

SHORE MEDICAL CENTER
COMMUNITY HEALTH NEEDS ASSESSMENT: 2016

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Executive Summary

In 2010, Congress enacted the Patient Protection and Affordable Care Act that requires not-for-profit hospitals to conduct a Community Health Needs Assessment (CHNA) of the geographic areas it serves and adopt an implementation strategy to address these needs every three years. A CHNA and Implementation Strategy was last completed and adopted by Shore's Board of Trustees in 2013. The implementation strategy, which is also required by Section 501(r) of the Internal Revenue Code (IRC) documents the strategies by which Shore Medical Center plans to address the community health needs addressed in the CHNA. As required by the IRC, the CHNA and Implementation Strategy is posted to the SMC website as the method of public reporting and will be included as a part of our Form 990 filing for tax year 2016.

The CHNA was conducted in order to ensure that Shore Medical Center's outreach efforts and initiatives truly reflect the changing health needs of the community it serves, which includes all of the cities and towns in Atlantic County, as well as Ocean City and Upper Township in Cape May County.

Although access to quality, affordable health care plays a significant role in the health and well-being of members of our community, their health is also affected by other social determinants. Understanding these factors, such as economics, education and age, can also lead to reductions in health disparities and improvements in health indicators. These indicators can be used to describe the overall health of a population and determine community needs in addressing those issues.

In addition to defining the community we serve, the following steps were taken to ensure the assessment was managed in a logical and effective manner:

- Engagement of community representatives, especially those with public health expertise
- Select quality data sources
- Review and analyze quality information
- Identify and prioritize health and health-related information

In order to achieve these objectives and to gain input from the community on health issues of concern, Shore Medical Center distributed both an online and hard copy community health needs assessment survey. The survey was completed by approximately 220 individuals. The top three health concerns of survey participants were cancer, heart disease and diabetes. Other conditions ranked high in the survey included substance abuse, obesity and dementia.

Additionally, public health leaders and professionals from local and county government and a local university were interviewed and assisted us to form a better picture of the community. These leaders identified the most important barriers to making informed health choices which included access to healthier food and recreational activities, lack of transportation and lack of educational programs designed to better inform the community of their health-related options.

The significant CHNA data findings indicate we have an aging population with lower household income levels, higher percentages living below the state average poverty level, lower levels of

education and health status indicators, especially in Atlantic County such as low birth weight, age adjusted death rate, average age of death cancer death rate, and infant mortality death rate. The leading causes of death in our community are heart disease, followed by cancer, both of which contributed to more than half the deaths of the areas we serve. Additionally, stroke, chronic respiratory disease and diabetes are also areas of major concern.

For these reasons, we identified the following health-related issues as our priority community health needs and will address them in our implementation strategy:

- Obesity
- Heart Disease
- Cancer
- Diabetes

This strategy will include providing priority attention and a plan to address these key health issues by better education and implementation of programs designed to address the needs of our community.

Through this strategy, we hope to impact the following impacts:

- Chronic disease reduction
- Death rate from heart disease will decrease
- Death rate from cancer will decrease
- Death rate from diabetes will decrease

This document is a summary of the information collected, analyzed and utilized in the development of our findings and implementation strategy. It is available for public use and an electronic version of the CHNA and Implementation Strategy may be accessed at www.shoremedicalcenter.org.

Authors of Shore Medical Center’s Community Health Needs Assessment- Update and Revision- 2016

Angela A. Bailey, MSW, LSW, Shore Medical Center’s Manager of Cancer Community Outreach

Riddhi Desai, CHES, Shore Medical Center’s Co-Coordinator of the Cape Atlantic Coalition for Health

Melissa Mayer, Stockton University Intern

Timothy J. Roach, MPH, Independent Participant

Shore Medical Center Community Health Needs Assessment Committee (internal committee) – 2015/2016

Alan Beatty, MBA, Vice President of Human Resources

Frederick Cantz, CPA, CFE, Chief Compliance Officer

Joseph Johnston, MBA, CMPE, Director of Oncology Services

Brian Cahill, Director of Marketing

Angela A. Bailey, MSW, LSW, Manager of Cancer Community Outreach

The Community Health Needs Assessment – 2013 document was revised over the course of 2015 and 2016. The Community Health Needs Assessment – 2016 was presented to Shore Medical Center’s Executive Team and Board of Trustees on December 5, 2016.

Authors of Shore Medical Center’s Initial Community Health Needs Assessment-2013

Angela A. Bailey, Shore Medical Center’s Coordinator of the Cape Atlantic Coalition for Health

Donna J. Cericola, RN, BSN, OCN, Shore Medical Center’s Administrative Director of Oncology Services

Marge Scanny, Shore Medical Center’s Manager of Cancer Community Outreach

The Community Health Needs Assessment (CHNA) was originally presented to Shore Medical Center’s Executive Team and Board of Trustees on November 5, 2012. Upon clarification of the requirements of Section 501(r) of the Internal Revenue Code, the CHNA Implementation Strategy was presented to the Executive Team and Board of Trustees on September 3, 2013. As a result of the clarifications, minor revisions were made to the CHNA. On September 3, 2013, the Shore Medical Center’s Board of Trustees adopted the CHNA and the Implementation Strategy.

Purpose of the Assessment

This community needs assessment was conducted in order to ensure that the Shore Medical Center's outreach efforts truly reflect the changing health needs of the community that it serves.

Process for Completing the Assessment

The following steps were taken to ensure that the assessment was managed in a logical and effective manner:

- Select quality data sources from key organizations such as U.S. Census Bureau, New Jersey Department of Health, American Cancer Society, etc.
- Engage community representatives, especially those with public health expertise
- Define the community that we serve through zip code analysis of the hospital catchment area
- Developed and administered a community survey in an effort to gain the community's input
- Prioritize the health and health-related problems based on relevant statistics and community's concern
- Identified data gaps throughout the data collection efforts

Guides and Expert Advice for Conducting the Assessment

- Educational Webinars by the New Jersey Hospital Association
- Guide for Planning & Reporting Community Benefit by Catholic Health Association
- Mobilizing for Action through Planning and Partnership (MAPP) by the National Association of County & City Officials
- Schedule H (Form 990) by the US Department of the Treasury Internal Revenue Service
- Guidance from public health community leaders
- Developed an internal committee for the revision process

Community Organizations with Public Health Experts involved in the Process

A series of meetings with representatives from the following organizations were held in 2012. These public health experts provided guidance regarding the assessment process.

Atlantic City Department of Health & Human Services

- Ronald Cash, Health Officer
- Rhonda Fitzgerald, Coordinator of Community Health/Educator

Atlantic County Division of Public Health

- Patricia Diamond, MPH, MCHES, RN, REHS, Public Health Officer
- Benjamin H. Mount III, MPA, MPH, Partnership Coordinator

Atlantic County Department of Corrections

- John McLernon, MSW, LCSW, Director, Social Services

Rutgers Cooperative Extension

- Joanne Kinsey MS, CFCS, Assistant Professor of Family & Community Health Sciences

Southern Jersey Family Medical Center

- Carol Malette, Program Director of Prenatal Access to Care

The Richard Stockton College of New Jersey (Now: Stockton University)

- Ariane Newman MS, Assistant Director of Continuing Studies

United Way of America

- Fran Wise, Director of Community Investments & Partnerships

As part of the updating process in 2015 several public health representatives were interviewed on key public health issues in the county. The following representatives were interviewed. Questions can be found in Appendix D.

Atlantic County Division of Public Health

- Benjamin H. Mount III, MPA, MPH, Coordinator of Community Health Services

Cape May County Health Department

- Kevin Thomas, Public Health Coordinator

Stockton University

- Ariane Newman, MS, Interim Assistant Dean of School of Health Sciences

In addition, public health statistical expertise (2015-2016) was given by:

Stockton University

- Tara L. Crowell, PhD., Associate Professor

Definition of Community

A “community” can take on many meanings. For the purpose of this needs assessment, our advisory committee defined community as all of the cities and towns in Atlantic County as well as Ocean City and Upper Township in Cape May County. During the update the hospital pulled data to examine who is actually using the hospital by zip code. Out of the approximately 106,000 cases that used Shore Medical Center’s services in 2014, 72.6% of them came from these ten regions:

1. Egg Harbor Township
2. Somers Point
3. Ocean City
4. Mays Landing
5. Pleasantville
6. Northfield
7. Atlantic City
8. Linwood
9. Margate
10. Ventnor

It is also important to note that although Longport and Woodbine have a small population, a huge portion of their population used Shore Medical Center’s services. A significant proportion of Marmora’s population used Shore Medical Center’s services as well.

Key Quantitative Sources of Data

- American Cancer Society
- American Diabetes Association
- American Heart Association
- Atlantic County Division of Public Health
- Centers for Disease Control and Prevention
- County Health Rankings, University of Wisconsin
- New Jersey Cancer Registry
- New Jersey Department of Health
- New Jersey Primary Care Association
- United States Census Bureau
- United States Department of Health and Human Services

Existing Health Care Resources

Hospital Resources

Shore Medical Center	609-653-3500 - www.shoremedicalcenter.org
Billing Questions	609-653-3717
Financial Assistance	609-653-3533
Cancer Screenings (uninsured)	609-653-3484
Urgent Care	609-653-5333
AtlantiCare	1-888-569-1000 - www.atlanticare.org
AtlantiCare Behavioral Health	1-888-569-1000 - www.atlanticare.org
Cape Regional Medical Center	609-486-5150 - www.caperegional.com

County Resources

Atlantic County Division of Public Health	609-645-7700 - www.aclink.org
Cape May County Health Department	609-465-1200 - www.cocape-may.nj.us

State Resources

New Jersey Department of Health	www.state.nj.us/health
NJ Health Insurance Exchange	www.healthinsurance.org/newjersey
Medicaid	1-800-356-1561 - www.medicade.gov

National Resources

Affordable Care Updates	www.hhs.gov
Medicare	1-800-633-4227 – www.medicare.gov

AREA DEMOGRAPHIC PROFILE

I. Population Data

According to the U.S. Census, Atlantic County's population in 2000 was 252,552. It increased to 274,549 in 2010 which resulted in an 8.7% increase to the total population. Cape May County's population was 102,326 in 2000 and decreased to 97,265 in 2010 which resulted in a 4.9% decrease to the total population. Individual municipalities fluctuate between increases and decreases of population. Buena, Egg Harbor Township, Galloway Township, Hamilton Township and Weymouth Township had an increase of 18% or higher while Brigantine, Margate, Ventnor and Ocean City had a decrease of 17% or more.

Table 1-1: Atlantic County, Distribution of Population by Municipality, 2000 & 2010

Area	2000 Total Population	2000 Percentage of Population	2010 Total Population	2010 Percentage of Population	Population Increase between 2000 & 2010
Atlantic County	252,552	100%	274,549	100%	8.7%
Absecon	7,638	3%	8,411	3%	10.1%
Atlantic City	40,517	16%	39,558	14%	-2.4%
Brigantine	12,594	5%	9,450	3%	-25.0%
Buena	3,873	2%	4,603	2%	18.8%
Buena Vista Township	7,436	3%	7,570	3%	1.8%
Corbin City	468	0%	492	0.2%	5.1%
Egg Harbor City	4,545	2%	4,243	1.5%	-6.6%
Egg Harbor Township	30,726	12%	43,323	16%	41.0%
Estell Manor	1,585	1%	1,735	1%	9.5%
Folsom	1,972	1%	1,885	1%	-4.4%
Galloway Township	31,209	12%	37,349	14%	19.7%
Hamilton Township	20,499	8%	26,503	10%	29.3%
Hammonton	12,604	5%	14,791	5%	17.4%
Linwood	7,172	3%	7,092	3%	-1.1%
Longport	1,054	0%	895	0.3%	-15.1%
Margate	8,193	3%	6,354	2%	-22.4%
Mullica Township	5,912	2%	6,147	2%	4.0%
Northfield	7,725	3%	8,624	3%	11.6%
Pleasantville	19,012	8%	20,249	7%	6.5%
Port Republic	1,037	0%	1,115	0.4%	7.5%
Somers Point	11,614	5%	10,795	4%	-7.1%
Ventnor	12,910	5%	10,650	4%	-17.5%
Weymouth Township	2,257	1%	2,715	1%	20.3%

Table 1-1 Continued: Cape May County, Distribution of Population by Municipality, 2000 & 2010

Cape May County	102,326	100%	97,265	100%	-4.9%
Ocean City	15,378	15%	11,701	12%	-23.9%
Upper Township	12,115	12%	12,373	13%	2.1%

Census Bureau 2000 & 2010, 100-Percent Data

DP1: Profiles of General Population and Housing Characteristics 2000 & 2010

Retrieved: April 24 & 25, 2012

II. Age and Gender

According to the U.S. Census the median age in Atlantic County was 37.0 in 2000 and 39.9 in 2010. Cape May County median age is was 40.7 in 2000 and 47.1 in 2010. The population is growing older. This can be shown in several areas of Table 2-2 and Table 2-3.

In Table 2-2, Atlantic County's total population in 2010 consisted of 133,175 men and 141,374 women representing 48.5% and 51.5% of the population respectively. As the population grows older, the composition of the population changes to a higher female based population. 51.3% of the population under 19 is male with 48.7% being female. In the age category of 80 and over 35.7% of the population is male and 64.3% is female. Additionally, generational fluctuations can be identified as the 30-34 and 35-39 age groups are in a decrease between 2000 and 2010 and the 55-59 and 60-64 age groups are in an increase between 2000 and 2010. The 85-89 age group also had a large increase. These population shifts illustrate the potential changes needed in medical care services.

In Table 2-3 similar population changes are occurring. Ocean City and Upper Township are combined together vs. looking at the entire Cape May County because this is the additional area relevant for Shore Medical Center outside of Atlantic County. The two municipalities' population in 2010 consisted of 11,507 men and 12,567 women representing 47.8% and 52.2% of the population respectively. As the population grows older, the composition of the population changes to a higher female based population. Fifty-one percent of the population under 19 is male with 49.2% being female. In the age category of 80 and over 35.1% of the population is male and 64.9% is female. Ages 35-39 and 40-44 decrease while ages 55-59 and 60-64 increase between 2000 and 2010 just the same as in Atlantic County. The Cape May County municipalities also had a large increase in the 85-89 age group as well.

Table 2-2: Atlantic County, Distribution of Population by Age and Gender, 2000 & 2010

Age	2000 Number & Percent			2010 Number & Percent			Percent Change
	Both	Male	Female	Both	Male	Female	
Total	252,552 100.0%	122,074 100.0%	130,478 100.0%	274,549 100.0%	133,175 100.0%	141,374 100.0%	8.7%
>5	16,483 6.5%	8,297 6.8%	8,186 6.3%	16,484 6.0%	8,403 6.3%	8,081 6.3%	0.0%
5-9	19,133 7.6%	9,755 8.0%	9,378 7.2%	17,074 6.2%	8,846 6.6%	8,228 5.8%	-10.8%
10-14	18,346 7.3%	9,403 7.7%	8,943 6.9%	18,314 6.7%	9,375 7.0%	8,939 6.3%	-0.2%
15-19	15,966 6.3%	8,195 6.7%	7,771 6.0%	19,854 7.2%	10,139 7.6%	9,715 6.9%	24.4%
20-24	14,294 5.7%	7,176 5.9%	7,118 5.5%	17,651 6.4%	8,838 6.6%	8,813 6.2%	23.5%
25-29	15,591 6.2%	7,516 6.2%	8,075 6.2%	15,893 5.8%	7,895 5.9%	7,998 5.7%	1.9%
30-34	18,035 7.1%	8,752 7.2%	9,283 7.1%	15,350 5.6%	7,432 5.6%	7,918 5.6%	-14.9%
35-39	21,798 8.6%	10,792 8.8%	11,006 8.4%	17,105 6.2%	8,164 6.1%	8,941 6.3%	-21.5%
40-44	21,908 8.7%	10,819 8.9%	11,089 8.5%	19,201 7.0%	9,297 7.0%	9,904 7.0%	-12.4%
45-49	18,186 7.2%	9,025 7.4%	9,161 7.0%	22,230 8.1%	10,907 8.2%	11,323 8.0%	22.2%
50-54	15,686 6.2%	7,618 6.2%	8,068 6.2%	22,390 8.2%	10,817 8.1%	11,573 8.2%	42.7%
55-59	12,345 4.9%	5,883 4.8%	6,462 5.0%	18,272 6.7%	8,884 6.7%	9,388 6.6%	48.0%
60-64	10,344 4.1%	4,809 3.9%	5,535 4.2%	15,829 5.8%	7,633 5.7%	8,196 5.8%	53.0%
65-69	9,250 3.7%	4,279 3.5%	4,971 3.8%	12,034 4.4%	5,548 4.2%	6,486 4.6%	30.1%
70-74	8,982 3.6%	3,917 3.2%	5,065 3.9%	9,054 3.3%	4,085 3.1%	4,969 3.5%	0.8%
75-79	7,369 2.9%	2,996 2.5%	4,373 3.4%	7,035 2.6%	3,060 2.3%	3,975 2.8%	-4.5%
80-84	4,718 1.9%	1,694 1.4%	3,024 2.3%	5,567 2.0%	2,221 1.7%	3,346 2.4%	18.0%
85-89	2,724 1.1%	840 0.7%	1,884 1.4%	3,496 1.3%	1,202 0.9%	2,294 1.6%	28.3%
90 & over	1,394 0.6%	308 0.3%	1,086 0.8%	1,716 0.6%	429 0.3%	1,287 0.9%	23.1%
Median Age	37.0	35.9	37.9	39.9	38.6	41.0	X

Census Bureau 2000 & 2010, 100-Percent Data
 QT-P1: Age Groups and Sex
 Retrieved: April 25, 2012

Table 2-3: Ocean City and Upper Township Combined, Distribution of Population by Age and Gender, 2000 & 2010

Age	2000 Number & Percent			2010 Number & Percent			Percent Change
	Both	Male	Female	Both	Male	Female	
Total	27,493 100.0%	12,966 100.0%	14,527 100.0%	24,074 100.0%	11,507 100.0%	12,567 100.0%	-12.4%
>5	1,265 4.6%	625 4.8%	640 4.4%	1,005 4.2%	495 4.3%	510 4.1%	-20.6%
5-9	1,702 6.2%	882 6.8%	820 5.6%	1,139 4.7%	586 5.1%	553 4.4%	-33.1%
10-14	1,916 7.0%	986 7.6%	930 6.4%	1,441 6.0%	719 6.2%	722 5.7%	-24.8%
15-19	1,590 5.8%	834 6.4%	756 5.2%	1,555 6.5%	812 7.1%	743 5.9%	-2.2%
20-24	1,099 4.0%	517 4.0%	582 4.0%	1,196 5.0%	658 5.7%	538 4.3%	8.8%
25-29	1,234 4.5%	613 4.7%	621 4.3%	1,075 4.5%	546 4.7%	529 4.2%	-12.9%
30-34	1,476 5.4%	715 5.5%	761 5.2%	932 3.9%	457 4.0%	475 3.8%	-36.9%
35-39	2,027 7.4%	952 7.3%	1,076 7.4%	1,072 4.5%	522 4.5%	550 4.4%	-47.1%
40-44	2,278 8.3%	1,065 8.2%	1,213 8.3%	1,377 5.7%	672 5.8%	705 5.6%	-39.6%
45-49	2,258 8.2%	1,124 8.7%	1,134 7.8%	1,884 7.8%	879 7.6%	1,005 8.0%	-16.6%
50-54	2,071 7.5%	1,088 8.4%	1,063 7.3%	2,166 9.0%	1,011 8.8%	1,155 9.2%	4.6%
55-59	1,734 6.3%	823 6.3%	911 6.3%	2,096 8.7%	1,004 8.7%	1,092 8.7%	20.9%
60-64	1,382 5.0%	623 4.8%	756 5.2%	1,899 7.9%	927 8.1%	972 7.7%	37.4%
65-69	1,395 5.1%	648 5.0%	747 5.1%	1,523 6.3%	715 6.2%	808 6.4%	9.2%
70-74	1,377 5.0%	599 4.6%	778 5.4%	1,058 4.4%	486 4.2%	572 4.6%	-23.2%
75-79	1,191 4.3%	485 3.7%	706 4.9%	977 4.1%	428 3.7%	549 4.4%	-18.0%
80-84	788 2.9%	272 2.1%	516 3.6%	861 3.6%	329 2.9%	532 4.2%	9.3%
85-89	449 1.6%	139 1.1%	310 2.1%	535 2.2%	190 1.7%	345 2.7%	19.2%
90 & over	261 0.9%	56 0.4%	205 1.4%	283 1.2%	71 0.6%	212 1.7%	8.4%

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Cape May County Median Age	42.3	40.7	43.8	47.1	45.3	48.7	X
Ocean City Median Age	47.8	45.4	50.3	53.6	51.4	55.2	X
Upper Township Median Age	38.4	38.0	38.8	43.6	42.2	44.9	X

Census Bureau 2000 & 2010, 100-Percent Data

QT-P1: Age Groups and Sex

Retrieved: April 25, 2012

In 2010, Atlantic County had 38,902 citizens 65 years old or older which is 14.2% of its population. Table 2-4 highlights the 11 out of 23 municipalities that have a higher percentage of senior citizens compared to the county overall average. Cape May County had 20,977 citizens 65 years old or older which is 21.6% of the population. Longport, Margate, Weymouth Township and Ocean City have the highest percentage of senior population in the Shore Medical Center catchment area.

Table 2-4: Atlantic County, Municipalities with Higher Percentage of Seniors (65+) than County Average Overall, 2010

Municipalities	Total Population	Total Seniors 65+		Male 65+		Female 65+	
		Number	Percent	Number	Percent	Number	Percent
Atlantic County	274,549	38,902	14.2%	16,545	12.4%	22,357	15.8%
Absecon	8,411	1,431	17.0%	619	7.4%	812	9.7%
Brigantine	9,450	2,056	21.8%	918	9.7%	1,138	12.0%
Buena Vista Township	7,570	1,242	16.4%	536	7.1%	706	9.3%
Hammonton	14,791	2,366	16.0%	924	6.2%	1,442	9.7%
Linwood	7,092	1,285	18.1%	493	7.0%	792	11.2%
Longport	895	337	37.7%	154	17.2%	183	20.4%
Margate	6,354	2,015	31.7%	896	14.1%	1,119	17.6%
Northfield	8,624	1,385	16.1%	537	6.2%	848	9.8%
Somers Point	10,795	1,577	14.6%	637	5.9%	940	8.7%
Ventnor	10,650	2,120	19.9%	863	8.1%	1,257	11.8%
Weymouth Township	2,715	737	27.1%	323	11.9%	414	15.2%

Ocean City, Higher Percentage of Seniors (65+) than County Average Overall, 2010

Municipalities	Total Population	Total Seniors 65+		Male 65+		Female 65+	
		Number	Percent	Number	Percent	Number	Percent
Cape May County	97,265	20,977	21.6%	9,081	19.2%	11,896	23.8%
Ocean City	11,701	3,471	29.7%	1,448	26.3%	2,023	32.6%

Census Bureau 2010, 100-Percent Data

QT-P1: Age Groups and Sex

Retrieved: April 25, 2012

III. Race

The distribution of population by race is found in Table 3-1. According to the 2010 U.S. Census, Atlantic County's three highest populations by race are white (65.4%), African American (16.1%) and Asian (7.5%). The Cape May County Municipalities population is predominately white (94.4%).

Table 3-1: Distribution of Population by Race, 2010

Subject	Atlantic County		OC & UT	
	Number	Percent	Number	Percent
Total Population	274,549	100.0%	24,074	100.0%
One Race	265,659	96.8%	23,730	98.6%
White	179,566	65.4%	22,725	94.4%
Black or African American	44,138	16.1%	48	0.2%
American Indian and Alaska Native	1,050	0.4%	31	0.1%
Asian	20,595	7.5%	175	0.7%
Asian Indian	5,153	1.9%	24	0.1%
Chinese	4,205	1.5%	51	0.2%
Filipino	2,914	1.1%	40	0.2%
Japanese	129	0.0%	9	0.0%
Korean	795	0.3%	24	0.1%
Vietnamese	3,267	1.2%	7	0.0%
Other Asian*	4,132	1.5%	20	0.1%
Native Hawaiian and Other Pacific Islander	92	0.0%	4	0.0%
Some Other Race	20,218	7.4%	313	1.3%
Two or More Races	8,890	3.2%	344	1.4%
White; American Indian and Alaska Native	731	0.3%	52	0.2%
White; Asian	1,197	0.4%	46	0.2%
White; Black or African American	2,155	0.8%	135	0.6%
White; Some Other Race	2,007	0.7%	33	0.1%

* Other Asian alone, or two or more Asian categories.

Census Bureau 2010, 100-Percent Data

DP1: Profiles of General Population and Housing Characteristics 2010

Retrieved: April 24, 2012

African Americans represent 16.1% of Atlantic County. Four municipalities have a higher percentage of African Americans than the county percentage. These municipalities are Atlantic City (38.3%), Egg Harbor City (17.9%), Hamilton Township (18.5%) and Pleasantville (45.9%). Two municipalities in Atlantic County have a higher African American population than white population. These two municipalities, Atlantic City and Pleasantville, have a racial composition as follows: Atlantic City's 26.7% white and 38.3% African American; and Pleasantville 24.3% white and 45.9% African American. (See Table 3-2)

Asian populations have increased in Atlantic County over the past ten years. According to the 2000 U.S. Census there were 12,771 Asians in Atlantic County consisting of 5.1% of the population.⁵ The 2010 U.S. Census reports 20,595 Asians in Atlantic County consisting of 7.5% of the population. This is a 61.3% increase in population. Four municipalities in Atlantic County have a higher percentage of Asians than the county percentage. These municipalities are Atlantic City (15.6%), Egg Harbor Township (11.8%), Galloway Township (10.0%) and Ventnor City (8.7%). (See Table 3-2)

Table 3-2: Atlantic County, Municipalities with Higher Percentage of Black or Asian Populations Than County Overall Average, 2010

Municipalities	Total Population	White Population		Black Population		Asian Population	
		Number	Percent	Number	Percent	Number	Percent
Atlantic County	274,549	179,566	65.4%	44,138	16.1%	20,595	7.5%
Atlantic City	39,558	10,543	26.7%	15,148	38.3%	6,153	15.6%
Egg Harbor City	4,243	2,671	63.0%	761	17.9%	94	2.2%
Egg Harbor Township	43,323	30,230	69.8%	4,152	9.6%	5,096	11.8%
Galloway Township	37,249	26,860	71.9%	4,271	11.4%	13,744	10.0%
Hamilton Township	26,503	18,011	68.0%	4,916	18.5%	1,435	5.4%
Pleasantville	20,249	4,926	24.3%	9,303	45.9%	490	2.4%
Ventnor City	10,650	8,076	75.8%	453	4.3%	924	8.7%

Census Bureau 2010, 100-Percent Data

DP1: Profiles of General Population and Housing Characteristics 2010

Retrieved: April 24, 2012

IV. Latino Ethnicity

Latino populations have increased in Atlantic County over the past ten years. According to the 2000 U.S. Census there were 30,729 Latino/as consisting of 12.2% of the population.⁶ The 2010 U.S. Census reports 46,241 Latino/as in Atlantic County consisting of 16.8% of the population. This is a 50.5% increase in population. Puerto Ricans make up 39.3% and Mexicans make up 23.5% of the Latino/a community. (See Table 4-1) Although the Puerto Rican population is larger Mexican populations are growing much quicker. Over the past ten years the Puerto Rican population increased 24.6% while the Mexican population doubled at an increase of 118.8%.⁷

Table 4-1: Atlantic County, Distribution of Population by Latino Ethnicity, 2010

Latino	Number	Percent
Total Population	274,549	100.0%
Latino or Hispanic (of any race)	46,241	16.8%
Mexican	10,879	4.0%
Puerto Rican	18,160	6.6%
Cuban	785	0.3%
Other Latino or Hispanic	16,417	6.0%
Not Latino or Hispanic	228,308	83.2%

Census Bureau 2010, 100-Percent Data

DP1: Profiles of General Population and Housing Characteristics 2010

Retrieved: April 24, 2012

Seven municipalities in Atlantic County have a higher percentage of Latinos than the county percentage. These municipalities are listed in Table 4-2.

Table 4-2: Atlantic County, Municipalities with Higher Percentage of Latino or Hispanic (any race) than the County Average Overall, 2010

Latino	Number	Percent
Atlantic County	46,241	16.8%
Atlantic City	12,044	30.4%
Buena	1,354	29.4%
Egg Harbor City	1,115	26.3%
Hammonton	3,096	20.9%
Mullica Township	1,046	17.0%
Pleasantville	8,314	41.1%
Ventnor City	1,922	18.0%

Census Bureau 2010, 100-Percent Data

DP1: Profiles of General Population and Housing Characteristics 2010

Retrieved: April 24, 2012

V. Income

The 2010 Census information was not yet available for income; therefore the American Community Survey conducted by the Census Bureau was used to estimate income numbers. The Atlantic County 5 year estimate was approximately 101,645 households. Households are defined as everyone living in a housing unit as their usual residence.⁸ The Atlantic County median income was \$54,766 and the mean income was \$71,086. Cape May County had 45,420 households with a median income of \$54,292 and a mean income of \$74,630. Both Atlantic County and Cape May County household income measurements are lower than New Jersey; median \$69,811 (MOE +/-309) and mean \$93,475 (MOE +/-360). Families and non-family households are further broken down in Table 5-1 by county.

**Table 5-1: 5 Year Estimates, Income and Benefits, 2006-2010
(2010 Inflation Adjusted Dollars)**

Subject	Number	MOE
Atlantic County		
Total Households	101,645	+/-1,752
Median Household Income	\$ 54,766	+/-1,130
Mean Household Income	\$ 71,086	+/-1,632
Families	67,256	+/-1,515
Median Family Income	\$ 66,920	+/-1,698
Mean Family Income	\$ 81,491	+/-1,540
Non-Family Household	34,389	+/-1,057
Median Non-Family	\$ 32,156	+/-1,416
Mean Non-Family Income	\$ 46,796	+/-3,478

Cape May County		
Total Households	45,420	+/-894
Median Household Income	\$ 54,292	+/-1,444
Mean Household Income	\$ 74,630	+/-2,240
Families	29,903	+/-860
Median Family Income	\$ 69,978	+/-3,119
Mean Family Income	\$ 88,660	+/-3,414
Non-Family Household	15,517	+/-805
Median Non-Family Income	\$ 33,059	+/-1,673
Mean Non-Family Income	\$ 45,057	+/-2,358

MOE: Margin of Error

U.S. Census Bureau, 2006-2010 American Community Survey

DP03: Selected Economic Characteristics, 5 Year Estimates

Retrieved: July 23, 2012

Several municipalities in Atlantic County have lower median and mean incomes. These municipalities include Atlantic City, Buena, Egg Harbor City, Pleasantville, Somers Point and Weymouth Township. Both of the Cape May County municipalities included in Shore Medical Center's catchment area are higher than the Cape May and Atlantic County numbers.

VI. Poverty

Atlantic County (11.8%) and Cape May County (12.7%) have higher percentages of the population living below the poverty level compared to New Jersey (9.1%). According to the American Community Survey approximately 30,757 people live below the poverty level in Atlantic County. Atlantic City, Egg Harbor City and Pleasantville have the highest percentages of people that live below the poverty level. (See Table 6-1)

Table 6-1: 5 Year Estimates, Poverty Status (Below Poverty Level), 2006-2010, Municipalities with 11% or more people below the poverty level

Area	Population for whom poverty status is determined	Population below poverty level	Percent below poverty level
Atlantic County MOE	261,002 +/-3,083	30,757 +/-2,141	11.8% +/-0.8
Atlantic City	39,959 +/-139	10,125 +/-900	25.3% +/-2.3
Buena	4,510 +/-31	508 +/-254	11.3% +/-5.6
Buena Vista Township	7,607 +/-27	1,037 +/-432	13.6% +/-5.7
Egg Harbor City	4,335 +/-28	905 +/-486	20.9% +/-11.2
Hammonton	14,392 +/-158	1,723 +/-496	12.0% +/-3.4
Pleasantville	19,782 +/-140	3,597 +/-997	18.2% +/-5.0
Somers Point	10,988 +/-86	1,399 +/-382	12.7% +/-3.5
Cape May County	10,988 +/-86	1,399 +/-382	12.7% +/-3.5

MOE: Margin of Error

U.S. Census Bureau, 2006-2010 American Community Survey

S1707: Poverty Status in the Past 12 Months, 5 Year Estimates

Retrieved: July 24, 2012

Certain population groups experience more poverty than others. In Atlantic County children under 18 (16.9%), African Americans (32.0%) and Latino/as (20.1%) are more likely to be living below the poverty level. Populations that did not receive a high school diploma (20.7%) or were unemployed (23.9%) were also more likely to be living below the poverty level.

VII. Education

Educational attainment is lower in Atlantic County and Cape May County compared to New Jersey. According to the American Community Survey a higher percentage of people graduate with bachelor and graduate degrees in New Jersey than in Atlantic and Cape May County. In New Jersey, 21.6% received bachelor degrees and 13.0% received graduate degrees compared to 16.3% and 7.2% for Atlantic County and 17.4% and 8.9% for Cape May County respectively. 87.3% of people in New Jersey are a high school graduate or higher and 34.6% of people in New Jersey have a bachelor's degree or higher. (See Table 7-1)

Table 7-1: 5 Year Estimates, Educational Attainment, 2006-2010

Subject	Number	MOE
Atlantic County		
Population 25 years and over	183,469	+/-145
Less than 9th grade	5.8%	+/-0.4
9th to 12 grade, no diploma	9.5%	+/-0.5
High school graduate/GED	35.5%	+/-0.9
Some college, no degree	18.6%	+/-0.6
Associate's degree	7.0%	+/-0.5
Bachelor's degree	16.3%	+/-0.6
Graduate of professional degree	7.2%	+/-0.4
Percent high school graduate or higher	84.7%	+/-0.7
Percent bachelor's degree or higher	23.6%	+/-0.7

Cape May County		
Population 25 years and over	71,205	+/-0.158
Less than 9th grade	3.2%	+/-0.5
9th to 12 grade, no diploma	8.6%	+/-0.7
High school graduate/GED	36.6%	+/-1.4
Some college, no degree	18.5%	+/-0.9
Associate's degree	6.7%	+/-0.6
Bachelor's degree	17.4%	+/-1.0
Graduate of professional degree	8.9%	+/-0.7
Percent high school graduate or higher	88.2%	+/-0.9
Percent bachelor's degree or higher	26.4%	+/-1.1

MOE: Margin of Error

U.S. Census Bureau, 2006-2010 American Community Survey

S1501: Educational Attainment, 5 Year Estimates

Retrieved: July 24, 2012

VIII. Language

Approximately 76% of the Atlantic County's population over 5 years old speaks only English. This is slightly higher than New Jersey in which 71.3% of the population over 5 years old speaks only English. Cape May County has a much higher percentage of the population that speaks only English consisting of 90.9% of the population. The highest segment of the population that speaks another language is Spanish or Spanish Creole as illustrated in Table 8-1. This is also the case with New Jersey as a whole (14.6%).

Table 8-1: 5 Year Estimates, Language Spoken at Home, 2006-2010

Language	Number	MOE	Percent	MOE
Atlantic County				
Population 5 years and over	256,508	*****		
Speak only English	195,720	+/-1,745	76.3%	+/-0.7
Speak a language other than English	60,788	+/-1,745	23.7%	+/-0.7
Spanish or Spanish Creole	33,887	+/-1,314	13.2%	+/-0.5
Other Indo-European	14,713	+/-1,224	5.7%	+/-0.5
Asian and Pacific Island	10,046	+/-838	3.9%	+/-0.3
Other	2,142	+/-549	0.8%	+/-0.2

Cape May County				
Population 5 years and over	93,095	+/-114		
Speak only English	84,619	+/-644	90.9%	+/-0.7
Speak a language other than English	8,476	+/-644	9.1%	+/-0.7
Spanish or Spanish Creole	5,078	+/-494	5.5%	+/-0.5
Other Indo-European	2,631	+/-447	2.8%	+/-0.5
Asian and Pacific Island	700	+/-223	0.8%	+/-0.2
Other	67	+/-56	0.1%	+/-0.1

MOE: Margin of Error

An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

U.S. Census Bureau, 2006-2010 American Community Survey
S1601 & B16001: Language Spoken at Home, 5 Year Estimates
Retrieved: August 1, 2012

Although Spanish is the most common language of people who speak another language in Atlantic County, there are a variety of other languages that are spoken. The following languages represent populations of 1,000 or more in Atlantic County: Chinese, Other Indic Languages, Vietnamese, Tagalog, Italian, Gujarati, French Creole, Arabic and Urdu. The only language higher than 1,000 people in Cape May County is Spanish.⁹

The 2010 Census actual sample data for language was not available yet. As this information is tabulated and becomes available it will be possible to look at how many people in the area do or do not speak English well and how many households are isolated in which no one in the household age 14 or over can speak English well. An estimate of approximately 6.2% of the households in Atlantic County and 2.2% of the households in Cape May County are

linguistically isolated in which no one in the household age 14 or older can speak English very well. This breaks down evenly between languages. See Table 8-2 for details.

Table 8-2: 5 Years Estimates, No One Age 14 and Over in the Household that Speaks English Very Well, 2006-2010

Subject	Percentage	MOE
Atlantic County		
Linguistically Isolated Households	6.2%	+/-0.4
Spanish	26.7%	+/-2.7
Other Indo-European	21.6%	+/-3.3
Asian and Pacific Island	35.7%	+/-5.1
Other	21.0%	+/-9.3
Cape May County		
Linguistically Isolated Households	2.2%	+/-0.7
Spanish	20.5%	+/-7.0
Other Indo-European	11.8%	+/-7.4
Asian and Pacific Island	28.9%	+/-21.9
Other	27.3%	+/-38.3

U.S. Census Bureau, 2006-2010 American Community Survey
 S1602: No One Age 14 and Over Speaks English or Speaks English "Very Well", 5 Year Estimates
 Retrieved: August 1, 2012

Table 8-3 illustrates where populations who speak another language are located. The municipalities listed in Table 8-3 have a higher percentage of people who speak another language other than English. All of the municipalities had a higher Spanish percentage, but Atlantic City also had a higher Indo-European and Asian and Pacific Island percentage as well.

Table 8-3: Year Estimates, Municipalities with a Higher Percentage than the County Average Overall for Populations Speaking a Language other than English, 2006-2010

Language	Percent	MOE
Atlantic County (5 and over)		
Speak a language other than English	23.7%	+/-0.7
Atlantic City	59.4%	+/-2.5
Buena	30.9%	+/-6.6
Egg Harbor City	31.5%	+/-9.7
Pleasantville	41.0%	+/-4.5
Ventnor	29.6%	+/-6.5

MOE: Margin of Error
 U.S. Census Bureau, 2006-2010 American Community Survey
 S1601: Language Spoken at Home, 5 Year Estimates
 Retrieved: August 1, 2012

Absecon, Egg Harbor Township, Hamilton Township, Hammonton, Galloway Township and Mullica Township are comparable to the county percentage. The remaining municipalities in Atlantic County were much lower than the county percentage.

In addition the inability to read English can be problematic. Literacy skills are a strong predictor of an individual’s health status. According to the Center for Health Care Strategies, a disproportionate number of minorities and immigrants are estimated to have literacy problems: 50% of Hispanics, 40% of blacks, and 22% of Asians.¹⁰ Compliance and medical errors may be based on a poor understanding of health care information as only about 50% of all patients take medications as directed¹¹ and patients with low literacy skills were observed to have a 50% increased risk of hospitalization, compared with patients who had adequate literacy skills.¹²

IX. Veterans

Approximately 8.8% of Atlantic County and 13.4% of Cape May County are veterans. Vietnam veterans make up the largest percentage of veterans as seen in Table 9-1. In both Atlantic and Cape May County most veterans are men (94.7% and 95.0% respectively) and White (79.9% and 93.7%) or African American (14.1% and 4.1%). Age groups vary with most veterans 35 and over.¹³

Table 9-1: 5 Year Estimates, Veteran Status, 2006-2010

Subject	Estimate	MOE
Atlantic County		
Civilian population over 18	208,209	+/-90
Veterans	18,358	+/-661
Period of Service		
Gulf War (after 2001)	4.1%	+/-0.9
Gulf War (8/1990 - 8/2001)	8.3%	+/-1.5
Vietnam Era	35.8%	+/-2.1
Korea Era	15.1%	+/-1.6
World War II	12.6%	+/-1.5
Cape May County		
Civilian population over 18	77,855	+/-226
Veterans	10,417	+/-653
Period of Service		
Gulf War (after 2001)	7.6%	+/-4.5
Gulf War (8/1990 - 8/2001)	7.3%	+/-1.9
Vietnam Era	30.4%	+/-2.8
Korea Era	18.4%	+/-2.1
World War II	15.0%	+/-1.7

MOE: Margin of Error

U.S. Census Bureau, 2006-2010 American Community Survey

S2101: Veteran Status, 5 Year Estimates

Retrieved: August 2, 2012

Health Risk Factors

X. Health Status Indicators

Atlantic County's birth rate is the same as New Jersey while Cape May County's birth rate is lower than New Jersey. Atlantic County has a higher percentage of low birth weight births compared to both New Jersey and Cape May County. See Table 10-1.

Table 10-1: Health Assessment Data - Births, 2007

Subject	New Jersey		Atlantic County		Cape May County	
	N/R	Percent	N/R	Percent	N/R	Percent
Total Births	115,920	x	2,607	x	969	x
Birth Rate *	13.4	x	13.4	x	10.0	x
Low Birth Weight (1,500-2,499g)	7,576	6.5%	264	10.1%	62	6.4%
Very Low Birth Weight (1,000-1,499g)	899	0.8%	42	1.6%	4	0.4%

N/R: Number/Rate

* Number of births per 1,000 residents

New Jersey State Health Assessment Data: New Jersey Birth Certificate Database, NJDHSS

Retrieved: April 2, 2012 from <http://www4.state.nj.us/dhss-shad/query/Introduction.html>.

Atlantic County has a higher death rate in all categories compared to New Jersey where as Cape May County has a lower death rate in all categories. This is also apparent in the average age of death. See Table 10-2.

Table 10-2: Health Assessment Data - Deaths, 2007

Subject	New Jersey		Atlantic County		Cape May County	
	Number	Rate	Number	Rate	Number	Rate
Total Deaths	68,932	x	2,383	x	1,050	x
Death Rate **	x	722.8	x	803.6	x	673.2
Average Age at Death	74.8	x	72.7	x	76.6	x
Cancer	16,949	x	594	x	248	x
Cancer Death Rate **	x	179.4	x	195.7	x	155.5
Diabetes	2,313	x	71	x	27	x
Diabetes Death Rate **	x	24.4	x	23.3	x	17.8
Diseases of the Heart	18,657	x	652	x	303	x
Diseases of the Heart Death Rate **	x	192.3	x	218.8	x	184.9
Stroke	3,452	x	108	x	58	x
Stroke Death Rate **	x	35.8	x	36.3	x	34.8
Infant Mortality	590	x	31	x	6	x
Infant Mortality Death Rate ***	x	5.1	x	8.6	x	not reliable

** Number of deaths per 100,000 population, age adjusted.

*** The infant mortality rate is the number of deaths under one year of age per 1,000 live births in the same year.

New Jersey State Health Assessment Data: New Jersey Death Certificate Database, New Jersey Infant and Fetal Mortality Database, NJDHSS.

Retrieved: April 2, 2012 from <http://www4.state.nj.us/dhss-shad/query/Introduction.html>.

XI. Health Insurance

Americans who do not have health insurance are less likely to receive annual preventive care such as routine exams and screenings for chronic disease, access to medication and often receive delayed treatment and premature mortality.¹⁴ Approximately 35,000 people in Atlantic County and 10,000 people in Cape May County do not have health insurance. There are more men who do not have health insurance than women. See Table 11-1.

Table 11-1: Health Insurance Coverage Status - 2009

All Income Levels

County	Number of People Under 65	Number Uninsured	Percentage Uninsured	MOE for Number of Uninsured	MOE for Percent
Atlantic County					
Both Men & Women	228,728	35,494	15.5%	2,380	1.0%
Men	113,435	19,800	17.5%	1,727	1.5%
Women	115,294	15,694	13.6%	1,589	1.4%
Cape May County					
Both Men & Women	73,988	10,530	14.2%	825	1.1%
Men	36,911	5,615	15.2%	593	1.6%
Women	37,077	4,915	13.3%	560	1.5%

A margin of error (MOE) is the difference between an estimate and its upper or lower confidence bounds. Confidence bounds can be created by adding the margin of error to the estimate (for an upper bound) and subtracting the margin of error from the estimate (for a lower bound). All published margins of error for the Small Area Health Insurance Estimates program are based on a 90 percent confidence level.

The number in a demographic group is the number of people in the poverty universe in that age, sex, and race/Hispanic origin group.

U.S. Census, SAHIE Data, 2009

Retrieved: April 2, 2012 from <http://www.census.gov/did/www/sahie/data/2009/tables.html>.

The 2009 Behavioral Risk Factor Surveillance System (BRFSS) prevalence and trend data is not available on the county level, but it does give insight on what is going on in the state. Gender, age, race, income and education levels affect health care coverage. The following information is categorized by different groups. The results are below:

- 84.8% said yes, 15.2% said no.
- Gender: 17.0% of men and 13.4% of women said no.
- Age: 28.0% of 18-24 year olds, 19.6% of 25-34 year olds, 13.3% of 35-44 year olds, 9.7% of 45-54 year olds and 10.2% of 55-64 year olds said no.
- Race/Ethnicity: 8.3% of white, 21.3% of Black, 35.7% of Hispanic and 15.3% of other said no.
- Income: 41.2% had incomes less than \$15,000, 41.8% of \$15,000-\$24,999, 30.9% of \$25,000-\$34,999, 19.7% of \$35,000-\$49,000 and 4.4% of \$50,000+ said no.
- Education: 37.6% had less than high school, 21.8% high school or G.E.D., 16.7% some post high-school and 7.2% college graduates said no.¹⁵

Groups such as Black or Hispanic, lower incomes and lower educational attainment puts people at greater risk for lack of health insurance, access to medical care and poorer health.

XII. Obesity

A body mass index (BMI) is an indicator of fatness calculated from a person's weight and height, used to screen for weight categories.¹⁶ Excess weight can lead to health problems. The Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion estimates that approximately 28.0% of Atlantic County and 24.9% of Cape May County adults 20 and older were obese (BMI 30.0 or more) in 2009. This yields an estimate of 53,000-60,000 people in Atlantic County and 17,000-21,000 people in Cape May County.¹⁷

The obesity numbers above consist of adults who have a BMI of 30.0 or more. This does not include adults who are overweight. The 2009 Behavioral Risk Factor Surveillance System (BRFSS) prevalence and trend data breaks down the data into categories of (a) neither overweight nor obese (BMI less than 24.9); (b) overweight (BMI 25.0-29.9); (c) obese (BMI 30.0-99.8). This information is not available on the county level, but it does give insight on what is going on in the state. Men, black and Hispanic populations are more likely to be overweight or obese; age did not affect the percentages much; and the more education a person attained the more likely that weight was not a problem.¹⁸ See Table 12-1 on the next page for details.

Lack of physical activity is related to obesity numbers. CDC estimates that 24.6% of Atlantic County and 22.3% of Cape May County adults 20 and older were physically inactive which results in approximately 47,000-54,000 adults in Atlantic County and 16,000-20,000 adults in Cape May County that were physically inactive in 2009.¹⁹ Only 47.5% of New Jerseyans participate in the recommended amount of exercise^v according to the BRFSS. CDC highlights:

- Obesity-related conditions such as heart disease, stroke, type 2 diabetes and certain types of cancer are some of the leading causes of death;
- Medical cost for people who are obese were \$1,429 higher than those of normal weight;
- Non-Hispanic Blacks and Hispanics had some of the highest rates of obesity;
- Between 1988-1994 and 2007-2008 the prevalence of obesity increased in adults at all income and education levels.²⁰

Childhood obesity is also concerning. According to the CDC approximately 15%-20% of low-income children aged 2 to 4 in New Jersey in 2010 were obese. Obesity prevalence has almost tripled since 1980 among children and adolescents with Hispanic boys and Black girls were more likely to be obese than non-Hispanic white children and adolescents.²¹ CDC highlights:

- 1 of 3 low-income children are obese or overweight before their 5th birthday;
- 1 of 7 low-income preschool-aged children are obese;

^v Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week.

- Obese children are more likely to have high blood pressure, high cholesterol, and type 2 diabetes;
- Obese children are more likely to become obese adults; and
- Low-income families generally have less access to health food choices and opportunities for physical activities.²²

Table 12-1: New Jersey - 2009, Weight Classification by Body Mass Index (BMI)

Subject	Neither (BMI < 24.9)	Overweight (BMI 25.0-29.9)	Obese (BMI > 30.0)
No Grouping	38.1	38.0	23.9
Gender			
Male	30.9	44.3	24.8
Female	45.1	31.8	23.1
Age			
18-24	58.0	29.8	12.2
25-34	40.8	38.2	21.0
35-44	35.6	39.9	24.6
45-54	33.9	38.9	27.2
55-64	30.8	38.0	31.2
65+	36.6	39.9	23.6
Race			
White	40.0	37.2	22.8
Black	24.9	36.4	38.7
Hispanic	30.9	44.1	24.9
Other	53.3	36.7	10.0
Subject	Neither (BMI<24.9)	Overweight (BMI 25.0-29.9)	Obese (BMI>30.0)
Income			
Less than \$15,000	32.6	39.7	27.7
\$15,000-24,999	38.7	32.8	28.5
\$25,000-34,999	35.1	40.1	24.9
\$35,000-49,000	36.9	35.9	27.2
\$50,000+	37.8	39.0	23.2
Education			
Less than H.S.	30.4	36.4	33.2
H.S. or G.E.D.	31.9	39.8	28.3
Some post H.S	39.7	34.6	25.6
College Graduate	42.0	39.3	18.7

Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services

Prevalence and Trends Data - Overweight and Obesity (BMI)

Retrieved: August 14, 2012

XIII. Tobacco Use

Tobacco smoke consists of more than 7,000 chemicals, including hundreds that are toxic and about 70 that cause cancer. Some examples of these chemicals are formaldehyde, arsenic, lead, carbon monoxide, butane and more. Nicotine is a highly addictive drug that changes the way the brain works thus making the person crave more and keeping the person using.²³

Atlantic and Cape May County have some of the highest smoking percentages in New Jersey. It is estimated that in 2014, 20% of adults (18 and over) in Atlantic County and 21% in Cape May County smoked cigarettes.²⁴ By applying the County Health Ranking numbers for each county to the most recent Census Bureau numbers an estimation of how many adults are affected by smoking can be found in Table 13.1. This is computed by applying the smoking percentage to the population 18 and over. Please note county populations have changed minimally between 2010 and 2014.²⁵

Table 13.1: Estimated Smoking Population 18 and Over, 2010

County	Number of People 18 and Over	Smoking Rate % (2010)	Estimated Number of Smokers
Atlantic	210,661	20.0%	42,132
Cape May	78,916	21.0%	16,572

*Estimated smokers were computed by multiplying the population in 2010 by the percentage of smokers in 2010.

Census Bureau 2010, 100-Percent Data

2000 County Health Rankings & Roadmaps, University of Wisconsin, Population Health Institute, <http://www.countyhealthrankings.org/#app/new-jersey/2010/atlantic/county/2/overall>,

Retrieved: August 15, 2012 from <http://factfinder2.census.gov> & September 21, 2015 <http://www.countyhealthrankings.org>

In addition it appears that education and economic status affects a person's smoking status in New Jersey. In 2010, approximately 7.2% of people who smoked were a college graduate compared to 22.9% of people who had less than a high school diploma; and 10.6% of household incomes above \$50,000 smoked while 26.2% of households that make less than \$15,000 smoked.²⁶

In 2006 the National Youth Tobacco Survey reported that 30.2% of high school boys and 21.3% of high school girls had used some type of tobacco product on one or more of the preceding 30 days. It was found that 21.2% of high school boys and 18.4% of high school girls smoked cigarettes one or more of the preceding 30 days.²⁷ The Atlantic County Youth Risk Behavior Survey reports that 17.5% of high school 9th and 11th grade students smoked during the past 30 days. This number has decreased in Atlantic County over the years from 28.4% in 1999 to 19.6% in 2004 to 12.9% in 2010. Students were also asked if they smoked at least one cigarette every day for 30 days. In 2007 the national results were 10.8% of students. In Atlantic County 13.5%

in 2004 and 9.7% in 2010 9th and 11th grade students said they smoked at least one cigarette every day for 30 days.²⁸

Secondhand smoke is a mixture of smoke from burning cigarettes, cigars or pipes and the exhaled mainstream smoke from smokers.²⁹ This smoke contains more than 7,000 chemicals including hundreds of toxic chemicals and 70 chemicals that can cause cancer according to the U.S. Department of Health and Human Services.³⁰ There has been a decrease in the exposure to secondhand smoke in the United States over the last twenty years due to the Indoor Air laws banning smoking in workplaces and public places, changes in smoking habits in the home and decreased smoking rates. However in 2007-2008 it is estimated that approximately 40.1% of U.S. nonsmokers had a measureable level of cotinine (measured in saliva, urine or blood) which is a byproduct of nicotine that was once in smoke.³¹ Although New Jersey has enacted a Smoke-Free Air Act, Atlantic County still has many casino workers exposed to secondhand smoke exposure due to the casino exception.³²

Centers for Disease Control and Prevention (CDC) highlights the following tobacco facts:

- Smoking causes heart disease, stroke, cancer and lung diseases; It
 - increases coronary heart disease by 2 to 4 times,
 - increases stroke by 2 to 4 times,
 - increases development of lung cancer in men by 23 times,
 - increases development of lung cancer in women by 13 times, and
 - increases death from chronic obstructive lung disease by 12 to 13 times.
- Tobacco is the leading preventable cause of death – it is estimated that tobacco use causes 1 in 5 deaths;
- The average smokers dies 13 to 14 years earlier than a nonsmoker;
- Cigarette smoking costs \$96 billion in health care expenditures; and
- Smoking adversely affects reproductive and early childhood effects by increasing risk for infertility, preterm delivery, stillbirth, low birth weight and sudden infant syndrome.³³

Secondhand smoke for nonsmokers cause increased risk for heart disease and lung cancer. According to the U.S. Department of Health and Human Services a nonsmoker who is exposed to secondhand smoke has an increased risk of heart disease by 25-30% and an increased risk of lung cancer by 20-30%.³⁴ Secondhand smoke causes problems for children as well. Children exposed to secondhand smoke experience health issues such as ear infections, asthma issues, respiratory symptoms such as coughing and shortness of breath, respiratory infections such as bronchitis and pneumonia and a greater risk for SIDS.³⁵

XIV. Alcohol Use

Excessive drinking consists of binge drinking and heavy drinking. Binge drinking is when men consume more than five or women consume more than four alcoholic beverages on a single occasion in the past 30 days. Heavy drinking is defined as drinking more than two drinks for men and one drink for women on average per day. Atlantic County and Cape May County have the highest percentages of excessive drinking in New Jersey at 18% of the population over 18 years old in 2012 for both counties. In 2010 the data was compiled for binge drinking alone with

Atlantic County being one of highest at 17% and Cape May County falling in the middle at 14%.³⁶ If the percentage of excessive drinking is applied to the 2010 Census count it can be estimated that approximately 37,919 people in Atlantic County and 14,205 people in Cape May County fall into the excessive drinking category. This is computed by applying the excessive drinking percentage to the population 18 and over. Although we do not know exactly how many people abuse alcohol we do know that there were 1,020 Atlantic County³⁷ admissions and 593 Cape May³⁸ County admissions to a Substance Abuse Treatment Program for alcohol in 2011.

The 2010 Behavioral Risk Factor Surveillance System (BRFSS) prevalence and trend data is not available on the county level, but it does give insight on binge drinking trends in New Jersey by gender, age, race, income and educational levels. The following information is categorized by different groups. The results are below:

- 13.8% said yes, 86.2% said no to binge drinking (males having five or more drinks, females having four or more drinks on one occasion).
- Gender: 17.8% of men and 10.1% of women said yes.
- Age: 16.8% of 18-24 year olds, 21.8% of 25-34 year olds, 17.0% of 35-44 year olds, 13.7% of 45-54 year olds, 9.7% of 55-64 year olds and 4.1% of 65 and over said yes.
- Race/Ethnicity: 16.1% of White, 10.3% of Black, 13.1% of Hispanic and 4.8% of other said yes.
- Income: 11.1% had incomes less than \$15,000, 11.0% of \$15,000-\$24,999, 8.3% of \$25,000-\$34,999, 12.6% of \$35,000-\$49,000 and 17.3% of \$50,000+ said yes.
- Education: 10.3% had less than high school, 13.3% high school or G.E.D., 15.0% some post high-school and 14.1% college graduates said yes.³⁹

Alcohol usage and experimentation begins during adolescents for many people. The United States Youth Risk Behavior Surveillance Survey reported that 70.8% of students nationwide had at least one alcoholic drink during their lifetime. The highest prevalence is among white (71.7%) and Hispanic (73.2%) students compared to Black (63.5%) students. The prevalence also increases as students get older. Students who ever had an alcoholic drink are broken down as such: 9th-grade (61.7%), 10th-grade (69.2%), 11th-grade (75.3%) and 12th-grade (79.0%). Trends are consistent when students were asked what their current alcohol usage was during the last 30 days. White and Hispanic students had higher numbers than Black students. The overall nationwide percentage of students that had at least one alcoholic drink during the past 30 days was 38.7%. On the national level, 21.9% of students binge drank during the last 30 days. This was higher among males (23.8%) than females (19.8%) and higher among white and Hispanic populations. Binge drinking also increased as students got older (12th grade compared to 9th grade).⁴⁰

Similar trends are found in Atlantic County. According to the 2010 Atlantic County Division of Public Health Youth Risk Behavior Study 76.8% of 11th grade females and 70.9% of 11th grade males in Atlantic County have had at least one drink of alcohol in their life. Twenty-seven percent of 9th and 11th grade students had their first drink of alcohol at 13 or 14 years of age. In the past 30 days, 38.9% of 9th and 11th grade students had at least one drink of alcohol.⁴¹ It is clear that as adolescents get older they are more likely to try alcohol. This is evident by the percentages broken down by grade. In 2010, approximately 30.0% of 9th graders had at least one

drink of alcohol in the past 30 days compared to approximately 50.0% of 11th graders.⁴² Young people who begin drinking before the age of 15 are five times more likely to become dependent on alcohol compared to adults who begin drinking at 21. Alcohol also increases risky sexual behaviors, poor grades, risk of fatal and nonfatal injuries and increased risk of suicide and homicide.⁴³

The Centers for Disease Control and Prevention (CDC) reports potential excessive alcohol health problems:

- Chronic diseases such as
 - Cirrhosis of the liver
 - Pancreatitis
 - Cancers such as liver, mouth, throat, larynx and esophagus
 - High blood pressure
 - Psychological disorders.
- Unintentional injuries such as
 - Motor-vehicle accidents
 - Falls
 - Drowning
 - Burns
 - Firearm injuries.
- Violence such as
 - Child maltreatment
 - Homicide
 - Suicide.
- Fetal alcohol spectrum disorders.
- Sudden infant death syndrome (SIDS).
- Alcohol abuse or dependence.⁴⁴

XV. Health Literacy

90 million people in the U.S. have difficulty with health literacy. Health literacy is the ability to read, understand and act on health information. Limited health literacy increases the disparity in health care access among vulnerable populations (such as racial/ethnic minorities and the elderly). Literacy skills are a stronger predictor of an individual's health status than age, income, employment status, education level, or racial/ethnic group. According to the Center for Health Care Strategies, a disproportionate number of minorities and immigrants are estimated to have literacy problems: 50% of Hispanics, 40% of blacks, and 22% of Asians.⁴⁵ Low health literacy is a huge cost burden on the American healthcare system. Annual health care cost for individuals with low literacy skills are four times higher than those with higher literacy skills.⁴⁶

According to U.S. Census, in 2013 42.8% of Spanish speaking people in Atlantic County and 52.2% in Cape May County reported that they do not speak English "very well". Fifty-five percent of Asian or Pacific language speaking citizens in Atlantic County and 56.4% in Cape May County do not speak English "very well".⁴⁷

DISEASE BURDEN

XVI. Leading Causes of Death

Heart disease is the leading cause of death in Atlantic County, Cape May County and New Jersey. While both counties have a higher heart disease rate than New Jersey, Atlantic County's rate is 27.6% higher than the state's rate. Cancer is the second leading cause of death in all three areas. Atlantic County's cancer mortality rate is 9.6% higher while Cape May County's cancer mortality rate is 12.4% higher than New Jersey.⁴⁸ Heart disease and cancer attribute to the greatest number of deaths.⁴⁹ CDC calculates that heart disease and cancer contribute to nearly 48% of all deaths.⁵⁰ See chart 16-1. The five leading causes of death in each area are highlighted.

Table 16-1: Leading Cause of Death, 2003

Disease	New Jersey		Atlantic County		Cape May County	
	Number	Rate	Number	Rate	Number	Rate
All Causes	73,410	797.7	2,764	975.7	1,320	848.3
Alzheimer's Disease	1,626	17.0	54	18.6	22	12.1
Aortic Aneurysm	402	4.4	20	7.0	7	**
Cancer	17,551	191.1	617	218.0	309	200.4
Chronic Liver Disease & Cirrhosis	767	8.4	35	12.4	8	**
Chronic Respiratory Disease	2,890	31.2	111	39.0	62	37.4
Diabetes	2,470	26.7	77	27.1	46	27.7
Heart Disease	21,801	232.2	848	296.3	411	247.9
HIV Disease	656	7.2	34	12.5	2	**
Hypertension	498	5.3	26	9.1	6	**
Influenza and Pneumonia	1,802	19.1	66	23.0	53	32.4
Kidney Disease	1,680	18.0	63	22.3	28	16.5
Motor Vehicle Accidents	761	8.8	41	15.4	16	**
Non-motor Vehicle Injuries	1,524	17.0	84	30.4	27	21.1
Pneumonitis r/t solids & liquids	559	5.9	23	81.0	15	**
Septicemia	1,887	20.2	64	22.6	31	18.8
Stroke	3,914	41.6	158	55.1	69	40.6
Suicide	560	6.3	32	11.7	7	**

Source: New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), <http://njshad.doh.state.nj.us/death1119.html>, 10-16-12

About half of all adults in 2012 had at least one chronic health condition with one in four adults having two or more. Common chronic diseases consist of heart disease, stroke, cancer and diabetes. Additionally, chronic health conditions such as obesity, smoking, lack of exercise, poor nutrition and alcohol abuse are also included as health concerns. Approximately one-third of adults were obese in 2009-2010 and almost half of adults have a major risk factor for heart disease or stroke such as uncontrolled high blood pressure. Adults living with these types of health conditions may develop early chronic diseases and often early death.⁵¹ See the health risk factors section for more information on common chronic health conditions such as obesity and smoking.

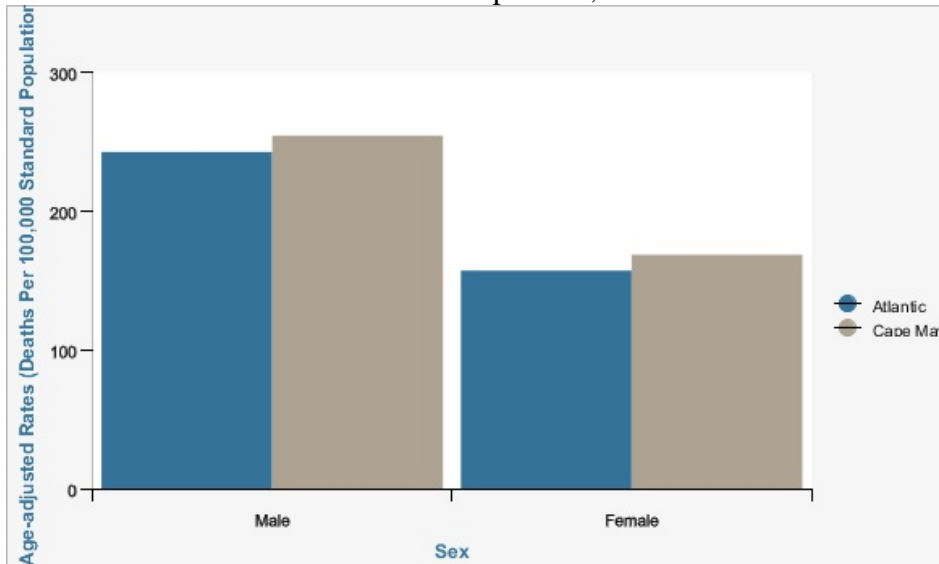
XVII. Heart Disease

According to the American Heart Association, heart disease is the leading cause of death in New Jersey and was responsible for 27% of deaths.⁵² In addition the New Jersey Department of Health reports heart disease affects every population. It is the leading cause of death for all Americans, New Jerseyans, men, women, whites, blacks, Hispanics and Asians.⁵³ In 2010, a total of 18,642 people in New Jersey died of heart disease. In New Jersey, 60% of adults are overweight or obese. Obesity is one of the leading contributors for heart disease.⁵⁴ Other contributing factors to heart disease are older age, smoking, diabetes, high blood pressure, excessive alcohol, drugs, and chronic high stress levels.⁵⁵ Men will have an increased risk of heart disease by age 45. In women, the increased risk begins at age 55.⁵⁶

According to the New Jersey Department of Health, heart disease was the leading cause of death during 2011-2013. The mortality rate per 100,000 people in the state was 170.3. Both Atlantic County and Cape May County are among the highest in the state. Atlantic County had a mortality rate of 194.4 per 100,000. Cape May County also had a higher mortality rate than New Jersey at 207.0 per 100,000. Cape May and Atlantic County's mortality rate were both higher than New Jersey's rate.⁵⁷

Males had a higher death rate per 100,000 than females in both Cape May and Atlantic County. In Atlantic County males and females had a death rate of 242.4 and 157.0 per 100,000, respectively. In Cape May County males and females had death rates of 254.2 and 168.4 per 100,000 respectively. Cape May County death rates were higher than Atlantic County for males and females. Both Atlantic and Cape May County had higher death rates than New Jersey with males at 216.4 and females at 136.2 per 100,000.⁵⁸

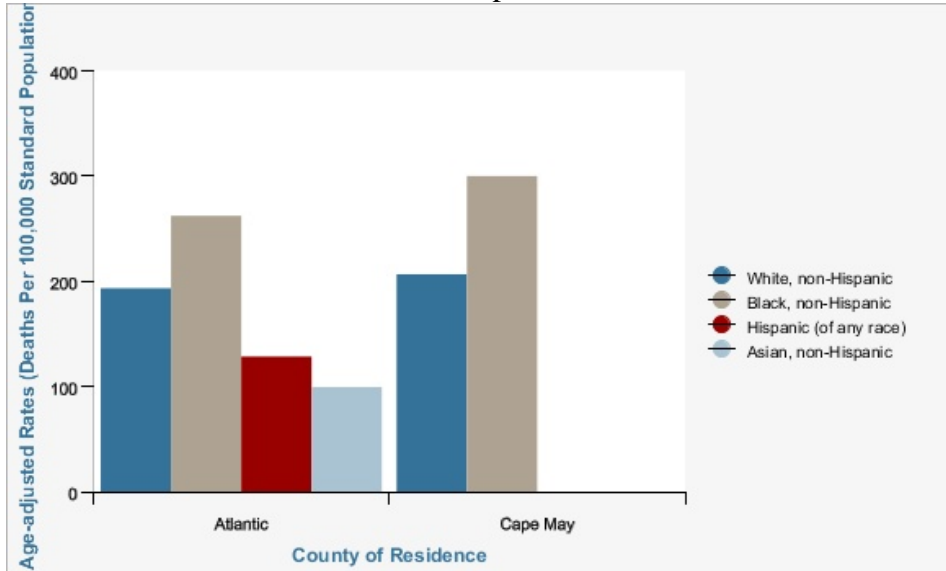
Chart 17-1: Heart Disease Deaths per 100,000 for Males and Females



Source: New Jersey Department of Health. 9/26/2016

Cape May County had higher death rates than Atlantic County regarding race. In Cape May County, whites had 206.7 deaths per 100,000 and Atlantic County had 193.4 deaths per 100,000. In Cape May County, blacks had 300.0 deaths per 100,000 and Atlantic County had 262.2 deaths per 100,000. Cape May County had insufficient data regarding the death rate per 100,000 for Hispanics and Asians.⁵⁹

Chart 17-2: Heart Disease Deaths per 100,000 for Race



New Jersey Department of Health. 9/26/2016

Cape May and Atlantic County both experience higher than average death rate per 100,000 in New Jersey. Males experience a higher death rate than females in both counties. Blacks experience higher death rates than all other ethnicities with black males having the highest death rate. Steps are being taken in New Jersey to reduce heart disease and strokes. The New Jersey Heart Disease and Stroke Prevention Program works with public and private sector groups to address controlling, preventing, and treating heart disease and stroke. Awareness about preventing, controlling, and treating heart disease is essential to lowering heart disease deaths.⁶⁰ Reducing heart disease will increase overall wellness to improve health outcomes in Cape May and Atlantic County.

XVIII. Cancer

Cancer can occur in any part of the body. It begins when cells grow and divide out of control. These cancer cells can crowd out normal cells which makes it difficult for the body to work the way it was meant to work. Cancer is not just one disease, but many diseases which can develop and spread both in similar ways and different ways. Cancer grows at different rates and responds to different treatments.⁶¹

Some cancers are more common than other types of cancer such as breast, lung, colorectal and prostate cancer. The National Cancer Institute estimates based on the Surveillance Epidemiology and End Results better known as the SEER database that 1 in 2 men (42.05%) and 1 in 3 women (37.58%) are at risk of developing some type of cancer.⁶² Survival rates vary depending on the type cancer and the stage of diagnosis.

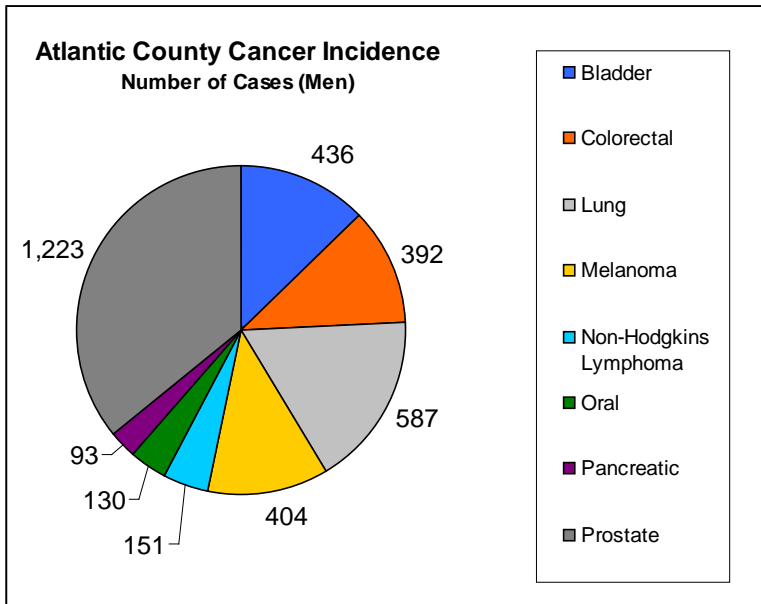
Incidence

Atlantic County's cancer incidence rate for all cancers, genders and race/ethnicities is 2.5% higher than the state at 566.8 vs. 552.8. This places Atlantic County among the middle of the state in regards to overall cancer incidence rates. Cape May County's cancer incidence rate for all cancers, genders and race/ethnicities is 18% higher than the state at 652.4 vs. 552.8. This places Cape May County with the highest overall cancer incidence rate in New Jersey.⁶³ ^{vi} For detailed information on cancer incidence rates see Appendix A.

In both Atlantic County and Cape May County men are most affected by prostate cancer in regards to incidence.⁶⁴ This is illustrated in Chart 18-1 and 18-2. Atlantic County men and Cape May County men are highly affected by lung cancer, bladder cancer, melanoma and colorectal cancer (Chart 18-1 and Chart 18-2). Cape May County men are especially affected by melanoma as Cape May County has the highest melanoma rate in New Jersey. Cape May men also have the highest rate for bladder cancer and are ranked second in the state for lung cancer.⁶⁵

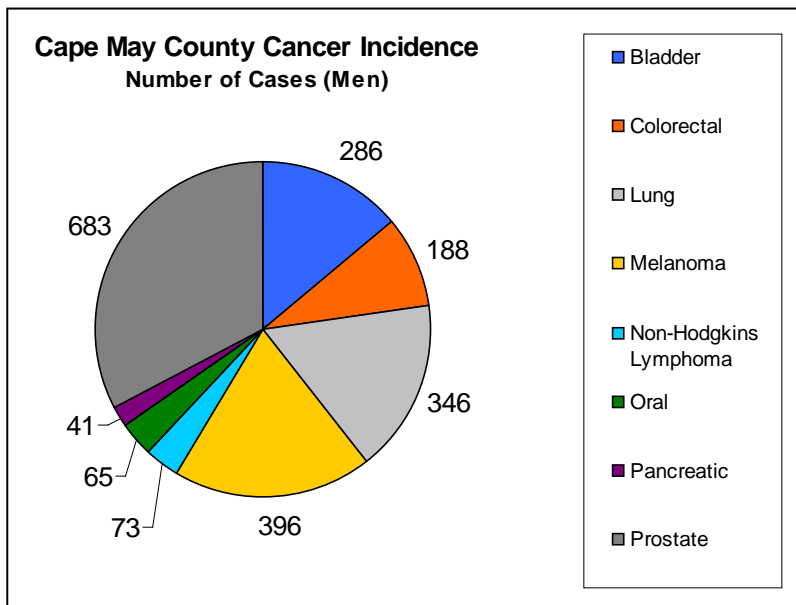
^{vi} All cancer rates are 5 year rates (2007-2011) per 100,000. Rates are age-adjusted to the 2000 US Standard Million Population.

Chart 18-1: Cancer Incidence Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

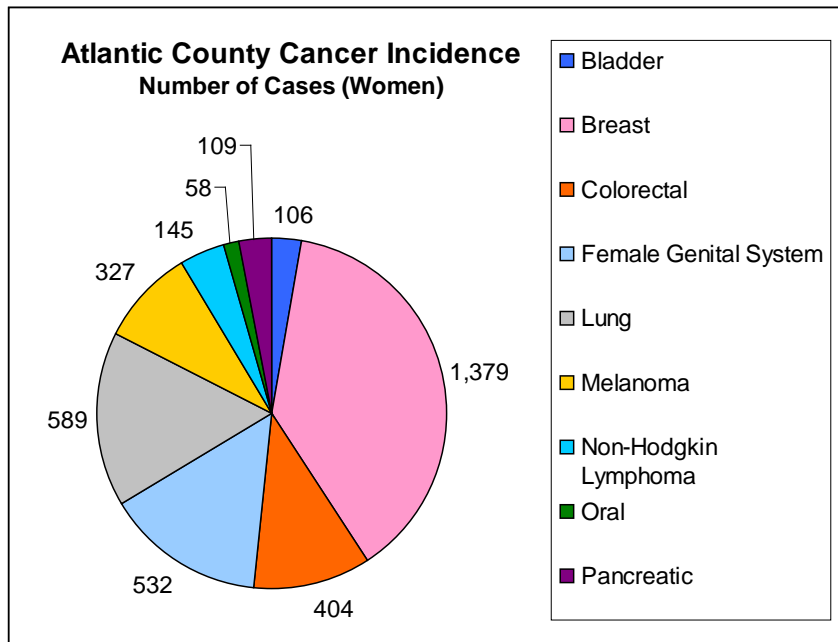
Chart 18-2: Cancer Incidence Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

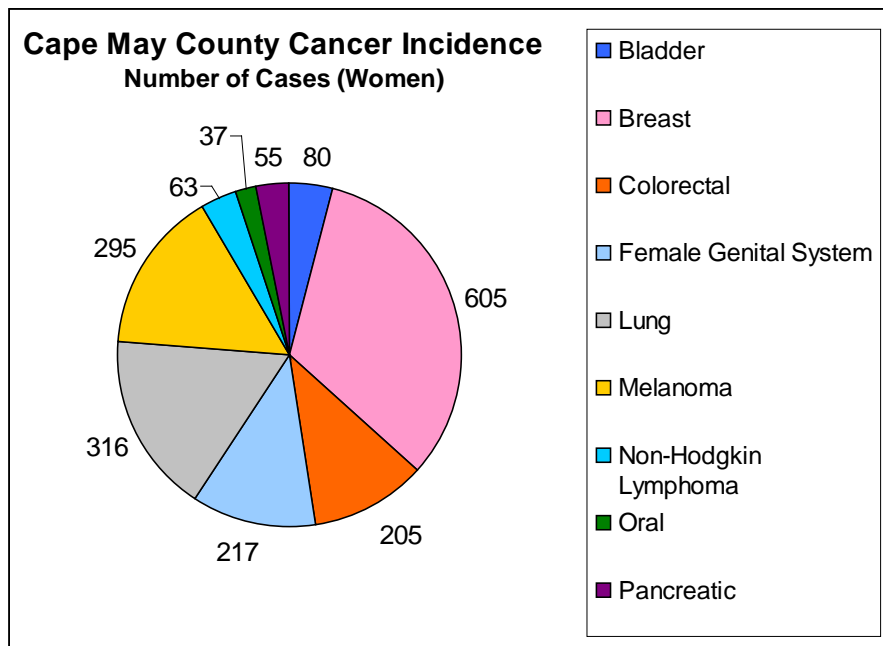
In both Atlantic County and Cape May County women are most affected by breast cancer in regards to incidence.⁶⁶ This is illustrated in Chart 18-3 and 18-4. Atlantic County women and Cape May County women are highly affected by lung cancer, female gynecological cancers, colorectal cancer and melanoma (Chart 18-3 and Chart 18-4). Cape May County women are especially affected by melanoma as Cape May County has the highest melanoma rate in New Jersey. Cape May women also have the highest rate for bladder cancer and are ranked second in the state for lung cancer.⁶⁷

Chart 18-3: Cancer Incidence Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

Chart 18-4: Cancer Incidence Cases, 2007-2011



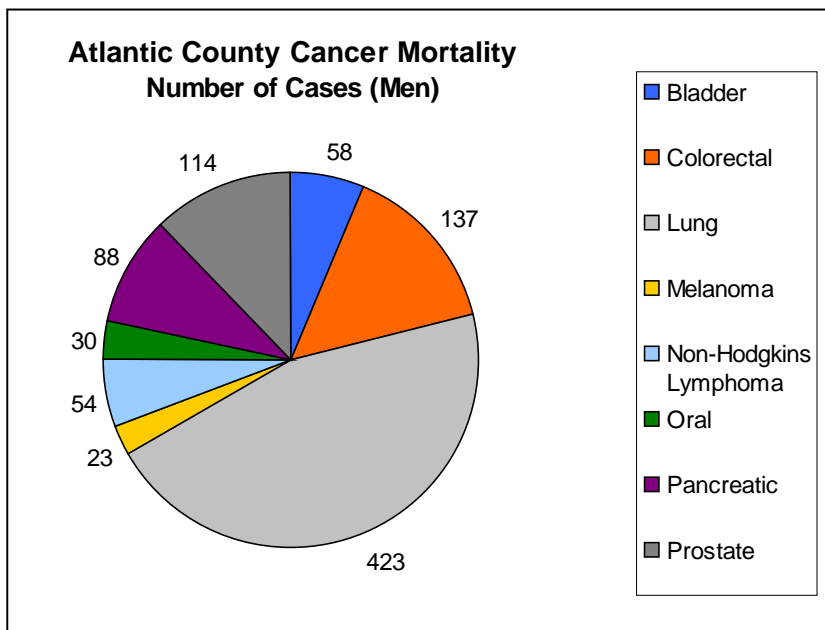
Source: NJDOH, Cancer Registry, 10-14-15.

Mortality

In regards to mortality, Atlantic County is 9.6% higher than the state's rate at 188.0 vs. 171.5. This places Atlantic County fifth highest among county cancer mortality rates. Cape May County is 12.4% higher than the state's rate at 192.7 vs. 171.5. Cape May County is the fourth highest among county cancer mortality rates.^{68 vii} For detailed information on cancer mortality rates see Appendix B.

In both Atlantic County and Cape May County men are most affected by lung cancer in regards to mortality. This is illustrated in Chart 18-5 and 18-6. Atlantic County men and Cape May County men are also affected by colorectal cancer and prostate cancer (Chart 4-4 and Chart 4-5).⁶⁹

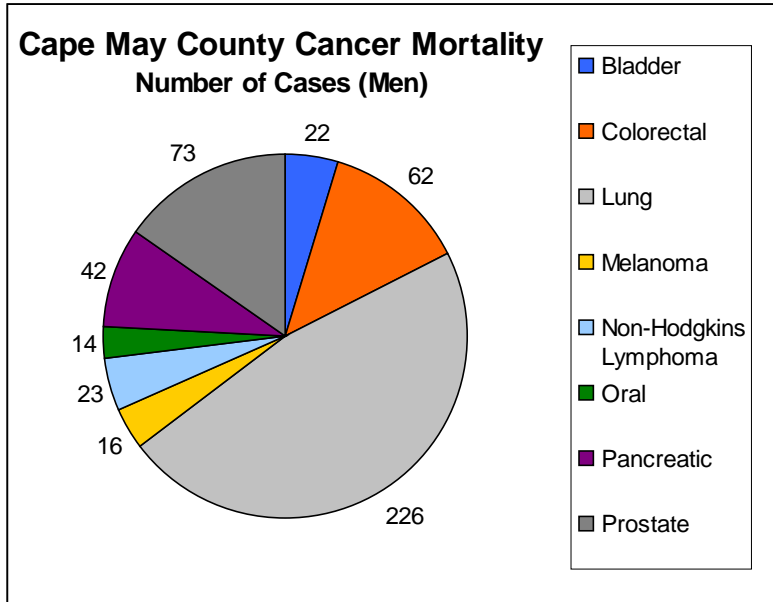
Chart 18-5: Cancer Mortality Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

^{vii} All cancer rates are 5 year rates (2007-2011) per 100,000. Rates are age-adjusted to the 2000 US Standard Million Population.

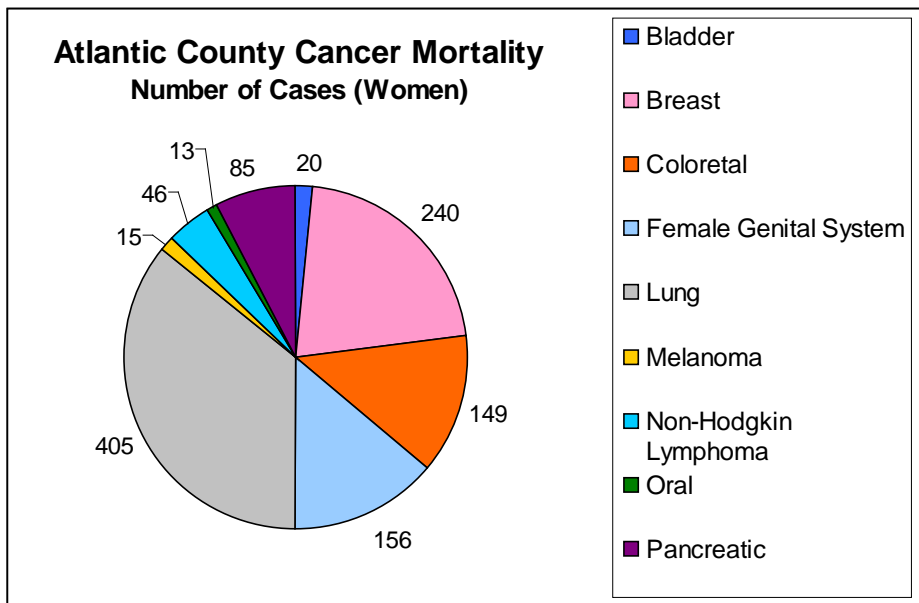
Chart 18-6: Cancer Mortality Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

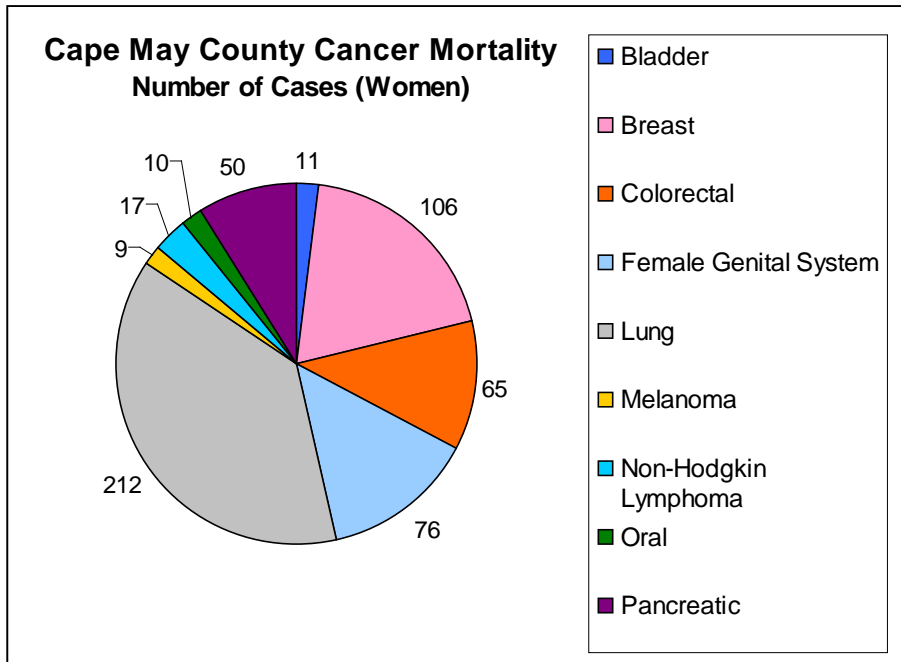
In both Atlantic County and Cape May County women are most affected by lung cancer in regards to mortality. This is illustrated in Chart 18-7 and 18-8. Atlantic County women and Cape May County women are also affected by breast cancer female gynecological cancers and colorectal cancer (Chart 18-7 and Chart 18-8).⁷⁰

Chart 18-7: Cancer Mortality Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

Chart 18-8: Cancer Mortality Cases, 2007-2011



Source: NJDOH, Cancer Registry, 10-14-15.

Most Prevalent Cancers

Upon reviewing incidence rates and mortality rates for individual cancer diagnosis specific cancers stand out as the most prevalent. Breast, colorectal, lung and prostate cancer affect the most people in Atlantic County, Cape May County and New Jersey.

- Breast Cancer:** Although Atlantic County's breast cancer incidence rate (162.1 vs. 171.1) is 5.3% lower than the state, the mortality rate is 11% higher than the state (27.3 vs. 24.6). Atlantic County is fifth in the state in regards to mortality rates for all women and white women (26.7 vs. 24.5) and first for black women (39.9 vs. 30.9). Cape May County's breast cancer incidence rate (156.9 vs. 171.1) is 6.6% lower than the state and the mortality rate (23.6 vs. 24.6) is consistent with the state. 1,402 women were diagnosed with breast cancer in Atlantic County and 240 deaths occurred during 2007-2011. In Cape May County, 604 women were diagnosed with breast cancer and 106 deaths occurred.⁷¹
- Colorectal Cancer:** Atlantic County has improved from first to tenth highest colorectal cancer incidence rate for both genders and all race/ethnicities combined in the state (50.6 vs. 48.9) from the previous five years. This is 3.5% higher than the state. This holds true for gender, as well, with Atlantic County men having moved from the highest to eighth in the state at 57.4 vs. 56.8 and Atlantic County women having moved from second to ninth highest in the state at 45.1 vs. 42.8. Atlantic County men's rates are 1.1% higher and Atlantic County women's rates are 5.4% higher than the state's rates. Atlantic County male mortality rates are consistent with the state (20.4 vs. 20.2), but higher for women (16.4 vs. 14.3). Cape May County's colorectal cancer incidence rate for both genders and

all race/ethnicities combined is 50.9 vs. 48.9, falling from fourth to ninth highest in the state from the previous five years. This is 4.1% higher than the state. Cape May County women are the fourth highest in the state at 47.0 vs. 42.8; men are consistent with the state at 55.6 vs. 56.8. Cape May County's overall mortality rates (16.4 vs. 16.8) compared with the state have fallen dramatically from being highest in the state in the previous five years, as have Cape May County men, also formerly highest to consistent with the state at 20.1 vs. 20.2. Cape May women remain consistent with a mortality rate of 14.0 vs. 14.3. In Atlantic County, 796 people were diagnosed with colorectal cancer and 286 deaths occurred during 2007-2011. In Cape May County, 393 people were diagnosed with colorectal cancer and 127 deaths occurred.⁷²

- **Lung Cancer:** Atlantic County's lung cancer incidence rate is 18.6% higher for men all race/ethnicities combined (85 vs. 71.7) and 20.6% higher for women all race/ethnicities combined (66.8 v. 55.4) compared to the state. Overall Atlantic County is seventh in the state regarding incidence, improved from second during the previous five years. Atlantic County is sixth in the state regarding men's mortality rates (62.6 vs. 53.9), improved over second in the previous five years - and dropped to fourth from third regarding women's mortality rates (45.9 vs. 36.6). Men are 16.1% higher and women are 25.4% higher than the state. Cape May County's lung cancer incidence rate is 36.3% higher for men all race/ethnicities combined (97.7 vs. 71.7) and 33% higher for women all race/ethnicities combined (73.7 vs. 55.4) compared to the state. Overall Cape May County is first in the state regarding incidence (83.9 vs. 61.9). Cape May County men's mortality rates (64.6 vs. 53.9) are 19.9% higher and Cape May County women's mortality rates (48.4 vs. 36.6) are 32.2% higher than the state. In Atlantic County, 1,182 people were diagnosed with lung cancer and 828 deaths occurred during 2007-2011. In Cape May County, 662 people were diagnosed with lung cancer and 432 deaths occurred.⁷³
- **Prostate Cancer:** Atlantic County's prostate cancer incidence rate (164.1 vs. 168.7) is 2.7% lower than the state. Black men have the highest incidence rates in the county (231.9 vs. 157.9 for whites). Atlantic County black men have a 46.9% higher rate than white men in Atlantic County. Atlantic County's prostate mortality rate is consistent to the state (22.7 vs. 23.4). Black men have a 96.6% higher mortality rate than white men (34.4 vs. 17.5). Cape May County's prostate cancer incidence rate (177.3 vs. 157.2) is 12.8% higher than the state. Black men have the highest incidence rates in the county (266.7 vs. 181.4 for whites). Cape May County black men have a 25% higher rate than white men in Cape May County. Cape May County's prostate cancer mortality rate has exceeded the state (22.8 vs. 21.2) from the previous five years. Mortality rates for black men are suppressed due to small numbers. In Atlantic County, 1,223 men were diagnosed with prostate cancer and 114 deaths occurred during 2007-2011. In Cape May County, 662 men were diagnosed with prostate cancer and 73 deaths occurred.

Special Considerations

- **Skin Cancer:** There are more cases of skin cancer per year than any other type of cancer. Unfortunately, New Jersey, Atlantic County, and Cape May County non-melanoma data is unavailable because it is not reported. According to the American Cancer Society,

3,500,000 new cases of non-melanoma skin cancer will develop in 2015 in the United States; while only 224,210 cases of lung cancer and 136,830 cases of colorectal cancer developed.⁷⁴ Cancers of the skin (most of which are basal and squamous cell skin cancers) are by far the most common of all types of cancer. According to one estimate, about 3.5 million basal and squamous cell skin cancers are diagnosed each year (occurring in about 2.2 million Americans, as some people have more than one). About 8 out of 10 of these are basal cell cancers. Squamous cell cancers occur less often. Death from non-melanoma skin cancer is rare. An estimated 2,000 people die in the United States each year.⁷⁵ The overall melanoma incidence rate in Atlantic County is 46.8 vs. 40.4. This is 15.8% higher than the state's rate. Mortality rates are consistent to the state's rates at 2.4 vs. 2.5. Melanoma is extremely concerning in Cape May County. The overall melanoma incidence rate in Cape May County is 96.3 vs. 40.4, the highest in the state. This is 138.4% higher than the state's rate. Mortality rates in Cape May County have dropped from second to fifth in the state since the previous five years with 3.3 vs. 2.5, 32% higher than the state's rate. In Atlantic County, 731 people were diagnosed with melanoma and 38 deaths occurred during 2007-2011. In Cape May County, 691 people were diagnosed with melanoma and 25 deaths occurred. The number of people affected is comparable to other priority cancers.⁷⁶

- **Human Papillomavirus (HPV):** HPV is highly contagious and is considered the most common sexually transmitted infection.⁷⁷ Approximately 79 million people are currently infected with HPV and approximately 14 million people will become infected in the United States each year.⁷⁸ According to American Cancer Society, HPV causes 70% of all cervical cancers and pre-cancers, as well as other cancers such as cancers of the anus, vulva, vagina and throat.⁷⁹ HPV vaccines are available and protect vaccinated individuals by developing antibodies to fight off the infection. These vaccines are safe and effective. Data shows that there is a 56% reduction prevalence of HPV strains (6, 11, 16 and 18) in adolescent girls in the United States despite a 33% vaccine rate. The most recent Census Bureau data reveals that there are 71,726 females in Atlantic County who are age-appropriate for the HPV vaccine and 20,658 females in Cape May County.⁸⁰ The HPV vaccination is a vaccine that prevents the Human Papillomavirus, which can cause cervical cancer. It is ideal to prevent HPV related cancers. According to the Centers for Disease Control and Prevention (CDC), New Jersey achieved a 31.6% HPV Vaccination Series Completion among 13-17 year-old girls in 2012. CDC is calling for a higher percentage of completion.⁸¹
 - **Cervical cancer:** Overall incidence in Atlantic County is third highest in the state at 10.4 vs. 8.4, 23.8% higher. Black vs. white is 10.8 and 9.2, respectively. Mortality from cervical cancer in Atlantic County is 3.4 vs. 2.3, 47.8% higher than the state; 3.8 and 3.4 for blacks and whites, respectively. Eighty women were diagnosed with cervical cancer during 2007-2011 and 78 died. Overall incidence in Cape May County is the second highest county in the state at 11.2 vs. 8.4, 33.3% higher. Mortality from cervical cancer in Cape May County is consistent with the state at 2.9 vs. 2.3. In Atlantic City, eighty women were diagnosed with cervical cancer during 2007-2011 and 78 died. In Cape May County, 28 women were diagnosed with cervical cancer during and 9 died.⁸²

Cancer financial costs are considerably high for both patients and society. It is estimated by the Agency for Healthcare Research and Quality that cancer medical costs in United States for 2011 were \$88.7 billion. Fifty percent of this cost is for outpatient care, 35% is for inpatient care and 11% is for prescription drugs. Additionally lack of health insurance and other barriers prevent many people from getting optimal care. Uninsured patients and ethnic minorities are more likely to be staged with cancer later when treatment is more extensive, costly and less successful.⁸³

It is important to note that some cancer can be prevented. Many cancers are connected to lifestyle choices such maintaining a healthy diet, physical exercise, controlling ones weight and avoiding tobacco. Additionally screening can lead to early detection which can improve survival outcomes and decrease cost.⁸⁴ Examples of this include routine mammograms and colonoscopies.

XIX. Diabetes

Diabetes is a chronic disease in which blood glucose levels are above normal. Usually in this condition, the pancreas, which is an organ that lies near the stomach, is not properly functioning. The pancreas creates a hormone called insulin which is responsible for maintaining glucose levels in the blood. When the pancreas is unable to make enough insulin or cannot use insulin effectively, this can cause above normal blood glucose levels. High blood glucose levels can cause serious health problems such as heart disease, blindness, kidney failure, and lower-extremity amputations.⁸⁵

The risk factors for diabetes are family history, age, obesity, physical inactivity, race/ethnicity, past history of gestational diabetes, genetics and environmental triggers. There are three common types of diabetes such as type 1 diabetes, type 2 diabetes, and gestational diabetes. In addition, there is a condition called prediabetes where an individual's blood sugar levels are higher than normal but are not high enough for a diagnosis of diabetes.⁸⁶

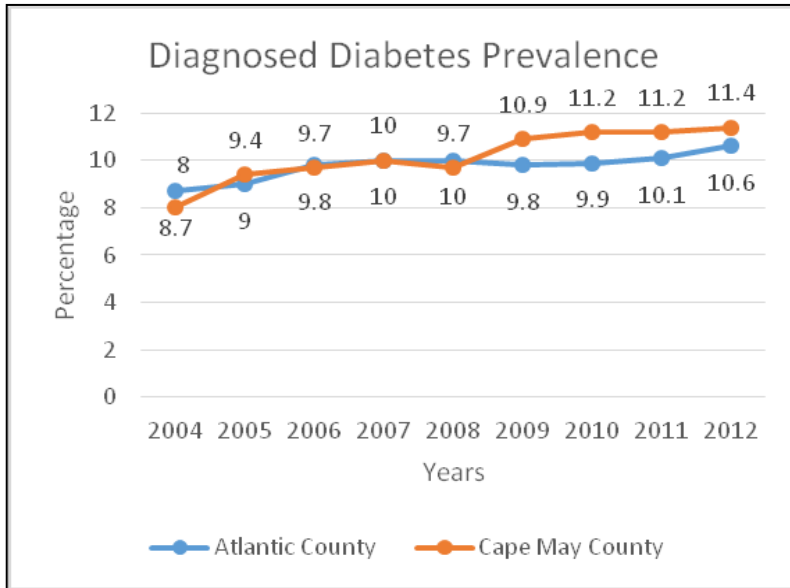
Prevalence

Approximately 596,000 adults in New Jersey have diabetes. Diabetes is most common among older adults. Almost 22% of adults 65 years and older have diabetes statewide. Fourteen percent of adults between 55-64 years of age are predicted to have diabetes. Adults who are 45-54 years old have the third highest diabetes prevalence rate. Diabetes is on the rise within the state. According to the New Jersey Department of Health, from 1996 to 2010, the estimated rate of new adult diabetes cases more than doubled.⁸⁷ It is estimated that 54,000 New Jersey residents are diagnosed with diabetes every year.⁸⁸

According to the New Jersey Behavioral Risk Factor Survey (NJBRFS) in 2011-2013, 8.1% of adults in New Jersey, 8.5% of adults in Atlantic County and 8.3% of adults Cape May County were told by a doctor that they have diabetes.⁸⁹ In addition the 2013 NJBRFS shows black populations are more likely to have higher rates of diabetes than any other racial or ethnic group in New Jersey. The second highest prevalence of diabetes is among white populations with Hispanics being the third highest population in New Jersey. In Atlantic and Cape May counties, whites are more likely to have been diagnosed with diabetes compared to other racial or ethnic groups. In Atlantic County, the second highest rate of diabetes is among blacks with Hispanics being the third highest race/ethnic group diagnosed with diabetes. There is insufficient data for accurate rates of doctor diagnosed diabetes in other race/ethnic groups for Cape May County.⁹⁰

In 2012, the number of people with diabetes was 21,761 or 10.6% of the population in Atlantic County.⁹¹ In Cape May County, 8,747 people or 11.4% of the population had the diabetes in 2012.⁹² The prevalence for diabetes statewide was 9.2% in 2012.⁹³ Both Atlantic and Cape May counties have higher prevalence percentages than the state average. From 2004-2012, the prevalence percentage of diagnosed diabetes in Cape May County has increased slightly except in 2008. From 2004 to 2012, Atlantic County's prevalence percentage has increased slightly throughout each year except for a slight dip in 2009 (Chart 19-1).⁹⁴

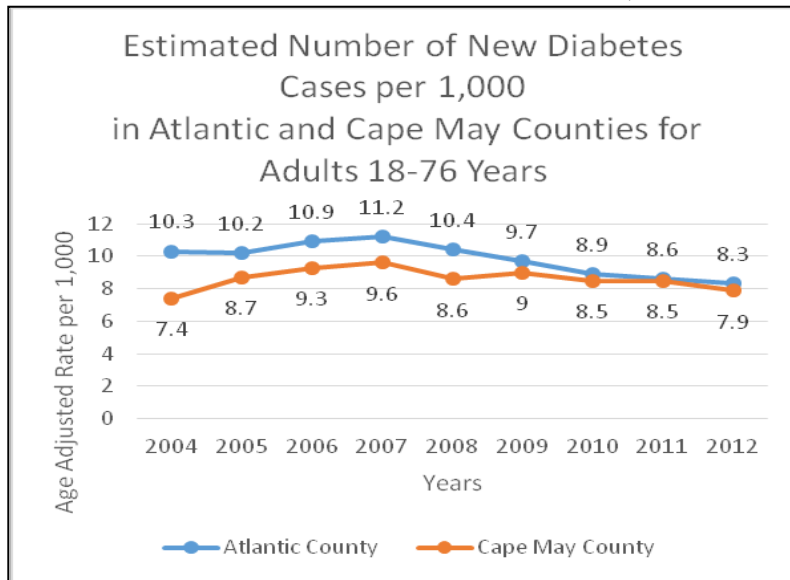
Chart 19-1: Diabetes Prevalence, 2004-2012



Source: CDC, County Data Indicators for Diabetes, 1-4-16.

The estimated number of new diabetes cases for Atlantic and Cape May counties vary slightly throughout 2004 to 2012. Between 2004 and 2012 the estimated number of new diabetes cases per 1,000 decreased from 10.3 to 8.3 in Atlantic County. In Cape May County, the estimated number of new diabetes cases per 1,000 stayed constant between 2004 and 2012 (Chart 19-2).⁹⁵

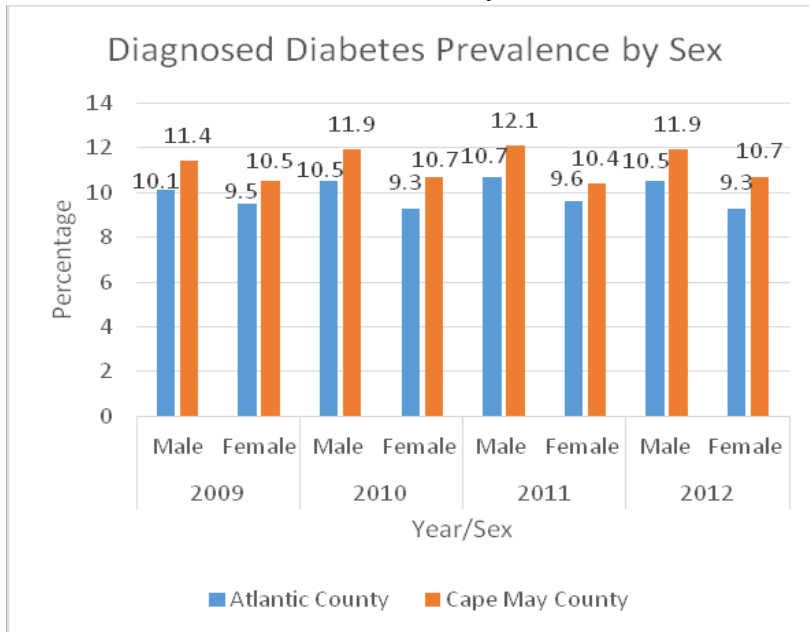
Chart 19-2: Estimated Number of New Cases, 2004-2012



Source: CDC, County Data Indicators for Diabetes, 1-4-16.

Males are more likely to have diabetes than females in Atlantic and Cape May counties. From 2009 to 2012, males have a higher diagnosed diabetes prevalence rate than females in Atlantic and Cape May counties. Compared to Atlantic County, Cape May County has higher prevalence rates in both males and females (Chart 19-3).⁹⁶

Chart 19-3: Diabetes Prevalence by Gender, 2009-2012



Source: CDC, County Data Indicators for Diabetes, 1-4-16.

Mortality

Diabetes is the sixth leading cause of death in New Jersey. According to the New Jersey Department of Health, almost 2,000 people in New Jersey die due to diabetes. The age-adjusted death rate associated with diabetes is about 20.6 per 100,000.⁹⁷

From 2010-2012, Atlantic County had 209 deaths due to diabetes.⁹⁸ Cape May County had 89 deaths recorded due to diabetes in the same time period. In 2010 to 2012, Atlantic County’s age-adjusted death rate for diabetes was 22.0 per 100,000 and Cape May County’s age-adjusted death rate was 19.1 per 100,000.⁹⁹ Atlantic County has a slightly higher death rate due to diabetes than Cape May County. Co-morbidity impacts the number of deaths due to diabetes. Often an individual suffering from diabetes has a higher predisposition for other chronic diseases that may lead to death. Even though, reporting of diabetes on the death certificate has improved, underreporting still remains a problem.

The age adjusted death rate among males is more than 50% higher than the rate among females.¹⁰⁰ From 2011-2013, 29.0 males per 100,000 and 20.0 females per 100,000 died due to diabetes in Atlantic County. In Cape May County, 34.1 males per 100,000 and 35.8 females per 100,000 died from diabetes.¹⁰¹

Diabetes affects racial and ethnic groups disproportionately. According to the New Jersey Department of Health, diabetes is the fourth leading cause of death among blacks and Hispanics. It is the fifth and seventh leading cause of death among the Asians and whites respectively.¹⁰² In Atlantic and Cape May counties, the mortality rate for diabetes among whites is the highest. Blacks have the second highest mortality rates in the Cape Atlantic region.¹⁰³

Considerations

In 2011, there were 16,383 hospitalizations in New Jersey due to diabetes.¹⁰⁴ From 2012-2014, the age-adjusted rate for hospital admissions with a primary diagnosis of diabetes was 192 per 100,000 statewide.¹⁰⁵ In Atlantic County, the age-adjusted rate for hospital admissions with a primary diagnosis of diabetes was 218 per 100,000 from 2013. In Cape May County, the age-adjusted rate for hospital admissions where diabetes was the primary diagnosis was 206 per 100,000.¹⁰⁶ Atlantic County has a slightly higher age adjusted rates for diabetes admissions.

Not only does diabetes affects an individual's health, it is also a financial burden. In 2012, direct medical cost for diagnosed and undiagnosed diabetes, prediabetes, and gestational diabetes in New Jersey was estimated at \$7.5 billion. In addition, there was another \$2.8 billion spent on indirect medical costs from loss of productivity.¹⁰⁷ People with diabetes have medical expenses that are roughly 2.3 times higher than with those who do not have diabetes.¹⁰⁸

For individuals with diabetes, it is important to learn how to manage and control their condition. Diabetes management is vital to avoid further complications from diabetes. Diabetes management is considered to be the standard of care and helps control diabetes long term.¹⁰⁹ Diabetes management provides an estimate of how well a patient maintained his or her diabetes over the past two to three months. In 2012, the state average percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring is 83%. In Atlantic and Cape May counties, the percentage is 82% and 86% respectively.¹¹⁰

Diabetes can be prevented and controlled by various means. Adopting a healthy lifestyle by losing weight and increasing physically activity can help prevent or delay the onset of diabetes. If an individual already has been diagnosed by diabetes, self-management can be an important step that can help prevent health complications which can directly affect an individual's quality of life.

NEW SOURCES OF INFORMATION

XX. Shore Medical Center Community Health Needs Assessment Survey

Shore Medical Center completed an online community health needs assessment survey in an effort to gain input from the community on health issues of concern. The survey questions were developed in a team approach by brainstorming questions and examining several sample surveys. The questions were adjusted by Stockton University to put the questions in proper format. The survey was dispersed through Shore Medical Center email blasts, linked to the Shore Medical Center's website and available in physician offices. The survey questions can be found in Appendix C.

Survey population: Approximately 220 people completed the survey. This group was predominately Caucasian (89.7%), female (77.1%) and employed full time or retired. Fifty-two percent had a college education and only 1% did not have health insurance. Insurance coverage was predominately commercial coverage (51.4%) and Medicare (36.4%) and a majority of the people considered themselves in good health or better. The population survey is lacking diversity among race, educational level and income levels.

Key Results:

- The three top health concerns for survey participants was cancer, heart disease and arthritis; however survey participants believed the three top health concerns for the community were cancer, heart disease and diabetes. Other conditions also ranked high for community concern such as substance abuse, obesity and Alzheimer's/dementia.
- Despite the higher standard of living amongst this group 8% smoked cigarettes; 15.1% eat fast food more than once a week; and only 66.3% receive a flu shot each year.
- Participants felt the following conditions were a barrier to a healthy lifestyle choices for them:
 - The cost of health clubs/gyms (40%);
 - Lack of time/too busy (43%).
- Participants felt the following conditions were a barrier to a getting healthcare in our community:
 - Health insurance coverage is too expensive (42%);
 - Cost of prescriptions is too high (37%);
 - Cost of care/insurance does not cover cost (33%).
- Participants would like to see the following health interventions in our community:
 - Community Garden/Farm Markets (70.9%);
 - More care for the aging population/elderly (66.3%);
 - Walking Programs (59.1%);
 - Organized Exercise Activities (53%);
 - Health Fairs/Community Events (53.0%);
 - Healthy Cooking Demonstrations (50.5%).

XXI. Shore Medical Center Public Health Interviews

Shore Medical Center completed key representative interviews. A representative from Atlantic County and Cape May County were identified, as well as a public health representative from the local University. The qualitative data was tallied and put together to form a picture of the community. The questions can be found in Appendix D.

Leaders throughout our community have identified the most important barriers to making health choices to be access to healthier food and recreational activities. Transportation and knowledge of healthy options were also identified as a major barrier to receiving health care.

When asked about barriers to receiving healthcare, our leaders identified transportation as being a top concern. The cost of health care and/or having an insurance that does not cover the majority of care was also a top barrier to health care.

Our leaders stated that there are not enough markets and grocery stores in every community that have healthy and affordable options. Fast food is a cheaper and more convenient source of food. The lack of healthy and affordable options may lead to obesity, diabetes, and many other health concerns.

In addition the following things were identified by our leaders:

- The Affordable Care Act has helped with receiving access to health care but it has not connected populations to available resources. Some populations do not know or understand they qualify for health insurance programs.
- Some of the largest health concerns within our community are access to follow up care, cancer, and heart disease.
- Three of the greatest public health issues we face today are the impact of the recession, health literacy, and the lack of funding to meet the needs of our community.
- A large population in our community in need is middle class families who use to work in recently closed casinos. These families may not be accessing the health care they need.
- Not everyone in our community is informed about the numerous programs that are available to help improve their health. Families in rural areas and lower socioeconomic populations are not as aware due to lack of access or understanding of information.

XXII. Shore Medical Center Statistical Data

Shore Medical Center produced in-house statistical data to generate reports for analyzing the reasons the community is utilizing the medical center.

In 2014, there were:

- 9,190 admissions.
- 44,796 emergency room visits
- 6,242 surgeries in which 2,628 of them were inpatient surgeries and 3,614 same day surgeries.
 - Of those inpatient surgeries, 27.5% were orthopedic surgeries, 14.8% were vascular surgeries, 13.4% were neurosurgeries, and 1.4% were urology surgeries. The remaining 42.9% were “other” surgeries.
 - Of those same day surgeries, 19.8% were orthopedic surgeries, 19.2% were vascular surgeries, 9.5% were ophthalmic surgeries, 6.3% were urology surgeries, 5.6% were podiatry surgeries, 5.5% were neurosurgeries, and 4.3% were rhinolaryng surgeries. The remaining 29.8% were “other” surgeries.
- 24,050 outpatient diagnostic imaging procedures. In addition there were 3,268 mammograms, 1,687 MRIs, 6,327 ultrasounds, 10,352 CT scans, 858 nuclear medicine procedures and 168 pet scans.

The following are other community utilization statistics in 2014 obtained from the medical center:

- 1,258 births
- 2,932 cardiac catheterization and interventional procedures
- 460 sleep center studies
- 4,978 perinatology visits
- 13,457 medical oncology treatments
- 10,156 oncology radiation therapy treatments
- 2,671 advanced pulmonary diagnostics

XXIII. Atlantic County Division of Public Health Community Health Assessment

The Atlantic County Division of Public Health completed a Community Health Assessment during 2013-2014 by randomly selecting Atlantic County addresses. Additional surveys were collected through a variety of outreach methods. This information was used to develop the Community Health Improvement Plan for 2014-2018.

Barriers to Healthcare

According to the Atlantic County Community Health Improvement Plan, when asked about the most important health problems, “cancers” were most often identified (22%) followed by “heart disease and stroke” at 21% and “aging problems” at 20%.

When asked about barriers to make healthy lifestyle choices, Atlantic County residents identified “Cost of maintaining a healthy lifestyle” (24%) and “lack of time/too busy” (20%) as the top two barriers. Also identified were “lack of knowledge of services,” “limited access to healthy foods such as fruits and vegetables,” “limited access to recreational facilities,” “lack of transportation,” “safety concerns,” and “other” barriers. A lack of motivation or willingness to change, and a lack of knowledge were most commonly identified as “other” barriers. Atlantic County residents indicated that they would like to see walking programs (16%), organized exercise activities (14%), and incentives to encourage a healthier lifestyle (14%) as interventions for healthy lifestyle choices. More health fairs and community events were also among the highest interventions at 13%.¹¹¹

When asked about barriers to getting healthcare, residents identified “prescription or medicine cost” (21%) and “cost of care/insurance does not cover cost” (19%) as the primary barriers. Additional barriers identified by Atlantic County residents include “too much paperwork,” “location of healthcare services,” “lack of transportation,” “fear or distrust of healthcare system,” “too complicated/I don’t understand,” “I don’t know where to get healthcare,” and “other.” Most common “other” barriers identified were the lack of providers (primary care and specialists), need for better hours, and lack of insurance.¹¹²

Residents were also asked to identify what they think are the most serious issues with drugs and alcohol within their communities. 23% of participants identified alcohol as the leading issue. Heroin and Rx Drugs followed at 18% and 17%. 14% of participants said Cocaine was the biggest issue and 13% said marijuana. 3% reported that drugs and alcohol were not problems in their communities.¹¹³

Access is a major barrier that was identified in both a healthy lifestyle, and receiving health care. The Affordable Care Act, which started in 2010 in New Jersey, has provided New Jerseyans’ with better access to care, more coverage, and reduced health care costs. Since the Affordable Care Act has started, about 16.4 million uninsured people have gained health insurance coverage. The uninsured rate in New Jersey in 2014 was 11.7 percent, down from 14.9 percent in 2013.¹¹⁴ States now have new opportunities to expand Medicaid coverage to individuals with family incomes at or below 133 percent of the federal poverty level (generally \$32,253 for a family of

four in 2015). This expansion includes non-elderly adults without dependent children, who have not previously been eligible for Medicaid in most states.¹¹⁵

XXIV. Atlantic County Division of Public Health Youth Risk Behavioral Survey

The Atlantic County Division of Public Health completed a Youth Risk Behavior Survey (YRBS) in February 2016 by surveying 9th and 11th grade students attending Atlantic County schools. A total of 1,755 students completed the survey (self-reported data). A random sampling technique produced 950 surveys used for analysis. This yields an overall error rate of +/-3.0% at a 95% confidence level.

Key study findings in relationship to Shore Medical Center’s Community Health Needs Assessment:

- Approximately 90.0% of students have seen a doctor or primary care provider and 78.0% have seen a dentist during the previous year.
- Obesity: BMIs were calculated based on height and weights reported by students in the YRBS. The breakdown are as follows: 67.8% healthy weight; 2.3% underweight; 18.6% overweight; and 11.4% obese. Over half the students reported that their weight was the “right weight”. Exercise (52.6%) and reducing food/caloric intake (26.6%) were the most common strategy for attempting to lose weight.
- Tobacco Use: Approximately 20% of Atlantic County students have tried a cigarette. Forty-seven of these students tried their first cigarette before age 13. Although the percentage of students who have tried a cigarette has gone down, students were younger when they first tried a cigarette. New questions were added to this YRBS in regards to vaping products. Approximately 37% of Atlantic County students have tried an electronic vapor product. This is much higher than the percentage of students who have tried a cigarette and may suggest a switch of products by this generation. A majority of Atlantic County youth, 61.1% believe that electronic vapor products are less harmful than smoking cigarettes.
- Alcohol Use: Approximately 50% of Atlantic County students have had at least one drink of alcohol in their lifetime. This is lower than past surveys and lower than the national average. This pattern also holds true in relation to binge drinking with 11.8% of Atlantic County youth who engaged in binge drinking at least once in the past 30 days.

RECAP OF DISPARITIES

According to the 2010 U.S. Census, approximately 36.3% of the population currently belongs to a racial or ethnic minority group. These racial and ethnic minority groups hold the most health disparities. In addition low economic levels and living in poverty often result in health disparities.

- Atlantic County and Cape May County median and mean incomes are lower than New Jersey.
Atlantic County: median \$54,766; mean \$71,086
Cape May County: median \$54,292; mean \$74,630
New Jersey: median \$69,811; mean \$93,475
- Atlantic County (11.8%) and Cape May County (12.7%) have higher percentages of the population living below the poverty level compared to New Jersey (9.1%).
- According to the American Community Survey approximately 30,757 people live below the poverty level in Atlantic County.
- Certain population groups experience more poverty than others. In Atlantic County children under 18 (16.9%), African Americans (32.0%) and Latino/as (20.1%) are more likely to be living below the poverty level. Populations that did not receive a high school diploma (20.7%) or were unemployed (23.9%) were also more likely to be living below the poverty level.
- Atlantic and Cape May County have lower educational attainment levels.
Atlantic County: bachelor degrees 16.3%; graduate degrees 7.2%
Cape May County: bachelor degrees 17.4%; graduate degrees 8.9%
New Jersey: bachelor degrees 21.6%; graduate degree 13.0%
- Approximately 35,000 people in Atlantic County and 10,000 people in Cape May County do not have health insurance. There are more men who do not have health insurance than women. Groups at higher risk are black and Hispanic populations, as well as people with less education and lower economic levels.
- According to the Center for Health Care Strategies, a disproportionate number of minorities and immigrants are estimated to have literacy problems: 50% of Hispanics, 40% of Blacks, and 22% of Asians.
- Patients with low literacy skills were observed to have a 50% increased risk of hospitalization, compared with patients who had adequate literacy skills.
- Approximately 28.0% of Atlantic County and 24.9% of Cape May County adults 20 and older were obese (BMI 30.0 or more) in 2009. Groups at higher risk are men, blacks and Hispanics.

- Obesity among children has almost tripled since 1980. High risk groups include low income children, Hispanic boys and black girls. Obese children are more likely to become obese adults which leads to a variety of chronic diseases.
 - According to the CDC approximately 15%-20% of low-income children aged 2 to 4 in New Jersey in 2010 were obese.
 - 1 of 3 low-income children are obese or overweight before their 5th birthday.
- Low income families generally have less access to healthy food choices and physical activities.
- Atlantic and Cape May County have some of the highest smoking percentages in New Jersey. Populations with lower educational attainment or lower incomes are at higher risk.
- Males have a higher death rate in regards to heart disease. Black populations experience higher death rates than all other ethnicities with black males having the highest death rate.
- Atlantic County's five year breast cancer mortality rate for black women is first in the state (39.9 vs. 30.9).
- Black men have the highest prostate cancer incidence rates in the county (231.9 vs. 157.9 for whites). Atlantic County black men have a 46.9% higher rate than white men in Atlantic County. Black men have a 96.6% higher mortality rate than white men (34.4 vs. 17.5). Cape May County black men have the highest incidence rates in the county (266.7 vs. 181.4 for whites). In addition, black men have a 25% higher rate than white men in Cape May County.
- According to the 2013 NJBRFS, black populations are more likely to have higher rates of diabetes than any other racial or ethnic group in New Jersey.

FINAL THOUGHTS

The Community Health Needs Assessment was conducted in order to ensure that Shore Medical Center's outreach efforts and initiatives truly reflect the changing health needs of the community it serves. Although access to quality affordable health care plays a significant role in the health and well-being of members of our community, their health is also affected by other social determinants. Understanding these factors, such as economics, education and age can lead to reductions in health disparities and improvements in health indicators. These indicators can be used to describe the overall health of a population and determine community needs.

The significant findings indicate we have an aging population with lower household income levels, higher percentages of people living below the state average poverty level, lower levels of education and health indicators. The leading causes of death in our community are heart disease and cancer. In addition stroke, chronic respiratory disease and diabetes are also of major concern. All of these chronic diseases can be improved through healthy lifestyle improvements.

By gaining this knowledge, Shore Medical Center developed an implementation plan in order to address key issues. Projects were developed to specifically address obesity, heart disease, cancer and diabetes. The focus of the projects are to aid community members to make healthier choices, improve access to healthy foods, reduce food scarcity and to provide support to caregivers. In addition through these strategies the hope is to impact chronic disease rates by preventing and reducing mortality numbers from heart disease, cancer and diabetes. Shore Medical Center's Implementation Strategy may be accessed at www.shoremedicalcenter.org.

Appendix A

All Cancers Incidence Rates 2007-2011, All Races, All Ages: New Jersey, Atlantic County, Cape May County

	New Jersey		Atlantic County			Cape May County		
	Five Year Rate	Cases	Five Year Rate	Cases	Ranking	Five Year Rate	Cases	Ranking

All Cancers	552.8	268,566	566.8	8,934	12	652.4	4,862	1
Men	612.3	130,705	624.8	4,421	11	751.2	2,578	1
Women	517.5	137,861	529.1	4,513	10	913.8	2,284	2

Lung	61.9	29,955	74.3	1,176	7	86.9	662	1
Men	71.7	14,853	85.0	587	6	97.7	346	2
Women	55.4	15,102	66.8	589	6	73.7	316	2

Colorectal	48.9	23,888	50.6	796	10	50.9	393	9
Men	56.8	11,915	57.4	392	9	55.6	188	15
Women	42.8	11,973	45.1	404	8	47.0	205	4

Men

Male Genital System	175.9	38837	190.2	1,264	14	94.1	699	5
Prostate	168.7	37,307	164.1	1,223	14	186.5	683	8
Testicular	5.8	1212	5.9	36	11	7.0	14	6

Women

Breast	171.1	45,040	162.1	1,379	14	159.9	605	16
Female Genital System	59.7	15,845	63.2	532	6	59.9	217	10
Cervical	8.4	2047	10.8	80	3	11.2	28	2
Corpus Uteri	29.4	7983	28.3	249	14	26.8	105	19
Ovarian	13.4	3,572	12.0	103	20	11.7	45	21
Vulva	5.4	1,405	8.1	65	2	6.9	27	7

Other

Bladder	24.4	11,864	27.6	436	4	36.2	285	1
Kidney and Renal Pelvis	15.9	7,723	15.8	249	11	19.7	144	4
Leukemia	14.2	6,733	11.6	175	21	16.6	117	2
Melanoma	40.4	19,440	46.8	731	10	96.3	691	1
Non-Hodgkin Lymphoma	21.2	10,188	19.1	296	18	18.0	136	21
Oral	10.4	5151	11.3	188	7	13.5	102	1
Pancreatic	13.6	6,661	12.8	202	17	12.2	96	19
Thyroid	17.6	8,148	15.9	238	17	16.7	94	15

Source: State of New Jersey Department of Health, New Jersey Cancer Registry, <http://www.cancer-rates.info/nj/index.php>, 10-14-15.

All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Million Population. Based on data released February 2015.

Appendix B

All Cancers Mortality Rates 2007-2011, All Races, All Ages: New Jersey, Atlantic County, Cape May County

	New Jersey		Atlantic County			Cape May County		
	Five Year Rate	Deaths	Five Year Rate	Deaths	Ranking	Five Year Rate	Deaths	Ranking

All Cancers	171.5	84,033	188.0	2,954	5	192.7	1,532	4
Men	203.7	41,299	216.6	1,445	7	233.3	777	4
Women	151.0	42,734	169.7	1,509	3	67.8	755	4

Lung	43.6	21,146	52.5	828	6	54.7	438	3
Men	53.9	10,982	62.6	423	6	64.6	226	4
Women	36.6	10,164	45.9	405	4	48.4	212	2

Colorectal	16.8	8,314	20.9	286	5	26.1	127	15
Men	20.2	4,109	20.4	137	9	26.6	62	12
Women	14.3	4,205	16.4	149	4	26.0	65	15

Men

Male Genital System	21.6	4,104	19.3	115	19	22.8	73	11
Prostate	21.2	4,016	19.2	114	18	22.8	73	10
Testicular	0.2	53	*	*	*	*	*	*

Women

Breast	24.6	6,893	27.3	240	5	23.6	106	16
Female Genital System	17.10	4,757	17.9	156	6	17.6	76	7
Cervical	2.3	599	3.4	27	3	2.9**	9	7
Corpus Uteri	2.1	595	1.9	37	13	2.8**	13	5
Ovarian	8.5	2,384	7.7	68	18	9.7	44	4
Vulva	0.5	151	0.8	7	2	*	*	*

Other

Bladder	4.9	2,416	5.0	78	10	4.0	33	20
Kidney and Renal Pelvis	3.4	1,682	3.4	54	9	3.5	29	14
Leukemia	6.7	3,226	6.4	98	15	6.6	52	1
Melanoma	2.5	1,239	2.4	38	14	3.3	25	5
Non-Hodgkin Lymphoma	6.0	2,934	6.5	100	6	5.2	40	21
Oral	2.1	1,028	2.7	43	4	3.0	24	2
Pancreatic	11.7	5,715	10.9	173	18	11.2	92	15
Thyroid	0.5	238	0.4**	7	*	*	*	*

Source: State of New Jersey Department of Health and Senior Services, New Jersey Cancer Registry, <http://www.cancer-rates.info/nj/index.php>, 10-12-12

All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Million Population. Based on data released January 19, 2012.

* Small numbers

** Unreliable rate due to small numbers.

Appendix C

Shore Medical Center's Community Health Needs Assessment Survey

1. How would you describe your overall health?

- Excellent
- Very Good
- Good
- Fair
- Poor

2. Where do you go for routine healthcare?

- Physician Office
- Emergency Room
- Urgent Care Clinic
- Clinic in a Grocery Store or Drug Store
- I do not receive routine healthcare
- Other

3. In the past 12 months have you visited an emergency room to receive care for yourself or for an immediate family member who lives with you?

- Yes
- No

If yes, then why?

4. What type of healthcare coverage do you have?

- Medicare/Managed Medicare
- Medicaid/Managed Medicaid
- Commercial Health Coverage (Ex. Horizon, AmeriHealth, Aetna)
- Exchange Program
- No Healthcare Coverage
- Other

5. Which of the following preventive procedures have you had in the past 24 months?
(Check all that apply)

- Blood Pressure Check
- Blood Sugar Check
- Bone Density Test
- Cardiovascular Screening

- Cholesterol Screening
- Colon/Rectal Exam/Colonoscopy
- Dental Cleaning/X-Rays
- Flu Shot
- Hearing Screening
- Mammogram (If female)
- Pap Smear (If female)
- Physical Exam
- Pneumonia Vaccine
- Prostate Cancer Screening (if male)
- Skin Cancer Screening
- Vision Screening
- None of the Above

6. Which of the following health-related issues would you want to receive a (clinical) screening for? (Check all that apply)

- Alzheimer/Dementia
- Arthritis
- Asthma
- Cancer
- Chronic Pain
- Diabetes
- Heart Disease/Stroke
- Kidney Disease
- Lung Disease
- Obesity
- Osteoporosis

7. On a scale from 1-5, what is your level of concern to the following health conditions? (Circle)

Health Condition	Strongly Not Concerned	Not Concerned	Neutral	Concerned	Strongly Concerned
<i>Alzheimer/Dementia</i>	1	2	3	4	5
<i>Arthritis</i>	1	2	3	4	5
<i>Asthma</i>	1	2	3	4	5
<i>Cancer</i>	1	2	3	4	5
<i>Chronic Pain</i>	1	2	3	4	5
<i>Diabetes</i>	1	2	3	4	5

8. On a scale from 1 to 5, what is your level of concern to the following health conditions (Circle)

Health Condition	Strongly Not Concerned	Not Concerned	Neutral	Concerned	Strongly Concerned
<i>Heart Disease/Stroke</i>	1	2	3	4	5
<i>Kidney Disease</i>	1	2	3	4	5
<i>Lung Disease</i>	1	2	3	4	5
<i>Obesity</i>	1	2	3	4	5
<i>Osteoporosis</i>	1	2	3	4	5
<i>Substance Abuse</i>	1	2	3	4	5

9. On a scale from 1 to 5, what is the community's concern to the following health conditions? (Circle)

Health Condition	Strongly Not Concerned	Not Concerned	Neutral	Concerned	Strongly Concerned
<i>Alzheimer/Dementia</i>	1	2	3	4	5
<i>Arthritis</i>	1	2	3	4	5
<i>Asthma</i>	1	2	3	4	5
<i>Cancer</i>	1	2	3	4	5
<i>Chronic Pain</i>	1	2	3	4	5
<i>Diabetes</i>	1	2	3	4	5

10. On a scale from 1 to 5, what is the community's concern to the following health conditions? (Circle)

Health Condition	Strongly Not Concerned	Not Concerned	Neutral	Concerned	Strongly Concerned
<i>Heart Disease/Stroke</i>	1	2	3	4	5
<i>Kidney Disease</i>	1	2	3	4	5
<i>Lung Disease</i>	1	2	3	4	5
<i>Obesity</i>	1	2	3	4	5
<i>Osteoporosis</i>	1	2	3	4	5
<i>Substance Abuse</i>	1	2	3	4	5

11. Check all the statements that apply to you:

- I abuse or overuse prescription drugs
- I chew tobacco
- I consume more than 4 alcoholic drinks (if female) or 5 (if male) per day
- I eat at least 5 servings of fruits and vegetables each day
- I eat fast foods more than once per week
- I exercise at least 3 times per week
- I have access to a wellness program through my employer
- I receive a flu shot each year
- I smoke cigarettes
- I use illegal drugs
- I use sunscreen or protective clothing for planned time in the sun
- None of the above apply to me

12. On a scale from 1 to 5, which of the following barriers stop you from making health lifestyle choices? (Circle)

Barriers	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<i>Cost of health clubs or gyms</i>	1	2	3	4	5
<i>Cost of healthy food</i>	1	2	3	4	5
<i>Lack of knowledge of services available</i>	1	2	3	4	5
<i>Lack of knowledge</i>	1	2	3	4	5
<i>Lack of motivation and willingness to change</i>	1	2	3	4	5

13. On a scale from 1 to 5, which of the following barriers restrict you from making health lifestyle choices? (Circle)

Barriers	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<i>Lack of time/too busy</i>	1	2	3	4	5
<i>Lack of transportation</i>	1	2	3	4	5
<i>Limited access to healthy food such as fruits and vegetables</i>	1	2	3	4	5
<i>Limited access to recreational facilities</i>	1	2	3	4	5
<i>Safety or security concerns</i>	1	2	3	4	5

14. On a scale from 1 to 5, which of the following barriers restrict you from getting healthcare in your community? (Circle)

Barriers	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<i>Cost of care/insurance does not cover cost</i>	1	2	3	4	5
<i>Cost of prescriptions and medicine is too high</i>	1	2	3	4	5
<i>Fear/distrust of the healthcare system</i>	1	2	3	4	5
<i>Healthcare is not important</i>	1	2	3	4	5
<i>Healthcare services are not in good locations</i>	1	2	3	4	5
<i>Health insurance is too expensive</i>	1	2	3	4	5
<i>I don't know where to get healthcare</i>	1	2	3	4	5

15. On a scale from 1 to 5, which of the following barriers restrict you from getting healthcare in your community? (Circle)

Barriers	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<i>Lack of primary care doctors or other primary care providers</i>	1	2	3	4	5
<i>Lack of transportation</i>	1	2	3	4	5
<i>Lack of specialty doctors</i>	1	2	3	4	5
<i>Medical office hours are inconvenient</i>	1	2	3	4	5
<i>Doctor/staff does not speak other languages</i>	1	2	3	4	5
<i>Too much paperwork</i>	1	2	3	4	5
<i>The system is too complicated/I don't understand it</i>	1	2	3	4	5

16. Check up to four types of health interventions you would like to see in your community

- Community Garden/farm Markets
- Healthy Cooking Demonstrations
- Health Fairs/Community Events
- Healthy Living Support Groups
- Incentives to encourage a healthier lifestyle
- More care for the aging population/elderly
- Organized Exercise Activities
- Smoke-free outdoor areas (e.g. recreation areas such as parks and beaches)
- Walking Programs
- Other

17. What additional health services need to be offered to meet the health challenges in your community?

18. What is your Gender?

- Female
- Male

19. What is your Zip Code? _____

20. What is your Race?

- African American/Black
- American Indian/Alaska Native
- Asian
- Caucasian/white
- Hispanic

21. What is your current employment status?

- Employed Full Time
- Employed Part Time
- Retired
- Unemployed
- Homemaker
- Student
- Disabled

22. What is the highest level of education you have completed?

- Some High School
- High School Graduate
- Some College
- Collage Graduate

How many family members reside in your household?

Thank you for taking this community survey!

Appendix D

Community Public Health Representative's Interview Questions

1. What do you think is the greatest health concern within our community?
2. What do you think are the three greatest public health issues we face?
3. Do you think that everyone is getting the care that they need?
4. If not, what part of our population is not receiving the care they need?
5. In your opinion, do you think everyone in this community has access to care? If not, why?
6. Do you think that our community is informed about the numerous programs that are available to them to help improve their health?
7. Are there restaurants, markets, and grocery stores with healthy and affordable food choices located in every neighborhood?
8. Are there enough high quality options for child and elder care?
9. What do you think the most important barriers to making healthy choices are?
10. What do you feel are barriers to health care in your community?

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