in 2011, 3.5% tested positive, compared to 10.9% in NC.



Graph 8. Chlamydia Rate Trend (2007-2014). Sources: N.C. Chlamydia Cases by County of Report, 2007-2011 (Table 7), from 2011 HIV/STD Surveillance Report. Communicable Disease Branch, Epidemiology Section of the Division of Public Health, North Carolina Department of Human Services: http://epi.publichealth.nc.gov/cd/stds/annualrpts.html; North Carolina Newly Diagnosed Chlamydia Rates by County of Diagnosis and Year of Diagnosis, 2010-2014 (Table 13), from 2014 North Carolina HIV/STD Surveillance Report. Communicable Disease Branch, Epidemiology Section of the Division of Public Health, North Carolina Department of Human Services: http://epi.publichealth.nc.gov/cd/stds/annualrpts.html

Sexually Transmitted Infections - Gonorrhea

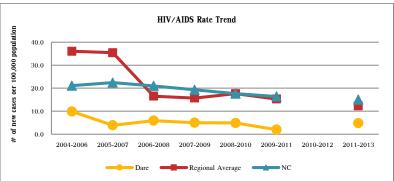
The gonorrhea infection rate in Dare County has increased recently but was lower than both the state and the Region throughout the period cited. Most of the recent rates are based on low numbers and should be interpreted with caution. In 2014, there were 8 new cases of gonorrhea in Dare County, calculating to a rate of 22.8, significantly lower than the state rate of 150.4. The gonorrhea rate was highest among African Americans in 2006-2010 (the last year for which stratified data is available): 406.9 compared to 48.2 overall.



Graph 9. Gonorrhea Rate Trend (2007-2014). Sources: N.C. Gonorrhea Cases by County of Report, 2007-2011 (Table 8), from 2011 HIV/STD Surveillance Report. Communicable Disease Branch, Epidemiology Section of the Division of Public Health, North Carolina Department of Human Services: http://epi.publichealth.nc.gov/cd/stds/annualrpts.html; N.C. Newly Diagnosed Gonorrhea Rates by County of Diagnosis and Year of Diagnosis 2010-2014 (Table 12), from 2014 HIV/STD Surveillance Report. Communicable Disease Branch, Epidemiology Section of the Division of Public Health, North Carolina Department of Human Services: http://epi.publichealth.nc.gov/cd/stds/annualrpts.html

Sexually Transmitted Infections – HIV/AIDs

Although the numbers are too low to yield stable rates, the rate of newly diagnosed HIV infections in Dare County (an average of 5.7 between 2012-2014) was less than half the comparable state rate (13.4). When numbers are aggregated over three-year periods to stabilize them, the Dare County rates are still consistently and significantly lower compared to NC and the Region. Thirty-nine people in Dare County were living with HIV as of the end of 2014.

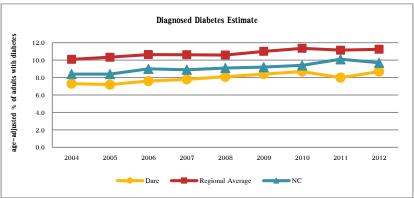


Graph 10. HIV/AIDS Rate Trend (2004-2013) Source: North Carolina Epidemiologic Profile for HIV/STD Prevention & Care Planning, Annual Reports. Division of Public Health, NC Department of Health & Human Services, Communicable Disease Surveillance Unit, North Carolina Communicable Disease Branch: http://epi.publichealth.nc.gov/cd/stds/epiprofile.html

Adult Diabetes

The average prevalence of diabetes among Dare County adults has increased overall since 2008 but was lower than the state and the Region for the entire period shown.

Over the 9-year period presented, the Dare County average was 8.0%, compared to 10.8% Region-wide and 9.1% across the state. Approximately 11.6% of respondents to the Dare County Community Health Survey reported having received a diagnosis of diabetes.



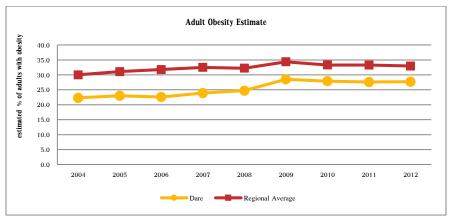
Graph 11. Diagnosed Diabetes Estimate (2004-2012). Source: County-Level Data, Diagnosed Diabetes Prevalences, North Carolina, 2004 through 2012. Centers for Disease Control and Prevention, National Diabetes Surveillance System: http://www.cdc.gov/diabetes/data/index.html

Because the prevalence of diabetes in Dare County may be increasing, it may be illustrative to examine hospital discharges among Dare County residents for diabetes (ICD-9 Code 250xx). These data are from TOBH only. Eight percent of all ED discharges under this code was composed of blacks; 85% was composed of whites. There were no IP discharges under this code for blacks over the period cited. Ninety-four percent of all IP discharges were among whites.

The percentages of ED discharges among Dare County residents under this code for both females and males were rather static, but the total number and percentage for males were higher. The total number and percentages of IP discharges among females and males were similar.

Obesity in Adults

The average prevalence of obesity in Dare County was 25.4% in the period from 2004 through 2012, compared to 32.4% in the Region. [State data is not available]. The Dare County percentage was lower than the Region for the entire period presented and increased overall. Approximately 32.8% of respondents to the Dare County Community Health Survey reported having received a diagnosis of overweight or obesity.



Graph 12. Adult Obesity Estimate (2004-2012). Source: County-Level Data, Diagnosed Diabetes Prevalences, North Carolina, 2004 through 2012. Centers for Disease Control and Prevention, National Diabetes Surveillance System: http://www.cdc.gov/diabetes/data/index.html

Obesity in Children (Ages 2-4)

There is limited data on the prevalence of childhood obesity in Dare County. Data is collected for three age groups (2-4, 5-11, 12-18), but only the youngest two age groups yielded stable rates in Dare County. The data is also not particularly current.

The data available covers only children seen in health department WIC and child health clinics and certain other facilities and programs. According to this NC-NPASS data, in 2010 an annual average of 20.6% of the participating children in Dare County age 2-4 were deemed "overweight", and an additional 15.1% were

deemed "obese" (total = 35.7%). Statewide, 16.1% were overweight and 15.6% were obese, for a total of 31.7%.

Across the Region, an average of 16% were overweight and another 16.8% were considered obese, for a total of 32.8%. Among the 5-11 year olds, 24.6% were deemed overweight and an additional 17.5% were obese (total =42.1%), Statewide, 17.1% were overweight and 25.8% were obese, for a total of 42.9%. In the Region, an average of 20.4% were overweight and another 23.3% were obese (total = 43.7%).

Asthma

The Dare County rate of hospital discharges with a primary diagnoses of asthma was a fraction of the state rate (11.4 vs. 90.9 in 2014), and has decreased slightly over time (from 17.7 in 2010). Between 2010 and 2014 very few children (4 total over the 5 years) were discharged from NC hospitals with a primary diagnosis of asthma. Corresponding rates are unstable and significantly lower than NC and the Region. 14.5% of Dare County Community Survey respondents reported that they had received a medical diagnosis of asthma.

Mental Health

Between 2006 and 2014, the number of Dare County residents served by the Area Mental Health Program *decreased* overall by 41%. In 2014, 940 Dare County residents were served, down from 1,327 the year before. Over the same 9-year period the number of Dare County residents served by State Psychiatric Hospitals *decreased* by 85%. In 2014, 10 persons were served, compared to a high of 69 in 2006. During the same 9-year period, a total of 557 Dare County residents were served by NC State Alcohol and Drug Abuse Treatment Centers (ADATCs), with the number varying from year to year. 42 were served in 2014. 25.5% of Dare County Community Survey respondents reported having received a diagnosis of depression or anxiety. The LME/MCO serving Dare County is Trillium Health Resources, located in Greenville (in Pitt County). Trillium also serves the following counties: Brunswick, Carteret, New Hanover, Onslow, Pender, Beaufort, Camden, Chowan, Craven, Currituck, Gates, Hertford, Hyde, Jones, Martin, Northampton, Pamlico, Pasquotank, Perquimans, Pitt, Tyrrell, Washington. Trillium is a consolidation of East Carolina Behavioral Health and CoastalCare.

Trillium partners "with agencies and licensed therapists in our Provider Network to offer services and supports to people in need in or near their own communities. We ensure the delivery of the right services, in the right amount, at the right time. We also work 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" (http://www.trilliumhealthresources.org/en/About-Us/).

OBH ED discharges related to all Mental, Behavioral and Neurological Disorder diagnoses composed 3.7% of all ED discharges over the three-year period cited; IP discharges for mental health diagnoses composed 7.2% of all IP discharges. These diagnoses (ICD-9 290-319xx) include psychotic and non-psychotic disorders, and conditions associated with alcohol and drug abuse.

CHAPTER FOUR: COMMUNITY FEEDBACK

Community Survey Methodology

A community survey was designed to receive feedback from community members regarding health. The survey questions were designed to obtain feedback regarding health issues within the community, as well as to better understand health behaviors and issues experienced by survey participants and their family members. A summary of the survey responses is provided in Appendix C. The survey was implemented online and in paper copies and in English and Spanish. A total of 861 surveys were collected in January 2016, and responses of 806 Dare County residents were analyzed.

Survey / Population Comparison

All of the survey respondents did not answer the demographic questions, so while this data is useful it is not complete since around 180 people didn't answer these particular questions. Compared to US Census Bureau and other authoritative statistics for the overall Dare County population, the 2015 Dare County Community Health Survey sample:

- Under-represented males.
- Slightly under-represented African Americans and persons of Hispanic/Latino origin.
- Under-represented the youngest age groups.
- Under-represented the uninsured, the poor, and the less educated.

Community Survey Results

Quality of Life

Participants were asked if they agreed that Dare County had good healthcare, was a good place to raise children or grow old, had plenty of economic opportunity, was a safe place to live and had help for people in times of need. At least 45% of respondents agreed or strongly agreed with these quality of life statements, with the sole exception of the question about economic opportunity, with which 73% of respondents disagreed or strongly disagreed.

Community Issues

Participants were asked to select only one issue from a list of named issues. Economic issues were clearly on the mind of survey respondents, as 41.6% selected low income and poverty as a community issue of concern.

Services Needing Improvement

Participants were asked to select only one issue from a list of named services. Services related to employment and housing garnered the highest proportions of responses. Twelve people answered the follow-up question about which healthcare providers were lacking. Gastroenterologists and oncologists were identified most frequently as lacking.

Health Education Needs

Participants were asked to select only one issue from the list and the highest proportion of respondents thought the community needed more information about substance abuse prevention.

Health Information Access

Doctors or nurses followed by the internet were the top places respondents get most of their health-related information

Health Topics To Learn More About

Respondents were most interested in learning about aging issues, cancers, healthy living and chronic diseases.

Health Topics For Children

Participants were allowed to select multiple issues from the list and more than half of the respondents thought children needed more information about drug abuse. Alcohol and mental health issues also garnered a high percentage of responses.

Personal Health Diagnoses

A total of 50.8% of respondents rated their health as very good or excellent and 39.1% rated their health as good and 9.7% as fair or poor. Participants most commonly reported having diagnoses of high blood pressure (43.6%), high cholesterol (39.3%) and overweight or obesity (32.8%).

Preventive Procedures

Participants most commonly responded to having a blood pressure check (81.8%), dental cleaning and x-rays (73.9%), cholesterol screening (67.7%) and physical exam (64.2%) in the past 12 months. When asked in a separate question if they had a flu vaccine in the past year, 67% said yes.

Personal Health Behaviors

A total of 12.8% of participants reporting having had days in the past month when feeling sad or worried kept them from going about their normal business. Slightly over half (53.4) of respondents Eating outside the home one or more times per week. A total of 7.7% of respondents reported being worried about whether their food would run out before they got money to buy more. Over 30% of respondents reported being exposed to second hand smoke in the past year and 5.5% of respondents said they currently smoke.

Of those exposed to second hand smoke:

Of those that currently smoke:

- 7.4% were exposed in their homes.
- 12.7% were exposed at work.

- 36% would see a doctor for help quitting.
- 17% do not want to quit.

Exercise

In a normal week, 73.6% engage in physical activity/exercise that lasts at least half an hour.

- 61.5% exercise fewer than 5 times a week.
- 38.5% exercise more than 5 times a week.
- The most common place to exercise is at home (59%).

The most common reason for not getting enough exercise is not having enough time (30%) followed by being too tired (28%).

Medical Care Preferences

Doctor's offices (64.6%) and urgent care centers are (27.3%) the most preferred places respondents go when they are sick.

Health Insurance Coverage

Only 1.1% of respondents reported not having health insurance of any kind. The most popular types of coverage among respondents included more than half (55.1%) having health insurance provided by their employer, with almost a third (32.1%) having Medicare. Because so few individuals were uninsured, the responses were not analyzed by gender.

Medical Care Access

Respondents were asked if they had encountered problems in past year getting medical care:

- 80.5% had *not* had a problem
- 17.6% *did* have a problem

Of those that reported encountering problems:

- 47.3% had trouble accessing a general practitioner.
- 25.5% had trouble accessing a specialist (orthopedists and neurologists were named most frequently)
- 14.5% had trouble accessing a dentist.
- 36% could not get care because they could not get an appointment.
- 27% could not get care because the wait was too long.

Mental Health

Slightly over 31% of respondents said they would refer individuals with a mental health or substance abuse problem to a private counselor or therapist, an additional 31% reported they would refer to a doctor. A concerning 14.2% of respondents noted not being sure of where to refer individuals with a mental health or substance abuse problem.

Emergency Preparedness

Households reported having basic emergency supply kits (66%) smoke detectors (54%) and smoke and carbon monoxide detectors (39%). Approximately 89% who have a basic emergency supply kit reported having enough supplies for 3 or more days. Respondents anticipated utilizing the radio (24%) and television (24%) as information sources in a disaster/emergency. A total of 41% of respondents reported they would participate in mandatory evacuation. Among the 24% who indicated they would not evacuate and the 35% who were unsure, the most common reasons were "other" (41%) or leaving property behind (22.4%).

Community Focus Group Methodology

In addition to the survey process, seven small focus group discussions were held in various locations within Dare County to collect primary data. The HCOB Partnership reviewed and finalized a moderator script with instructions, the questions to be asked, materials to collect participant demographics, and established a categorization tool to be used to record responses during the focus groups. The tools used to facilitate and implement the groups are all included in Appendix C of this report. HCOB Partnership members were responsible for recruiting attendees and hosting focus groups.

Participants responded to seven open-ended questions and shared their feedback. The Community Health Assessment coordinators served as Focus Group Moderators. One facilitated the groups, while the other recorded responses. A total of 83 individuals were reached through the following Focus Groups:

- Dare County Schools Jan 19, 2016
- Dare County Employees-Jan 22, 2016
- Baum Center-Feb 5, 2016
- Community Member's Home- February 26, 2016
- Outer Banks Hospital -March 5, 2016
- Avon Fire Department March 21, 2016
- Coastal Family Church Members March 31, 2016

Focus Group / Population Comparison

Generally, the percent of reached members of the community aligned with Dare County demographics. Compared to the US Census Bureau and other authoritative statistics for the overall Dare County Population, the 2016 Dare County Community Focus Group sample:

- Under represented males.
- Slightly under represented African Americans and persons of Hispanic/Latino origin.

More details on demographics are available on the Focus Group Comparative Table located in Appendix C.

Based on lessons learned in the 2013 CHA process, groups were purposely conducted after the Holidays and prior to the start of the tourist season.

Participation at the Focus Groups averaged to be 12 individuals at each session. Each Focus Group lasted a minimum of one hour with the same questions asked at each session.

Community Focus Group Results

Best Thing About Living in Dare County

Our geography, environment and sense of community remained the most highly valued benefits of living in Dare County. The phrase "tight-knit" was used frequently to describe the community.

How Residents get Health Information

Residents most frequently look to the internet, social media, and technology when searching for information about health, followed closely by word of mouth.

How Residents stay Healthy

Residents most commonly rely on outdoor activities such as walking, riding bikes, swimming and yardwork to remain healthy. Utilization of a gym or fitness classes and government centers or activities were also brought up frequently in discussion.

Health Related Problems

Substance Abuse and Mental Health related concerns were the most frequently cited health problem in the community. Additional problems discussed frequently were the economy and cancer.

Barriers to Good Health

The economy and financial concerns were cited as the top barrier to being healthy. Groups brought up most frequently in this discussion were employees of the restaurant industry, local government, and school system.

Solutions for Better Health

Participants recognized education and prevention as the best options for addressing the discussed problems identified.

Populations in Need of Healthcare

While access to healthcare continues to be a frequently cited concern, the moderator noticed an increase in discussion regarding trust for local providers/ services and positive feedback regarding existing healthcare options in the community.

Every group mentioned Medicare/Medicaid patients not being able to get a primary care provider if they didn't have one because not many doctors are accepting new patients with these insurances- and if they are, the wait to get in is months.

Uninsured, underinsured and individuals who cannot afford services were most frequently brought up as the group that is not receiving enough health care. In particular, young adults (ages 18-30), who were unmarried and not yet "financially stable" were discussed.

CHAPTER FIVE: HEALTH RESOURCES

Health Insurance

The percent of uninsured adults aged 19-64 in Dare County changed very little over the three years shown. Compared to NC, Dare County tends to demonstrate higher percentages of uninsured residents in all age groups. The age group 0-18 tends to have a lower percentage of uninsured than the 19-64 age group, due partly at least to NC Health Choice.

Medicaid Eligibility

According to data obtained from the NC Division of Medical Assistance, 11% of Dare County residents were eligible for Medicaid in 2013, compared to 16.5% in NC and 19.6% in the Region. The total number of people in Dare County eligible for Medicaid increased annually in most years from 2009 through 2013. The Medicaid programs with the largest proportion of eligibles in 2013 were Infants & Children (49%), Medicaid Aid to Families with Dependent Children (AFDC) (19%) and Disabled (13%). In each month of 2013, an average of 201 aged individuals were eligible for both Medicaid and Medicare, significantly lower than the NC County average of 1,195 and a Regional average of 828.

Health Care 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. This data was examined for Dare County, the 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. The period covered is through 2012.

- The health professional ratios in Dare County for MDs and RNs were higher than the Region but lower than state ratios.
- The Dare County ratio for primary care MDs exceeded the comparable Region and state ratios.
- The Dare County ratio for dentists and pharmacists exceeded the comparable Region and state ratios.

Although the health professional ratio for dentists in Dare County appears to be higher than state or national ratios, accessing dental care may still be a problem for Medicaid enrollees as there are limited dental practices which accept Medicaid and/or NC Health Choice clients.

Hospital - The Outer Banks Hospital

The Outer Banks Hospital (OBH), which is located in Nags Head, NC, opened in 2002. It is a full-service critical access hospital offering a wide range of inpatient and outpatient services, and is fully accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). OBH is a partnership between Vidant Health and Chesapeake Regional Healthcare.

The hospital has 21 private rooms. Two of the hospital's beds are designed as labor/delivery/recovery/postpartum rooms, and one is a Level 1 nursery bed. Nearly 400 babies are born at OBH every year. The Emergency Department employs physicians who are board certified in emergency medicine, and trauma-trained RNs. A Minor Care section helps accommodate the increased volume of patients seen during the tourist season. Dare County Emergency Medical Services provides medical air transports out of the community utilizing the helipad adjacent to the hospital Emergency Department. The hospital has three operating rooms used for general surgery and a third designated for Cesarean sections.

OBH has a comprehensive, film-less diagnostic imaging department that offers X-rays, digital mammograms, 64-slice CT, fixed MRI, nuclear medicine, ultrasound, and PET/CT scan services. It also operates outpatient oncology including med one, radiation therapy, chemo therapy; a CAP-accredited laboratory; cardiopulmonary

rehab; nurse navigator accredited by the American College of Surgeons Commission on Cancer. . The affiliate

medical group, Outer Banks Medical Group includes two urgent care centers, three family medicine, one internal medicine, one general surgery, 1 orthopedic, one ear nose and throat, and one women's care practice.

Dare County Department of Health & Human Services

The Dare County Department of Health & Human Services (DCDHHS) is committed to meeting the evolving needs of our community and partners with individuals, families and the community to strengthen their efforts towards healthy living, independence, permanence and safety.

Adult Services

Our Social Workers provide intake, screening and assessment of abuse, neglect and exploitation of elderly/disabled adults. Adult Protective Services reports that are not substantiated or that do not meet the criteria to be "screened in" are provided with information and referrals, when appropriate. Adult Services staff provides a wide variety of case management services, as well as administering our Special Assistance/In-home program and our Community Alternatives Program for disabled adults. With the assistance of these programs, disabled adults are able to live in the community.

Community & Clinical Services

Our Community & Clinical Services unit provides a wide range of services, prenatal care management, maternal health, family planning, newborn and post-partum assessments, including child health, immunizations, school and dental health and disease surveillance. Services are provided by our dedicated team of nurse practitioners, nurses, social workers, dental and clerical staff.

Children's Services

Our Social Workers investigate reports of suspected child abuse and neglect. With the goal of keeping families united, social workers connect family members to community resources and treatment services. Higher risk families may receive additional case management services. In some cases, temporary substitute care is provided to children in out-of-home settings which may involve permanency planning and adoption services when necessary.

Economic Services

Our Economic Services staff link families in need to financial assistance. Programs include Medical Assistance, Food & Nutrition Services, Work First Family Assistance and Special Assistance. Our programs are means tested and require individuals/families to meet either an income or asset test or both in some program areas. All programs have a state residency and citizenship requirement with the exception of Emergency Medicaid.

Environmental Health Services

Our Environmental Health Specialists work diligently to protect the health of the public, by permitting and performing routine inspections of food handling establishments, lodging establishments, public pools and spas, and promoting child health. Staff also work to promote safe water, air quality, waste water treatment & disposal.

Family Services

Our Family Services unit provides a variety of assistance services to families in need. Energy assistance programs provide assistance with heating or cooling emergencies. Child care assistance grants parents the ability to maintain employment through access to safe, quality and affordable child care. Medicaid patients are assisted with transportation needs to promote access to health care. Emergency Assistance helps families with rent and utility costs in crisis situations. Comprehensive and intensive services are available for families through the Family Support social workers that are experiencing difficulties that could potentially place their children at higher risk for Child Protective Services involvement or to families that are dealing with an unexpected family crisis.

Home Health & Hospice Services

Dare Home Health & Dare Hospice are programs of the DCDHHS which provide in-home, medical services and hospice support services to residents of Dare County. The organization is dedicated to providing comprehensive, compassionate and quality services to our clients.

Health Education & Outreach Services

Our Health Education & Outreach Services unit provides outreach, public awareness, prevention and health promotion services in our schools and various locations throughout the community. With an emphasis on healthy choices and lifestyles, health education initiatives include smoking cessation, healthy eating, active living, and substance use/abuse prevention, all of which impact individual and population health. Outreach initiatives includes nutrition services, breastfeeding support, care coordination for children, and WIC.

Health Services

Dialysis

There is one dialysis facility with 9 hemodialysis stations in Dare County, located in Manteo. No shifts are offered after 5pm.

Health Facilities

There is one licensed ambulatory surgical center in Kitty Hawk, and no licensed nursing pools in the county.

Mental Health Services

There are 3 mental health facilities: 1 offering day activity, 1 an intensive outpatient substance abuse program, and 1 supervised living facility for developmentally disabled adults.

Home Health/Hospice

Dare County has 2 Medicare certified agencies providing skilled home health services in the patients' homes. Sentara & Albemarle Home Care is located in Southern Shores and DCDHHS' Dare Home Health in Manteo. DCDHHS' Dare Home Health is accredited and also provides hospice care through their Dare Hospice program. There are three agencies located on the northern beach and lower Currituck which provide privately-paid home care and personal care services.

School Nurses

The student to school nurse ratio has increased slightly since 2009-10 from 477:1 to 488:1 in 2012-13 but is still significantly lower than the recommended ratio of 750:1 and the state average of 1,177:1.

Long-Term Care Facilities

The number of beds in NC-licensed long-term care facilities in Dare County are:

- Adult Care Homes/Homes for the Aged (1 facility): 102 beds
- Family Care Homes: no facilities
- Nursing Homes/Homes for the Aged (1 facility): 126 beds. This facility also had 18 adult care home beds.

These facilities are located in Kill Devil Hills and Nags Head with a total of 228 long-term care beds, or 1 bed for every 29 persons age 65 and older in Dare County (6,550 persons > 65 in 2014). Because of the predicted growth of the elderly population over the next 15-20 years, these services would be expected to grow.

Hospital Utilization – Emergency Department

Presented here are demographic summaries of the populations that were admitted to the emergency department in recent years. This data includes all individuals who received services within the Vidant Health system, who also had a home address located within Dare County. This data does not include visitors to this area.

Hospital Utilization – Emergency Department - Gender and Age

Emergency Department utilization by gender was consistent with the demographics of Dare County. Females accounted for 54% of all ED discharges over the three year period reviewed (51% of Dare County population) and males accounted for 46% all ED discharges over the same period (49% of Dare County population).

An analysis of Emergency Department utilization by age reflects that Adult (age 18-64) patients accounted for 62% of all ED visits. This figure is consistent with the proportion of persons in this age group in the overall Dare County population, 62%. Pediatric (age 0-17) patients accounted for 15% of all ED visits. This figure is slightly lower than the proportion of persons in this age group in the overall Dare County population, 19% Senior (age 65+) patients accounted for 24% of all ED visits. This figure is higher than the proportion of persons in this age group in the overall Dare County population, 19%.

Hospital Utilization - Emergency Department - Racial and Ethnic Profile

An analysis of Emergency Department utilization by race and ethnic profile shows that Whites accounted for 88% of all ED visits. This figure is less than the proportion of persons in this racial group in the overall Dare County population (94%). Blacks/African Americans accounted for 6% of all ED discharges, which is higher than the proportion of persons in this racial group in the overall Dare County population (3%). Hispanics accounted for 5% of all ED discharges over the same period, which is less than the overall proportion in Dare County (7%). It is important to note that in US Census terms, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals do tend to consider Hispanic ethnicity to be a separate racial category.

Hospital Utilization – Emergency Department - Payor Mix

The most common payor groups, in descending order, were:

- Medicare (26.4%)
- Self-Pay (22.3%)

- Medicaid (20.9%)
- BCBS Managed Care (18.9%)

Hospital inpatient admissions were also reviewed for those individuals who experienced an inpatient admission within the Vidant Health system, who also had a home address located within Dare County.

Hospital Utilization – Inpatient Admissions - Gender and Age

Females accounted 62% of all inpatient hospitalizations which is higher than the proportion of females within the total Dare County population (51%). Males accounted for 38% of inpatient hospitalizations which is lower than the proportion of males within the total Dare County population (49%). One reason for this significant difference may be attributed to age.

Upon closer examination of age as related to inpatient hospitalizations, it is noted that Adult patients (age 18-64 years) accounted for 48% of all inpatient hospitalizations. While this is the largest percentage group based on age, it is important to note that this percentage is significantly lower than the population of 18-64 year old individuals within the total Dare County population (62%). Pediatric patients (under the age of 18 years) accounted for 21% of inpatient hospitalizations which is slightly higher than the overall population of children under the age of 18 years within Dare County (19%). The Senior population (age 65+) accounted for 31% of all inpatient hospitalizations over the three year period examined. This is an important finding as this utilization is more than 1.5 times the proportion of the total county population represented by this age group (19%).

Hospital Utilization – Inpatient Admissions - Racial and Ethnic Profile

Examining the inpatient hospitalization data based on race and ethnicity, Blacks/African Americans accounted for 3% of all inpatient hospitalizations which is consistent with the proportion of the total county population represented by this racial/ethnic group. Whites accounted for 88% of all inpatient hospitalizations which is less than the composition within the total county population (94%). Hispanics accounted for 8% of all inpatient hospitalizations which is slightly higher than their representation within the overall Dare County population (7%).

Hospital Utilization - Inpatient Admissions - Payor Mix

The most common payor groups, in descending order, were:

- Medicare (32.7%)
- Medicaid (27.3%)

- BCBS Managed Care (21.7%)
- Self-Pay (5.2%)

Inventory of Community Health Prevention & Promotion Services

In efforts to assure that duplication of services did not occur, the HCOB partnership created an inventory of all services and programs currently available in Dare County for identified watch list items.

Older Adult Population Issues

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Assisted Living	Spring Arbor	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Currently providing services to Dare County residents
Project Lifesaver	Dare County Sheriff's Office	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes No	Currently available
Caregiver Support Groups	Older Adult Services; DCDHHS; Dementia Task Force; Spring Arbor	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Currently available
Memory Screenings	GEM Adult Day Services	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Currently available
Caregiver Conference	Alzheimer's NC; Dementia Task Force	☐ Individual ☐ Family ☐ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Yearly
Respite Services	Dare Respite Care; Albemarle Respite; Area Agency on Aging; Spring Arbor; Dementia Task Force	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ✓ No	Currently available
In-Home Care	DCDHHS- SS Division	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	supportive services currently available
NC Respite Coalition	State Coalition	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	address the needs of family caregiver; education to community; networking
Dementia Care Training	Dementia Task Force; ALZ NC; GEM Adult Day Services	✓ Individual ✓ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Training provided for families/caregivers
Respite Grant Program	GEM Adult Day Services	Individual Family School Workplace Community	✓ Indicated ✓ Selected ☐ Universal	☐ Yes ☑ No	ongoing

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
OBX Alzheimer's Walk	Dementia Task Force & Local Committee	☐ Individual ☐ Family ☐ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☑ No	yearly event; raises funds and brings awareness
Private In-Home Aid	Visiting Angels; OBX Home Care; Quality Home Staffing; Golden Way; Rescare	✓ Individual ✓ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	currently available
Here With You! Mentoring for Caregivers	HCOB Dementia Taskforce	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	currently available
Dementia Friendly Hospital	Dementia Task Force; OBH	☐ Individual ☐ Family ☐ School ☑ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	In progress
Family Caregiver Support Program	Albemarle Commission Area Agency on Aging; Dementia Task Force; Spring Arbor	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	currently available
Elder Abuse Walk	Area Agency on Aging; DCDHHS	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☑ No	annual event; currently available

Substance Abuse & Mental Health

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
PORT Human Services - provide support, counseling, and referrals for students and families	PORT Human Services with Dare County Schools	✓ Individual ✓ Family ✓ School Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Ongoing
Alcoholics Anonymous Support & fellowship Group	Alcoholics Anonymous of the Outer Banks	✓ Individual ☐ Family ☐ School ☐ Workplace ✓ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes □ No	Ongoing
Narcotics Anonymous Support & fellowship Group	Narcotics Anonymous	✓ Individual □ Family □ School □ Workplace ✓ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Ongoing
Peer Support	Rcovery Innovations	✓ Individual ☐ Family ☐ School ☐ Workplace ✓ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes □ No	Ongoing
Faith-based support	Yellow House Ministry of Hatteras Island	✓ Individual □ Family □ School □ Workplace ✓ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Ongoing

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
CSRS Application Resource for medical providers	Dare CASA	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going
Rx Drug Abuse Prevention- Take Correctly, Store Securely, Dispose Properly, Never Share, Reducing unauth. youth access & availability	Dare CASA	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going
Alcohol Purchase Surveys with ALE and ABC law enforcement support	Dare CASA	✓ Individual ☐ Family ☐ School ✓ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going
Sticker Shock- Alcopop Free Stores Initiative	Dare CASA	✓ Individual ☐ Family ✓ School ✓ Workplace ☐ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☑ No	on going
Student Education & Outreach	Dare CASA		☐ Indicated ☑ Selected ☐ Universal	☐ Yes ☑ No	on going
Responsible Seller/Server Program (on and off premise alcohol retailers)	Dare CASA		☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	2x annually
Jim MacDonald Student Scholarship	Dare CASA	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	annual
Rx Drug Abuse Prevention/ Prevent Underage Drinking Media Campaign	Dare CASA	✓ Individual ✓ Family ☐ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going
Overdose Prevention- Naloxone Program with local law enforcement	Dare CASA	✓ Individual ☐ Family ☐ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Annual
Peer Power- Student Prevention & Education	DCDHHS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going during school year
Helping Women Recover	DCDHHS	✓ Individual ✓ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	on going

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Salt Camps	DCDHHS & Sheriffs Dept.		☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Annual Summer Event
After Prom Party	DCDHHS/Coastal Family Church/DCS	☐ Individual ☐ Family ☑ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☐ No	Annual Spring Event
Keeping Current	DCDHHS	✓ Individual ✓ Family ✓ School ✓ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going
Talk it Up; Lock it Up	DCDHHS/Dare CASA	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	on going
Positive Action	DCDHHS	☐ Individual ☐ Family ☑ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Annual Summer Event
School Health	DCDHHS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes	Ongoing
Random Drug Testing	DCS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☑ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
Students Against Drugged Driving	DCS	✓ Individual ☐ Family ✓ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
School Newspaper Coverage/Atricles Focus on SA	DCS		☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
Red Ribbon Week- School wide activites focus on good decisions	DCS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
School Guidance Counselor Lesson	DCS		☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Guest Speakers- variety of individuals and groups insprie and present information to students	DCS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
NC Healthful Living Curriculum- taught to all studentds by Health/PE Teachers	DCS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
School Assemblies on drug awareness, peer pressure, making healthy choices, etc.	DCS	✓ Individual ☐ Family ✓ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
Keepin It REAL- Refuse, Explain, Avoid, Leave	DCS & DC Sherriffs		☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
Video and Poster contests on drug awareness	DCS & DPI	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
DARE Program taught by SRO officers	DCS & Law Enforcement	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Ongoing
Mock Car Crash	DCS & Law Enforcement	✓ Individual ☐ Family ✓ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
One Way 2 Play Drug Free www.ow2p.org	Fellowship of Christian Athletes	✓ Individual ✓ Family ☐ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Annual
Physicians Council on Rx Drug Abuse	Outer Banks Hospital	☐ Individual ☐ Family ☐ School ☑ Workplace ☑ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Ongoing
Medicine Drop Off Events	Outer Banks Hospital/DCHHS/DC Sherriffs	✓ Individual ✓ Family ☐ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☑ No	Quarterly Events

Unintentional Injuries

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Prescription Drug Drop Off Events	Various community partners	Individual Family School Workplace Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ✓ No	Periodically conducted
Falls Prevention Coalition	DCDHHS	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ✓ Selected ☐ Universal	✓ Yes ☐ No	Ongoing
Prescription Take-back Program	Dare County Sheriff's Office	✓ Individual ☐ Family ☐ School ☐ Workplace ✓ Community	✓ Indicated ☐ Selected ✓ Universal	☐ Yes ✓ No	Ongoing
Prescription Drug Abuse Council	ОВН		☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Investigate abuse/make recommendations
Dare County Community Child Protection Team/Childhood Fatality Prevention Team/	DCDHHS	☐ Individual ☐ Family ☐ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	Yes No	Ongoing
Safe Routes to Schools Camp	ОВН	Individual Family School Workplace Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Ongoing
Care Seat Safety Check	Fire Departments	✓ Individual ✓ Family ☐ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Ongoing

Chronic Diseases

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Dare County Fitness Center	Dare County	☐ Individual ☐ Family ☐ School ☑ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Currently providing exercise classes (minimal fee for under 55) and fitness center services free-of- charge
Walking Trails	Various Agencies	☐ Individual ☐ Family ☐ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Avaiable for recreational use

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Peer Power	DCDPH	☐ Individual ☐ Family ☑ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes No	Addresses tobacco, PA, nutrition for 3rd and 7th grades and high school students in Dare County schools
Healthy Weight Task Force	нсов	☐ Individual ☐ Family ☐ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☑ No	Currently meeting and working toward objectives
Better Breathers Club	ОВН	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Currently available
Nutrition Counseling	ОВН		✓ Indicated ☐ Selected ☐ Universal	✓ Yes	Currently available
Cardiac Rehabilitation	ОВН	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	currently in development
Dare County Fitness Center	Dare County Center	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Currently providing exercise classes and fitness center services free-of- charge
Various fitness centers throughout community	N/A	✓ Individual ✓ Family ☐ School ☐ Workplace ✓ Community	☐ Indicated ☐ Selected ☐ Universal	✓ Yes	Currently available
Outer Banks Cancer Services	ОВН	✓ Individual ✓ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Cancer Resource Center; Luncy & Learns; Screening Services
Cardiologists	OBH/Sentara	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Ongoing
Nurse Navigator	Dare County Cancer Outreach Clinic	☐ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Ongoing
Hands of Hope	ОВН	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Ongoing

Assets (Programs/Strategies in place)	Implementing Agency	Social Ecology	IOM Level	Evidence- based?	Status
Social Services	DCDHHS	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Ongoing
Financial Relief	Outer Banks Relief Foundation	✓ Individual ✓ Family ☐ School ☐ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Currently assists Dare County residents with financial assistance
Dare Home Health & Dare Hospice	DCDHHS	☐ Individual ☐ Family ☐ School ☐ Workplace ☑ Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	Currently available
Teen Tobacco Use Prevention & Cessation Initiative	DC DHHS	✓ Individual ✓ Family ✓ School ✓ Workplace ✓ Community	✓ Indicated ✓ Selected ✓ Universal	✓ Yes ☐ No	Ongoing prevention services, current target population: adolescents
Various toll-free Quit-lines	N/A	✓ Individual ✓ Family ✓ School ✓ Workplace ✓ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes ☐ No	Currently available
Cessation classes and support groups offered by various local clinicians	N/A	✓ Individual ✓ Family ✓ School ✓ Workplace ☐ Community	✓ Indicated ☐ Selected ☐ Universal	✓ Yes	Currently available
Fitness	Dare County Baum Center	✓ Individual ☐ Family ☐ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☐ No	Offering services free-of-charge to residents of Dare County ages 55+
Cancer Education & Prevention	ОВН	Individual Family School Workplace Community	☐ Indicated ☐ Selected ☐ Universal	☐ Yes ☐ No	
HPV Awareness Campaign	OBH & DCDHHS	☐ Individual ☐ Family ☑ School ☐ Workplace ☐ Community	☐ Indicated ☐ Selected ☑ Universal	☐ Yes ☑ No	Currently being provided to all rising 8th and 11th graders
Smoke Free Ordinances	DCDHHS	✓ Individual ✓ Family ✓ School ✓ Workplace ✓ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Ongoing; HHS Board added ENDS products to Smoke Free Bars Law
Wellness Programs/Risk Management	Dare County	☐ Individual ☐ Family ☐ School ☑ Workplace ☑ Community	☐ Indicated ☐ Selected ☑ Universal	✓ Yes ☐ No	Currently available

CHAPTER SEVEN: HEALTH ISSUES & PRIORITIZATION

As information was gathered, it was presented to the Dare County Department of Public Health, Outer Banks Hospital, and The Healthy Carolinians of the Outer Banks Partnership, at the monthly HCOB meetings in 2016.

Populations At-Risk for Poor Health Outcomes

Primary and secondary data gathered identified the following groups as at-risk or populations with health disparities:

- The uninsured and under-insured
- Persons living in poverty
- Minorities
- Males, who generally have poorer health outcomes than females
- Persons with poor access to transportation, because travel 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; long-term care options in Dare County seem particularly sparse

Watch List

Based on primary and secondary data and populations at-risk for poor health outcomes, a watch list of noteworthy Health Problems was developed. Chronic diseases, unintentional injuries, older adult population issues, mental health and substance abuse were selected as potential health concerns.

Chronic Diseases, such as heart disease, chronic lower respiratory disease (CLRD) and chronic liver disease. In Dare County the mortality rate for heart disease exceeds the NC rate and is increasing among both males and females. While Dare County CLRD rate is currently lower than the NC rate, the county mortality rate is increasing, especially among females. Dare County mortality rate for chronic liver disease significantly exceeds the NC rate and is increasing, especially among males.

In Dare County the unintentional injuries mortality rate is higher than NC rate, and although it is currently higher among males than females, the mortality rate among females is increasing faster than the rate among males.

Older adult population issues is of concern as the elderly population is predicted to continue to grow, with a noteworthy 220% anticipated growth of individuals aged 85 and older. Services for this community were identified through the service inventory process, however it was noted there were opportunities to increase access to services for this population.

Mental health & substance abuse were selected due to the utilization of the hospital ED for mental health problems being high, coupled with a proportion of survey respondents seem not to know where to seek treatment for a mental health problem. Additionally, Dare County suicide mortality rate significantly exceeds the NC rate and is increasing, especially among males. Lastly, these areas were the number one cited health related or cause of health related problems by focus group participants.

Prioritization Process

Based on findings from the 2016 Community Health Assessment, members of HCOB Partnership identified the following health or social concerns for the county. The issues were identified by consensus and are listed in no particular order below:

- 1. Older Adult Population Issues
- 2. Substance Abuse
- 3. Mental Health

- 4. Chronic Diseases
- 5. Unintentional Injuries

The formal prioritization process included asking each participant to evaluate each of the issues according to three predetermined areas. The partnership used following criteria to evaluate the health indicators:

- The Magnitude of the Problem How many persons does the problem affect?
- Seriousness of the Consequences What degree of disability or premature death occurs because of the problem? What are the potential burdens to the community such as social or economic burdens?
- Feasibility of Correcting the Problem Is the problem amenable to interventions? Is the problem preventable? Is the community concerned about the problem? Is the intervention feasible scientifically as well as acceptable to the community?

After each participant completed their evaluations, each area was then averaged and provided to the HCOB Partnership.

Magnitude of the Problem Ranked Issues Average

Ranked Issues Average	e
Substance Abuse	2.35
Chronic Diseases	2.73
Mental Health	2.85
Older Adult Population Issues	2.85
Unintentional Injuries	4.37
(ranked 1-5 with 1 being the issue w	ith the
largest magnitude)	

Seriousness of the Consequences

Ranked Issues Averag	ge
Substance Abuse	1.95
Mental Health	2.55
Chronic Diseases	3.30
Older Adult Population Issues	3.36
Unintentional Injuries	3.89
(ranked 1-5 with 1 being the issue v	with the
largest consequences)	

Feasibility of Correcting the Problem

in the state of th	
Ranked Issues Averag	ge
Older Adult Population Issues	2.45
Chronic Diseases	2.55
Substance Abuse	3.05
Unintentional Injuries	3.30
Mental Health	3.65
(ranked 1-5 with 1 being the issue being the	
most feasible to correct)	

Next, the HCOB Partnership discussed the averages of each category and noted that several of the same health concerns were present in the top few throughout. The Partnership discussed potential health priorities and taskforce opportunities. Members also noted that some of the health concerns could be grouped together.

Overall Average of all Criteria	
Ranked Issues Average	

Ranked 135des	Niverage
Substance Abuse	2.45
Chronic Diseases	2.86
Older Adult Population Issues	2.88
Mental Health	3.02
Unintentional Injuries	3.84

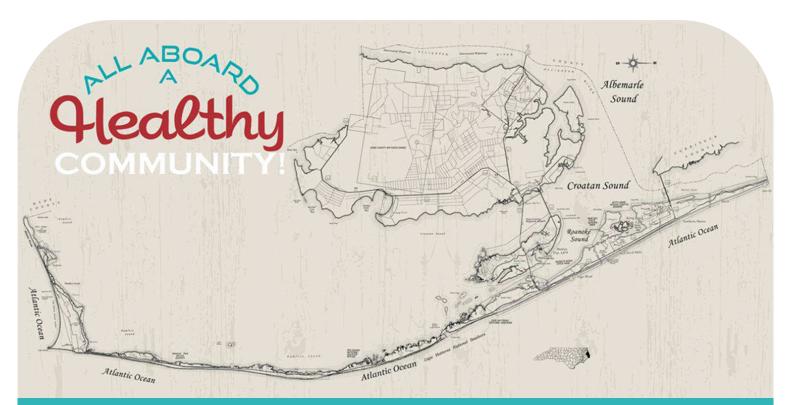
(ranked 1-5 with 1 being the issues with average of the largest magnitude, most serious consequences and most feasible to correct)

Health Priorities for 2016-2019

Based on the rankings and group discussion, the partnership elected to move forward with the following action plan:

• Continue addressing Chronic Diseases & Healthy Weight through the implementation of the Healthy Living Taskforce. This group was merged in 2014 and was formerly the Chronic Disease Taskforce & Healthy Weight Taskforce established from the 2013 CHA.

- Continue addressing needs of Older Adults by maintaining the Dementia & Alzheimer's Taskforce.
 Refocus the Access to Healthcare Taskforce to address needs and bring new resources specific to the aging community.
- Continue to address Substance Abuse & Mental Health by inviting the leadership of the existing community based *Substance Abuse/Mental Health* task forces to join the partnership and share information on a regular reporting cycle with HCOB members.
- Continue to address Mental Health by forming a Behavioral Health Communication Taskforce to reduce the stigma attached to seeking help for behavioral health issues.



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