



Community Health Needs Assessment



December 2019

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Our Commitment to Community Health

Compassion is at the heart of Deborah's Mission, reflected in its founders' motto: "There is no price on life." For close to 100 years, Deborah has cared for those in need, regardless of race, creed, color, national origin, nationality, ancestry, age, sex, familial status, marital/civil union status, religion, domestic partnership status, affectional or sexual orientation, gender identity and expression, atypical hereditary, cellular or blood trait, genetic information, liability for military service, and mental or physical disability (including perceived disability, and AIDS and HIV status). We believe that no one should have to make a medical decision based on their personal financial situation. Deborah is the only hospital in the nation that treats both adults and children and that has never balance billed a patient for care provided in the hospital. Deborah is also active in our local communities and service areas, providing community-based health and wellness programs. Deborah represents the best of the traditional nonprofit hospital and serves as a regional safety net for exceptional cardiovascular and pulmonary services and care.

Our Mission and Vision

The Deborah Mission is to provide the most advanced facilities, equipment, medical staff and necessary financial resources to deliver the highest quality inpatient and outpatient services for the diagnosis and treatment of heart, lung and vascular disease. We also recognize our important obligation to provide the highest degree of patient safety and privacy. To this end, Deborah embraces and advocates all initiatives that enable us to attain these goals.

The Deborah Vision is to be the premier provider of cardiovascular and pulmonary services in the region. We will continue to be known for excellent clinical outcomes and for supreme customer-driven service, and as the ultimate leader in patient safety and privacy. We will continue to partner with other quality providers and payers to ensure a seamless continuum of care to every patient we serve. We will continue to improve both service and quality in the most cost effective manners.

Our Story

The Deborah story is an extraordinary one. Deborah was founded in 1922 as a tuberculosis (TB) sanatorium and pulmonary center. According to legend, the therapeutic air of the Pine Barrens of rural Burlington County was key to patient recovery. In reality, thousands of TB patients were medically treated and successfully cured by a heroic team of Deborah physicians and caregivers.

When the development of antibiotic medications led to the eradication of TB, Deborah shifted its focus to other chest diseases, embracing the emerging specialty of cardiac disease prevention and treatment. The focus on cardiac diseases, combined with Deborah's established expertise treating lung diseases, transformed Deborah into New Jersey's only cardiac and pulmonary specialty hospital.

Today, Deborah offers leading-edge surgical techniques and non-surgical alternatives for diagnosing and treating cardiac, vascular and pulmonary diseases in adults, and congenital and

acquired heart defects in adults and children. By specializing in the most advanced treatments for coronary heart disease, pulmonary and thoracic diseases, diabetes and wound care, Deborah is consistently recognized as a leader in patient care, patient satisfaction, quality outcomes and innovative healing.

At Deborah, we take our role as one of the nation's leading and most innovative health facilities very seriously. New advances in cardiac, pulmonary and vascular care are often available at their early stages at Deborah. Deborah's Clinical Research Department – combined with our well-respected teaching program – brings to Deborah promising new treatments and technologies. This infusion of innovative ideas and professional talent shapes the Deborah of tomorrow, strengthening our already stellar reputation.

2019 Community Health Needs Assessment

To guide our community benefit and health improvement efforts, Deborah conducted a Community Health Needs Assessment (CHNA). The 2019 CHNA builds upon the 2013 and 2016 studies to monitor current health status in our primary service areas in Burlington and Ocean Counties. The CHNA includes a mix of statistical research and stakeholder input to collect and analyze health trends that impact the health of our community.

This report outlines findings from the 2019 CHNA and highlights strengths and opportunities across the Deborah service area. The findings will be used to guide the development of services at Deborah, as well as serve as a community resource for grant making, advocacy, and to support the many programs provided by our community health and social service partners.

To learn more about Deborah Heart and Lung Center's work to improve the health of our community, visit our [website](#) or contact [Christine Carlson-Glazer](#), Government and Community Relations Liaison at Deborah Heart and Lung Center.

Executive Summary of CHNA Findings

CHNA Leadership

The 2019 CHNA was led by representatives from Deborah to oversee research and stakeholder engagement. CHNA findings were reviewed with a wide representation of local and regional partners. Steering Committee members are listed below, along with Baker Tilly consultant team members. Consultants assisted in all phases of the CHNA including project management, data collection and analysis, and report writing.

2019 Deborah CHNA Executive Committee

Susan Bonfield, Esq., General Counsel and Executive Vice President
 Christine Carlson-Glazer, MPH, Government and Community Relations Liaison
 Lewis Clark, Jr., Vice President of Marketing, Media, and Public Relations
 Grant Leidy, Vice President and Chief Financial Officer
 Joseph Manni, Executive Vice President and Chief Operating Officer
 Rich Temple, Vice President and Chief Information Officer

2019 Deborah CHNA Steering Committee Members

Christine Carlson-Glazer, MPH, Government and Community Relations Liaison
 Peggy Dowd, Director of Finance
 Donna McArdle, Public Relations Liaison

Baker Tilly Consulting Team

Baker Tilly is recognized both locally and nationally as a leader in serving not-for-profit healthcare organizations. For more than 30 years, our firm has been dedicated to this industry. Our healthcare practice, which provides services to acute care, post-acute care, and ancillary service providers, is one of the firm's leading industry groups. Baker Tilly's CHNA team members have assisted more than 100 hospitals and health systems in conducting CHNAs.

Deborah 2019 CHNA Consulting Team



Colleen Milligan, MBA

Director, Healthcare Team

colleen.milligan@bakertilly.com

- ▶ 20 years of healthcare and human services industry experience
- ▶ Has overseen CHNAs for more than 100 hospitals
- ▶ Expertise in community engagement and health improvement planning



Catherine Birdsey, MPH

Research Manager

catherine.birdsey@bkaertilly.com

- ▶ Expertise in data collection and statistical analysis specific to CHNAs
- ▶ Has conducted research for nearly 100 CHNA projects
- ▶ Oversees quantitative and qualitative research and reporting

**Jessica Losito, BS**

Senior Research Consultant
jessica.Losito@bakertilly.com

- ▶ Expertise in administration of research surveys
- ▶ Experience preparing and analyzing statistical reports
- ▶ Experience with qualitative research including focus groups

Deborah Heart and Lung Center Service Area Description

As a highly-specialized medical provider providing high quality care, Deborah draws patients from every area of New Jersey and beyond. For the purposes of the 2019 CHNA, Deborah defined its service area as two distinct geographies:

1. Immediate Service Area – the community in which Deborah is physically located, including Pemberton Township and Borough, Browns Mills, New Lisbon, Birmingham, Wrightstown, and Joint Base McGuire-Dix-Lakehurst.
2. Primary Service Area – this is the heart of Deborah’s patient population and includes the remainder of Burlington County (separate from the Immediate Service Area) and all of Ocean County. Sixty percent of Deborah’s patients come from Ocean County.

CHNA Methodology

The 2019 CHNA was conducted from January to June 2019 and included quantitative and qualitative research methods to determine health trends and disparities within the Deborah service area compared to health indicators across New Jersey and the nation. Primary study methods were used to solicit input from healthcare consumers and key community stakeholders representing the broad interests of the community. Secondary study methods were used to identify and analyze statistical demographic and health trends.

Specific CHNA study methods included:

- > An analysis of existing secondary data sources, including public health statistics, demographic and social measures
- > A key informant survey
- > A community survey with residents of Burlington and Ocean Counties
- > An open partner forum with health and human service partners
- > Focus groups with community stakeholders

The CHNA was conducted in a timeline designed to comply with IRS Tax Code 501(r) requirements which require hospitals to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The findings are to be used to guide the hospital’s community benefit initiatives and engage local partners to collectively address identified health needs.

Community Engagement

In assessing the health needs of the community, Deborah solicited and received input from persons who represent the broad interests of the community. These individuals provided wide

perspectives on health trends, expertise about existing community resources available to meet those needs, and insights into service delivery gaps that contribute to health disparities.

Following the 2016 CHNA, in addition to being posted on the Deborah website, a copy of the Assessment report and Community Health Improvement Plan was made available for public comment for a period of time during the 2019 assessment process. No written comments were received.

Summary Findings

Deborah's Immediate Service Area includes six zip codes spanning portions of Burlington and Ocean Counties in New Jersey. The service area is unique with three of the six zip codes comprising Joint Base McGuire-Dix-Lakehurst (JB MDL), supporting more than 50,000 active duty, guard, reserve, family members, retirees, veterans, and civilian personnel.

Residents of the Immediate Service Area experience greater socioeconomic need compared to residents across Burlington and Ocean Counties.

Residents of Deborah's Immediate Service Area experience greater socioeconomic need compared to residents across Burlington and Ocean Counties. A higher percentage of residents live in poverty, fewer residents attain higher education, and a higher percentage of individuals are uninsured. Socioeconomic disparity is more pronounced within Pemberton and Browns Mills, where one-quarter of children live in poverty and nearly 1 in 10 residents are uninsured.

Deborah's Primary Service Area comprises the remainder of Burlington and Ocean Counties. The counties share a border, but are largely unique in their demographic and socioeconomic makeup. While both counties are predominantly White, Burlington County is more diverse with nearly 1 in 5 residents identifying as Black/African American. Residents are generally older with a median age that exceeds state and national medians and is increasing. Socioeconomic indicators are largely positive with a higher reported median household income, lower poverty rates, and higher educational attainment compared to the State and nation.

Ocean County is less diverse than the State or nation with 9 in 10 residents identifying as White. The county is aging at a faster rate than Burlington County, and approximately 1 in 4 residents are age 65 or over. While the overall poverty rate for Ocean County is comparable to that of the State, the child poverty rate is higher and more than double the Burlington County rate. Nearly 1 in 5 children in Ocean County live in poverty. Consistent with the 2016 CHNA, Ocean County has a more prominent blue collar workforce, which is consistent with the fact that a higher percentage of residents hold a high school diploma versus a bachelor's degree or advanced degree.

Ocean County is an aging population, but 2 in 5 residents are under age 15, and nearly 20% of children live in poverty.

Areas of public health opportunity across the Deborah service area continue to be centered on access to care, behavioral health needs, chronic disease prevention and management, growing health and social needs among seniors, and reducing health and social disparities.

Access to Care

The percentage of the population that is uninsured in Burlington and Ocean Counties is lower than the percentage that is uninsured in the State and nation and is declining. Health insurance coverage contributes to lower healthcare costs. While fewer residents report cost as a barrier to receiving care compared to those across the State, data findings indicate that 1 in 10 residents face financial barriers.

Fewer residents are uninsured, but 1 in 10 experience financial barriers to care.

The uninsured rate in both counties is highest among Latinxs, the fastest growing population group. By 2023, approximately 1 in 10 residents in either county are projected to be Latinx. Latinxs in Ocean County experience the greatest disparity in health insurance with an uninsured rate of 24% compared to the total county uninsured rate of 7% (five-year aggregate).

Ocean County has fewer primary care, dentists, and mental health providers than is found in the State as a whole and the nation. Consistent with this finding, Ocean County adults are less likely to receive routine care. Roughly 70% of adults had a routine health visit within the past year compared to 80% of adults across Burlington County and the State.

Joint Base McGuire-Dix-Lakehurst provides non-emergent, primary care medical services as part of the 87th Medical Group located on base. Specialty medical care services are referred to providers in surrounding communities. Browns Mills and Pemberton Township are among the closest communities to JB MDL, and both are federally-designated Medically Underserved Areas for low-income populations, presenting access barriers for military personnel and their families.

Behavioral Health Needs

From 2015 to 2016, the percentage of Ocean County adults reporting a history of depression increased from 13.5% to 18%, surpassing the state average of 12.1%. Within Burlington County, the percentage of adults with a history of depression declined to 9.9% in 2016. Despite these differences, both counties have a similar and higher rate of suicide death than is found Statewide.

Both counties have a similar and higher rate of death than the State for suicide and drug-induced deaths.

From 2014 to 2017, the drug-induced death rate more than doubled in Burlington County and increased 17 points in Ocean County. The county death rates are nearly equal at approximately 40 per age-adjusted 100,000 and exceed the rates overall in the State (31) and nation (23). The majority of drug-related deaths in 2017 were due to fentanyl and fentanyl analogs, followed by heroin.

Drug-related deaths include drug overdoses, most prominently opioid overdoses. The number of suspected opioid overdose deaths also increased in both counties. In 2018, Burlington County had 161 suspected opioid-related overdose deaths, and Ocean County had 217.

Chronic Disease Prevention and Management

Smoking and obesity are significant contributors to morbidity and mortality due to chronic disease. Consistent with the State rates, adult smoking rates in Burlington and Ocean Counties declined. Currently 12-13% of adults in either county report smoking, lower than State and national benchmarks. Obesity rates followed a different trend, generally increasing across the State. Approximately 30% of adults in both counties are obese, greater than the Statewide findings and Healthy New Jersey 2020 benchmarks and consistent with national benchmarks.

Across New Jersey, smoking rates declined, but obesity rates continued to increase.

Heart disease and cancer continue to be the leading causes of death in Burlington and Ocean Counties. The Burlington County heart disease death rate declined and is similar to the Statewide death rate, but the Ocean County death rate has been stable, showing at more than 30 points higher than the State rate. Both counties have a similar incidence of cancer that exceeds State and national averages. Ocean County also has a higher death rate, indicating care access barriers.

Senior Health Needs

The median resident age within Burlington and Ocean Counties continues to be older than the State median, highlighting a need for increased emphasis on health and social needs among older residents. Approximately 43% of Burlington County senior Medicare Beneficiaries and 52% of Ocean County senior Medicare Beneficiaries manage four or more chronic conditions. Approximately 11% of seniors in Burlington County and 17% of seniors in Ocean County live alone, contributing to social isolation and potentially exacerbating behavioral and physical health conditions.

More seniors live alone and have multiple chronic conditions in Ocean County than in other parts of the State.

Heart conditions, including hypertension, high cholesterol, and ischemic heart disease, are the top causes of morbidity among Burlington and Ocean County seniors, and are more prevalent when compared to national averages. Respiratory diseases, including asthma and COPD, and cancer are also prevalent, particularly in Ocean County.

Health Disparities

Pemberton Borough/Township and Browns Mills, located within the Deborah Immediate Service area, experience greater socioeconomic and health disparity, as evidenced by higher poverty rates and lower life expectancy. Life expectancy is less than 75 years compared to a life expectancy of 75-80.9 years across the remainder of the service area. Pemberton residents also experience greater disparity related to substance use disorder. In 2017, Pemberton residents had the highest number of substance use disorder treatment admissions in Burlington County.

Health disparities across Burlington and Ocean Counties are also noted in healthcare utilization data, particularly emergency department (ED) usage. The New Jersey Hospital Association analyzed 2017 patient record data for ED visits related to chronic conditions across 68 New

Jersey acute care hospitals. Chronic conditions are considered ambulatory care sensitive conditions; conditions that if effectively treated and managed in an outpatient setting, should not be the primary reason for an ED visit. Ambulatory care sensitive utilization trends can identify access to care barriers and inform the need for community health management resources.

Across Burlington County EDs, approximately 38% of visits and 55% of costs were due to patients with a chronic condition, similar percentages to those found at the State level. Ocean County EDs exceeded State averages with nearly 50% of visits and 65% of costs due to patients with a chronic condition. When analyzed by patient zip code of residence, residents of Browns Mills ranked second highest in Burlington County for ED visits with a chronic condition present. Within Ocean County, residents of Lakewood and Toms River had the most ED visits.

Patients with chronic conditions accounted for 55% of ED costs in Burlington County and 65% of ED costs in Ocean County.

Community Health Priorities

To work toward health equity, it is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, Deborah solicited input from community partners and stakeholders. A summary of the prioritization process for identifying priority health needs is included in this report.

Using feedback from partners and stakeholders and taking into account the hospital's expertise and resources, Deborah will focus efforts on the following community health priorities as part of its 2020-22 Community Health Improvement Plan:

- > Linkages to care
- > Chronic disease management
- > Issues of Aging

Community stakeholders identified mental health and substance use disorder as key drivers of poor resident health outcomes. While Deborah will not address these needs directly based on the specialty nature of their services and available resources, the hospital will continue to be a community partner in supporting recovery efforts. Deborah actively works with first responders to administer Narcan, provides education and programs for alternatives to pain management, and is exploring telepsychiatry options to improve access to behavioral health providers.

Board Approval

The Deborah 2019 CHNA Final Report and corresponding Community Health Improvement Plan were reviewed and approved by the Board of Directors on December 16, 2019. The report and plan are available for review and comment on the Deborah Heart and Lung Center [website](#).

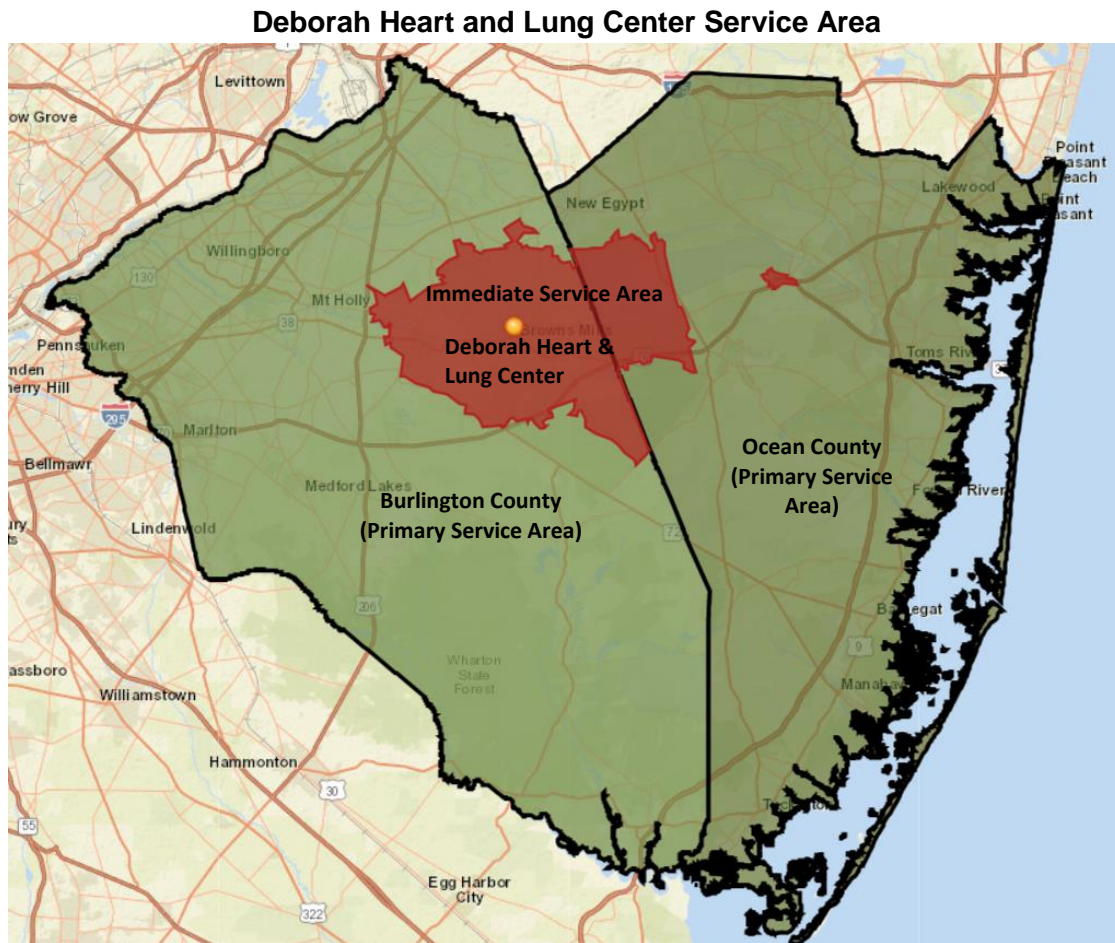
Full Report of CHNA Findings

The Deborah Heart and Lung Center Service Area

As a highly-specialized medical provider providing care at or above national benchmarks, Deborah draws patients from every area of New Jersey and beyond. For the purposes of the 2019 CHNA, Deborah defined its service area as two distinct geographies:

1. **Immediate Service Area** – the community in which Deborah is physically located, including Pemberton Township and Borough, Browns Mills, New Lisbon, Birmingham, Wrightstown, and the Joint Base McGuire-Dix-Lakehurst.
2. **Primary Service Area** – this is the heart of Deborah’s patient population and includes the remainder of Burlington County (separate from the Immediate Service Area) and all of Ocean County. Sixty percent of Deborah’s patients come from Ocean County.

The map below depicts Deborah’s Immediate and Primary Service Areas.



Deborah Heart and Lung Center Service Area Demographic Data Analysis

Analyses of demographic and socioeconomic data are essential in understanding health trends and determining key drivers of health status. Socioeconomic indicators play a significant role in community and individual health. Known as **social determinants of health**, they are defined as factors within the environment in which people live, work, and play that can affect health and quality of life. Social determinants of health are often the root causes of **health disparities**. Healthy People 2020 defines a health disparity as “a particular type of health difference that is closely linked with social, economic, or environmental disadvantage.”

Social determinants of health are factors within the environment in which people live, work, and play that can affect health and quality of life.

Burlington and Ocean County data are presented with New Jersey and national data sets to demonstrate broad trends and areas of strength and opportunity. Demographic analysis by zip code follow the county level analysis to provide a detailed view of population statistics. All reported data were provided by ESRI Business Analyst, 2018 and the US Census Bureau unless otherwise noted.

Population Trends

The population of the Immediate Service Area is 42,726. The population increased 1.6% from the 2010 Census, and is projected to increase 1.3% through 2023. Burlington and Ocean Counties overall experienced growth; the Ocean County population is the fastest growing demographic, and is projected to increase nearly 4% by 2023.

Population Growth

	2018 Population	% Growth 2010-2018	% Growth 2018-2023
Immediate Service Area	42,726	1.6%	1.3%
Burlington County	459,512	2.4%	1.7%
Ocean County	606,422	5.2%	3.7%

Source: ESRI, 2018

The population of Burlington and Ocean Counties is primarily White. In Burlington County, a similar percentage of residents identify as White compared to the State and nation, while a greater percentage of residents identify as Black/African American. The Ocean County population is less diverse with 9 in 10 residents identifying as White. Across both counties, fewer residents identify as Latinx compared to the state and nation.

Population diversity is increasing. By 2023, 1 in 10 residents will identify as Latinx.

Population diversity is projected to increase across the counties through 2023 as the White population comparatively declines. The Latinx population is the fastest growing demographic, and will account for approximately 1 in 10 residents by 2023.

2018 Population Overview by Race, Ethnicity, and Primary Language

	White	Black or African American	Asian	Latinx (any race)	Primary Language Other than English*
Burlington County	70.9%	17.5%	5.3%	8.4%	13.0%
Ocean County	89.8%	3.4%	2.0%	9.6%	12.5%
New Jersey	65.1%	13.9%	9.9%	20.9%	30.7%
United States	70.0%	12.9%	5.7%	18.3%	21.1%

Source: ESRI, 2018

*Data are reported for 2012-2016 based on most recent records available.

Population by Race/Ethnicity as a Percentage of Total Population (Projected Change)

	White		Black/African American		Asian		Latinx	
	2010	2023	2010	2023	2010	2023	2010	2023
Burlington County	73.8%	68.6%	16.6%	18.0%	4.3%	6.2%	6.4%	10.1%
Ocean County	91.0%	88.8%	3.2%	3.5%	1.8%	2.2%	8.3%	10.8%
New Jersey	68.6%	62.6%	13.7%	14.0%	8.3%	11.1%	17.7%	23.2%
United States	72.4%	68.2%	12.6%	13.0%	4.8%	6.4%	16.4%	19.8%

Source: ESRI, 2018

According to the US Census Bureau, by 2060, the median age of the US population is expected to grow from the current age of 38 to age 43. The median age of Burlington (41.7) and Ocean (44.2) Counties meets or nearly meets the 2060 projected median and is increasing. At the time of the 2016 CHNA, the median age was 41.2 in Burlington County and 42.6 in Ocean County. Approximately 1 in 5 residents in Burlington County and 1 in 4 residents in Ocean County are age 65 or over.

The median age of both counties exceeds state and national medians and is increasing.

2018 Population by Age

	Under 15	15-24 years	25-34 years	35-54 years	55-64 years	65+ years	Median Age
Burlington County	17.5%	11.8%	12.4%	26.7%	14.2%	17.3%	41.7
Ocean County	18.5%	10.3%	11.5%	21.8%	13.1%	24.7%	44.2
New Jersey	18.0%	12.4%	13.0%	26.5%	13.5%	16.6%	40.1
United States	18.6%	13.3%	13.9%	25.3%	13.0%	16.0%	38.3

Source: ESRI, 2018

Economic Measures

The median household income in Burlington and Ocean Counties increased from the 2016 CHNA by approximately \$4,400 and \$2,000 respectively. Burlington County has a higher median household income than the State and nation and lower poverty rates. Ocean County has a lower median household income than the State and a similar overall poverty rate, but the percentage of children living in poverty exceeds the State rate and is more than double the Burlington County rate. Nearly 1 in 5 children in Ocean County live in poverty compared to 1 in 10 in Burlington County.

1 in 5 children in Ocean County live in poverty compared to 1 in 10 children in Burlington County.

Median Household Income and Poverty Indicators

	Median Household Income	People in Poverty	Children in Poverty	Households with Food Stamp/ SNAP Benefits*
Burlington County	\$84,000	6.4%	8.9%	5.5%
Ocean County	\$63,766	10.9%	18.7%	8.1%
New Jersey	\$78,126	10.7%	15.3%	9.4%
United States	\$58,100	14.6%	20.3%	13.1%

Source: ESRI, 2018; US Census Bureau, 2013-2017

*Data are reported for 2012-2016 based on most recent records available.

When stratified by race and ethnicity, the percentage of African American and Latinx people living in poverty in Burlington and Ocean Counties is higher than the percentage of White people living in poverty. Ocean County mirrors the State for poverty rates among African American and Latinx residents, while Burlington County has lower rates of poverty for all reported population groups.

Poverty Rates by Race and Ethnicity

	Burlington County		Ocean County		New Jersey
	Count	Percentage	Count	Percentage	Percentage
White	17,241	5.4%	55,736	10.5%	8.3%
Black/African American	6,903	10.1%	3,295	19.1%	19.2%
Latinx	3,420	10.6%	8,843	16.8%	19.6%

Source: US Census Bureau, 2013-2017

Unemployment rates measure the percentage of the eligible workforce (residents age 16 years or over) who are actively seeking work, but have not obtained employment. Both counties have a lower unemployment rate than the State and nation, but unemployment is higher among minority populations. Consistent with the 2016 CHNA, Burlington County has a more prominent white collar workforce, while Ocean County has a more prominent blue collar workforce.

Population by Occupation and Unemployment

	White Collar Workforce	Blue Collar Workforce	Unemployment Rate
Burlington County	69.0%	31.0%	4.3%
Ocean County	62.0%	38.0%	4.4%
New Jersey	66.0%	34.0%	5.1%
United States	61.0%	39.0%	4.8%

Source: ESRI, 2018

Unemployment Rates by Race and Ethnicity

	Burlington County		Ocean County		New Jersey
	Count	Percentage	Count	Percentage	Percentage
White	16,159	6.0%	27,782	6.5%	6.0%
Black/African American	6,579	11.1%	1,355	9.5%	12.2%
Latinx	2,109	8.5%	2,669	7.3%	7.5%

Source: US Census Bureau, 2013-2017

Housing Measures

Homeownership and housing affordability are measures of economic stability. The median home value in Burlington and Ocean Counties increased from the 2016 CHNA by approximately \$5,700 and \$3,400 respectively. One-third of Burlington County homeowners and more than 40% of Ocean County homeowners are considered housing cost burdened. Housing cost burden in Ocean County is likely impacted by median home value relative to median household income. Ocean County has a higher median home value than Burlington County, but the median household income in Ocean County is approximately \$20,000 less.

A higher percentage of Ocean County homeowners and renters are considered housing cost burdened.

Roughly one-quarter of housing units in both counties are renter-occupied, lower than the State and national figures. However, the percentage of renter-occupied housing units increased from the 2016 CHNA in both counties. Approximately half of Burlington County renters are considered housing cost burdened, consistent with the state and nation. Ocean County has a higher percentage of cost burdened renters at more than 60%.

Population by Household Type and Housing Cost Burden

	Renter-Occupied	Renters Paying 30% or More of Income on Rent*	Owner-Occupied	Median Home Value	Mortgages Costing 30% or More of Household Income*
Burlington County	25.1%	51.6%	74.9%	\$265,563	34.3%
Ocean County	21.6%	62.0%	78.4%	\$277,195	43.2%
New Jersey	37.5%	53.2%	62.5%	\$346,269	39.8%
United States	36.9%	51.1%	63.1%	\$218,492	30.8%

Source: ESRI, 2018; US Census Bureau, 2012-2016

*Data are reported for 2012-2016 based on most recent records available.

Education Measures

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. More than one-third of Burlington County residents have attained a bachelor’s degree or higher, comparable to the state. Consistent with a more prominent blue collar workforce, a higher percentage of Ocean County residents have a high school diploma. The percentage of residents with less than a high school diploma decreased from the 2016 CHNA.

The percentage of residents with less than a high school diploma decreased in both counties from the 2016 CHNA.

Population (25 Years or Over) by Educational Attainment

	Less than a High School Diploma	High School Graduate/GED	Bachelor’s Degree or Higher
Burlington County	6.7%	28.1%	38.0%
Ocean County	8.6%	34.3%	29.0%
New Jersey	10.5%	27.3%	39.2%
United States	12.3%	27.0%	31.8%

Source: ESRI, 2018

When stratified by race and ethnicity, African American and Latinx residents are less likely to complete a bachelor’s degree compared to White residents. In Burlington County, African American and Latinx residents are more likely to complete a bachelor’s degree than their peers across the State, consistent with lower observed poverty rates.

Bachelor’s Degree or Higher by Race and Ethnicity

	Burlington County		Ocean County		New Jersey
	Count	Percentage	Count	Percentage	Percentage
White	88,106	37.4%	106,538	28.4%	38.8%
Black/African American	14,264	29.2%	2,671	23.2%	23.0%
Latinx	4,674	23.8%	4,303	14.7%	17.9%

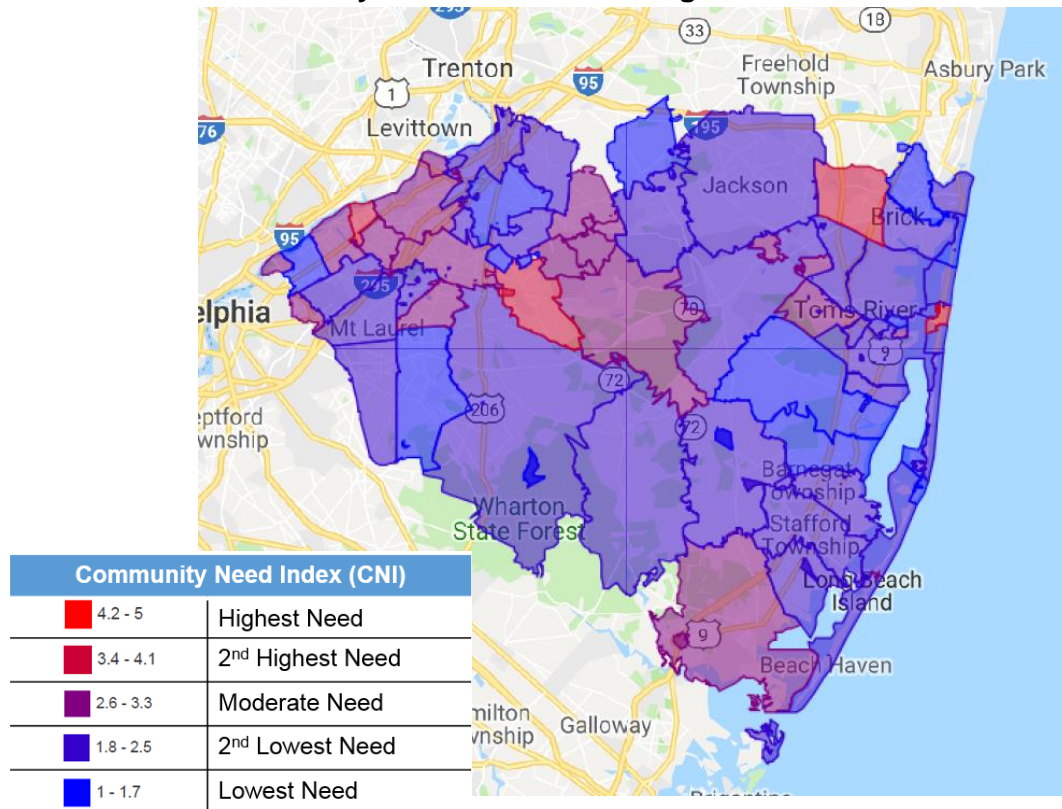
Source: US Census Bureau, 2013-2017

Deborah Heart and Lung Center Service Area Zip Code Analysis

Zip code of residence is one of the most important predictors of health disparity; where residents live matters in determining their health. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the zip code level. The CNI scores zip codes on a scale of 1.0 (low need) to 5.0 (high need) based on 2015 data indicators for five socio-economic barriers:

- > Income: Poverty among elderly households, families with children, and single female-headed families with children
- > Culture/Language: Minority populations and English language barriers
- > Education: Population over 25 years without a high school diploma
- > Insurance coverage: Unemployment rate among population 16 years or over and population without health insurance
- > Housing status: Householders renting their home

Community Need Index for Burlington and Ocean Counties



The weighted average CNI score for Deborah’s Immediate Service Area is 3.2, indicating moderate overall community needs. The CNI score for all of Burlington and Ocean Counties is comparable at 2.5 and 2.4 respectively, and indicates lower overall community need.

The Community Need Index score for Deborah’s Immediate Service Area is 3.2, higher than overall scores for Burlington (2.5) and Ocean (2.4) Counties.

The following tables list the social determinants of health that contribute to zip code CNI scores and are often indicative of health disparities. Zip code data is shown in comparison to the counties in which the zip codes are situated and the State, and are presented in descending order by CNI score. Cells highlighted in **yellow** are more than 2% points higher than the county statistic, but not necessarily statistically significant.

Social determinant of health indicators are shown for all Immediate Service Area zip codes. Within Burlington and Ocean Counties, zip codes with a CNI score of 3.0 or greater are shown.

Immediate Service Area

Social Determinants of Health by Immediate Service Area Zip Code*

	HHs in Poverty	HHs Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unemployment	Less than HS Diploma	Without Health Insurance	CNI Score
Immediate Service Area (aggregate)	10.5%	9.2%	17.9%	17.4%	5.6%	10.4%	7.8%	3.2
08068, Pemberton	8.7%	13.9%	24.3%	17.6%	4.6%	11.8%	9.4%	4.0
08640, Joint Base MDL	8.1%	1.4%	12.2%	25.1%	5.0%	5.5%	2.3%	3.2
08733, Lakehurst	11.7%	12.6%	13.6%	13.4%	6.2%	11.0%	8.2%	3.2
08015, Browns Mills	12.5%	9.7%	23.0%	15.2%	6.0%	12.8%	9.0%	3.0
08641, Joint Base MDL	5.2%	0.8%	6.8%	15.0%	4.7%	4.7%	2.0%	2.8
08064, New Lisbon	9.1%	9.1%	NA	27.2%	1.8%	6.9%	7.2%	NA**
Burlington County	6.3%	5.5%	8.9%	13.0%	4.3%	6.7%	5.9%	2.5
Ocean County	9.2%	8.1%	18.7%	12.5%	4.4%	8.6%	8.0%	2.4

*Zip code data are reported for 2012-2016. Exception: Unemployment and education data are reported for 2018.

**A CNI score cannot be generated for 08064 likely due to a low population count (n=156).

2018 Demographic Indicators by Immediate Service Area Zip Code

	White	Black/ African American	Latinx	Under 15	15-24	25-34	35-54	55-64	65+
Immediate Service Area (aggregate)	62.5%	22.7%	17.6%	18.6%	12.3%	17.8%	28.1%	11.5%	11.8%
08068, Pemberton	57.1%	27.8%	18.5%	16.0%	11.7%	14.8%	25.7%	13.1%	18.7%
08640, Joint Base MDL	49.9%	34.5%	26.4%	10.9%	5.5%	26.0%	45.2%	9.7%	2.8%
08733, Lakehurst	74.4%	11.6%	14.8%	21.2%	13.0%	16.9%	27.0%	11.7%	10.3%
08015, Browns Mills	66.9%	19.3%	14.2%	18.7%	11.7%	14.3%	25.9%	14.0%	15.4%
08641, Joint Base MDL	65.0%	16.9%	17.8%	33.0%	26.2%	24.9%	14.5%	0.6%	0.8%
08064, New Lisbon	59.8%	26.8%	13.4%	15.5%	9.3%	11.3%	23.7%	18.6%	21.7%
Burlington County	70.9%	17.5%	8.4%	17.5%	11.8%	12.4%	26.7%	14.2%	17.3%
Ocean County	89.8%	3.4%	9.6%	18.5%	10.3%	11.5%	21.8%	13.1%	24.7%

Burlington County

Social Determinants of Health for Burlington County Zip Codes with CNI Score ≥3.0

	HHs in Poverty	HHs Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unemployment	Less than HS Diploma	Without Health Insurance	CNI Score
Burlington County	6.3%	5.5%	8.9%	13.0%	4.3%	6.7%	5.9%	2.5
08010, Beverly	9.5%	12.9%	9.3%	15.5%	5.7%	10.9%	11.5%	3.6
08016, Burlington	8.1%	9.2%	10.0%	16.6%	4.7%	9.0%	5.9%	3.2
08052, Maple Shade	9.0%	7.2%	16.0%	14.8%	4.6%	7.6%	8.8%	3.2
08065, Palmyra	7.9%	7.1%	21.7%	11.1%	6.1%	6.7%	8.0%	3.2
08562, Wrightstown	11.5%	11.1%	18.7%	12.9%	6.2%	9.3%	10.9%	3.2
08075, Riverside	6.5%	6.1%	5.4%	18.2%	4.3%	9.5%	9.6%	3.0
New Jersey	10.6%	9.4%	15.6%	30.7%	5.1%	10.5%	10.7%	NA

*Zip code data are reported for 2012-2016. Exception: Unemployment and education data are reported for 2018.

2018 Demographic Indicators for Burlington County Zip Codes with CNI Score ≥3.0

	White	Black/ African American	Latinx	Under 15	15-24	25-34	35-54	55-64	65+
Burlington County	70.9%	17.5%	8.4%	17.5%	11.8%	12.4%	26.7%	14.2%	17.3%
08010, Beverly	55.0%	29.2%	13.5%	16.7%	11.0%	13.3%	26.2%	14.4%	18.4%
08016, Burlington	56.0%	30.5%	8.8%	18.8%	12.2%	12.4%	26.7%	14.1%	15.7%
08052, Maple Shade	76.0%	10.0%	10.7%	15.4%	11.0%	17.4%	26.7%	13.2%	16.4%
08065, Palmyra	76.2%	15.6%	7.1%	17.6%	9.3%	12.8%	27.5%	15.2%	17.6%
08562, Wrightstown	78.3%	8.0%	14.6%	17.6%	11.2%	14.4%	25.2%	15.9%	15.7%
08075, Riverside	77.8%	10.0%	8.5%	19.0%	11.1%	13.8%	27.9%	13.5%	14.7%
New Jersey	65.1%	13.9%	20.9%	18.0%	12.4%	13.0%	26.5%	13.5%	16.6%

Ocean County

Social Determinants of Health for Ocean County Zip Codes with CNI Score ≥ 3.0

	HHs in Poverty	HHs Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unemployment	Less than HS Diploma	Without Health Insurance	CNI Score
Ocean County	9.2%	8.1%	18.7%	12.5%	4.4%	8.6%	8.0%	2.4
08701, Lakewood	24.1%	23.5%	39.6%	28.3%	4.0%	15.0%	11.9%	4.0
08751, Seaside Heights	17.6%	16.2%	35.6%	29.2%	7.3%	9.7%	20.8%	3.8
New Jersey	10.6%	9.4%	15.6%	30.7%	5.1%	10.5%	10.7%	NA

*Zip code data are reported for 2012-2016. Exception: Unemployment and education data are reported for 2018.

2018 Demographic Indicators for Ocean County Zip Codes with CNI Score ≥ 3.0

	White	Black/ African American	Latinx	Under 15	15-24	25-34	35-54	55-64	65+
Ocean County	89.8%	3.4%	9.6%	18.5%	10.3%	11.5%	21.8%	13.1%	24.7%
08701, Lakewood	83.3%	6.5%	19.1%	37.7%	14.0%	16.1%	14.2%	5.5%	12.5%
08751, Seaside Heights	83.9%	4.9%	15.9%	13.7%	10.2%	14.4%	25.4%	16.8%	19.6%
New Jersey	65.1%	13.9%	20.9%	18.0%	12.4%	13.0%	26.5%	13.5%	16.6%

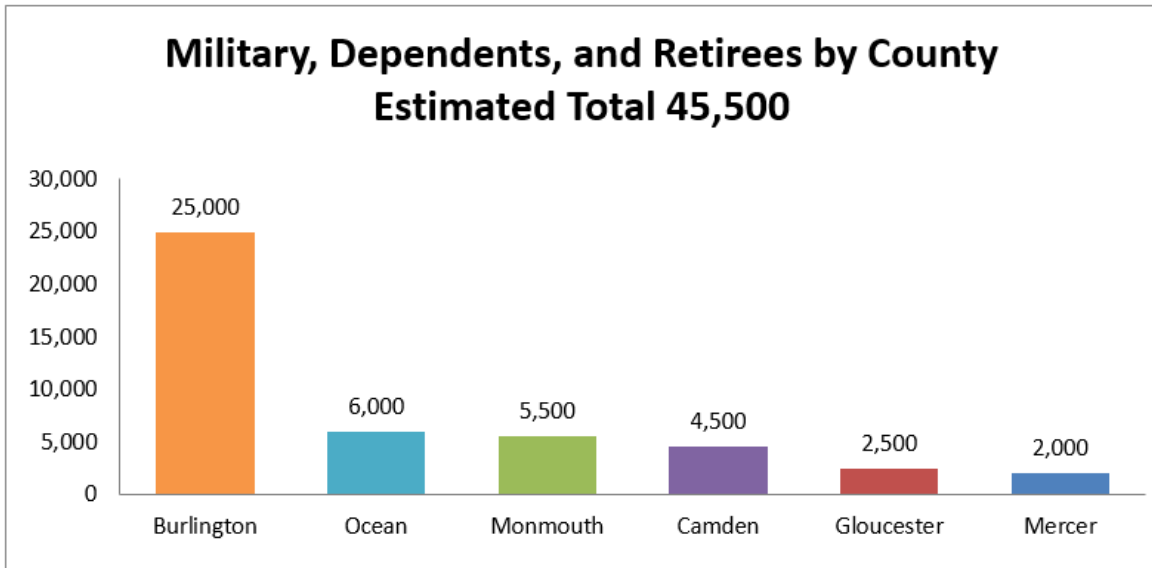
Special Population Groups

Joint Base McGuire-Dix-Lakehurst – Active Military, Dependents, Retirees and Veterans

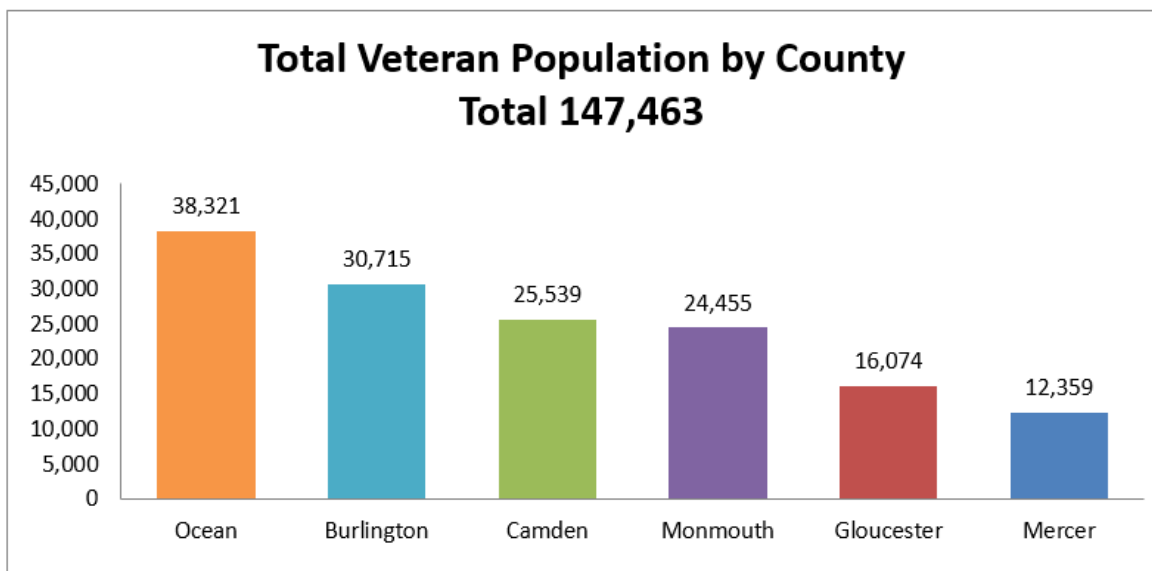
Joint Base McGuire-Dix-Lakehurst (JB MDL) is used by three branches of the US Military – Air Force, Army, and Navy. On October 1, 2009, three adjacent military bases (McGuire Air Force Base, the Army's Fort Dix, and the Navy's Naval Air Engineering Station Lakehurst) merged to form JB MDL, the nation's only tri-service Joint Base.

Straddling the two largest counties in New Jersey – Burlington and Ocean, JB MDL encompasses 42,000 contiguous acres spanning more than 20 miles from east to west. Deborah is uniquely situated as its Immediate and Primary Service Areas encompass JB MDL. With Deborah located just 1.3 miles from the Fort Dix gate, Deborah is committed to serving those who have served for us.

There are more than 45,000 Airmen, Soldiers, Sailors, Marines, Coast Guardsmen and their family members living and working on and around JB MDL, with an additional 60,000 military retirees living within a 50-mile radius of the base. In addition, approximately 147,000 veterans live within the six counties of Burlington, Camden, Gloucester, Mercer, Monmouth, and Ocean.



Source: JB MDL



Source: VA Predictive Analytics and Actuary Service, September 30, 2018

Access to Care

Joint Base McGuire-Dix-Lakehurst provides non-emergent, primary care medical services (e.g. internal medicine, pediatrics and gynecology) on JB MDL as part of the 87th Medical Group. Services are available Monday, Wednesday, and Friday, 7:30-4:30 pm, and Thursdays, 9:30-4:30 pm. Emergency services are generally provided at the Emergency Department located on the Deborah campus.

Patients requiring specialty medical care and many diagnostic services are referred to providers in the surrounding communities. Browns Mills and Pemberton Township border JB MDL. Browns Mills and Pemberton Township are designated by the federal government as Medically

Underserved Areas (MUAs), and may not have adequate medical professionals and services to meet the needs of area residents, including those at JB MDL.

Many Veterans receive care through the Veteran's Administration (VA). As of October 2018, approximately 14,702 VA appointments within the Deborah service area (including New Jersey, Philadelphia and Wilmington Health Care Services), have wait times in excess of 30 days. Of those veterans waiting for appointments, 7,663 have appointments scheduled out 31-60 days; 3,673 have appointments scheduled out 61-90 days; 1,740 have appointments scheduled out 91-120 days; and 1,626 have appointments scheduled out more than 120 days.

The following table shows average wait times in days for new and returning primary care patients for VA clinics in proximity to Deborah. This data is updated weekly and based on a rolling 30-day average.

Average VA Wait Times for New and Returning Primary Care Patients

	Location	New Patient	Returning Patient
Burlington County VA Clinic	Marlton, NJ 08053	61 days	4 days
James J. Howard Veterans' Outpatient Clinic	Brick, NJ 08724	38 days	8 days

Source: US Department of Veterans Affairs, January 31, 2019

Behavioral Healthcare for Military and Veterans

Studies consistently show the need for behavioral health services for military personnel and Veterans due to the unique stressors faced by these populations. Stress can increase the chances of developing Post-traumatic Stress Disorder (PTSD). The US Department of Veterans Affairs reports that the number of Veterans with PTSD varies by service era:

- **Operations Iraqi Freedom and Enduring Freedom:** About 11-20% of Veterans in a given year.
- **Gulf War (Desert Storm):** About 12% of Veterans in a given year.
- **Vietnam War:** About 15% of Veterans were diagnosed with PTSD at the time of the most recent study in the late 1980s. It is estimated that about 30% of Vietnam Veterans have had PTSD in their lifetime.

Suicide risk is also a concern among military Veterans. The 2016 National Suicide Data Report issued by the US Department of Veterans Affairs noted the following key data points:

- The rate of suicide was 1.8 times higher among female Veterans compared to non-Veteran adult women;
- The rate of suicide was 1.4 times higher among male Veterans compared to non-Veteran adult men; and
- Male Veterans ages 18-34 experienced the highest rate of suicide per 100,000 population, but male veterans ages 55 or over had the highest count of suicides.

Adequate and timely behavioral healthcare services continue to be a concern for both civilians and military members. The following table illustrates average wait times in days for new and returning mental healthcare patients for VA clinics in proximity to Deborah. This data is updated weekly and based on a rolling 30-day average.

Average VA Wait Times for New and Returning Mental Healthcare Patients

	Location	New Patient	Returning Patient
Burlington County VA Clinic	Marlton, NJ 08053	11 days	2 days
James J. Howard Veterans' Outpatient Clinic	Brick, NJ 08724	10 days	5 days

Source: US Department of Veterans Affairs, January 31, 2019

Lesbian, Gay, Bi-sexual, Transgender, Queer/Questionable (LGBTQ)

Deborah continues to identify and serve the unique health needs of LGBTQ individuals, recognizing that they are an underserved and at-risk population within our community. The CDC states, "Members of the LGBT community are at increased risk for a number of health threats when compared to their heterosexual peers. Differences in sexual behavior account for some of these disparities, but others are associated with social and structural inequities, such as the stigma and discrimination that LGBT populations experience." The inequities faced by LGBTQ individuals drive the need for culturally competent prevention and medical care services.

Creating an inclusive environment for members of the LGBTQ community is important to Deborah, and we are taking the following steps, among others, to create that environment:

- Initiating changes in communications to include opportunities for LGBTQ individuals to express sexual orientation and gender identity
- Prominently posting anti-discrimination signage
- Ensuring that our employees use patients' preferred names and pronouns
- Fostering a welcome environment for all
- Educating staff and providers about LGBTQ topics
- Providing training and support

Statistical Analysis of Health Indicators

Background

Health indicators were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance use disorder, and maternal and child health. Data were compiled from secondary sources including the New Jersey Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), and the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources is provided in Appendix A.

Health data focus on county-level reporting which is generally the most recent and most consistent data available. Health data for the counties are compared to State and national averages and Healthy New Jersey 2020 (HNJ 2020) and Healthy People 2020 (HP 2020) goals, where applicable, to provide benchmark comparisons. Healthy New Jersey 2020 is the State's health improvement plan and prevention agenda for the decade. The initiative is modeled after Healthy People 2020, a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

Age-adjusted rates are referenced throughout the reporting to depict a comparable burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

The BRFSS is a telephone survey of residents age 18 or over conducted nationally by states as required by the CDC. A consistent survey tool is used across the US to assess health risk behaviors, prevalence of chronic health conditions, access to care, and preventive health measures, among other health indicators. BRFSS results included within this report were provided by the New Jersey Department of Health.

The most recent data available at the time of this study were used unless otherwise noted.

Access to Healthcare

Burlington and Ocean Counties received the following rankings for clinical care out of 21 counties in New Jersey, as reported by the 2018 University of Wisconsin County Health Rankings & Roadmaps program. The rankings are based on a number of indicators, including health insurance coverage and provider access. Burlington County rose two positions in the rankings from the 2016 CHNA, while Ocean County rose one position.

2018 Clinical Care County Health Rankings

#6 Burlington County (#8 for 2016 CHNA)

#11 Ocean County (#12 for 2016 CHNA)

Health Insurance Coverage

Consistent with State and national trends, the percent of uninsured residents in Burlington and Ocean Counties declined annually from 2013 to 2016. In 2017, the uninsured rate increased slightly by 0.3-0.4 points. The current uninsured percentages are lower than state and national percentages.

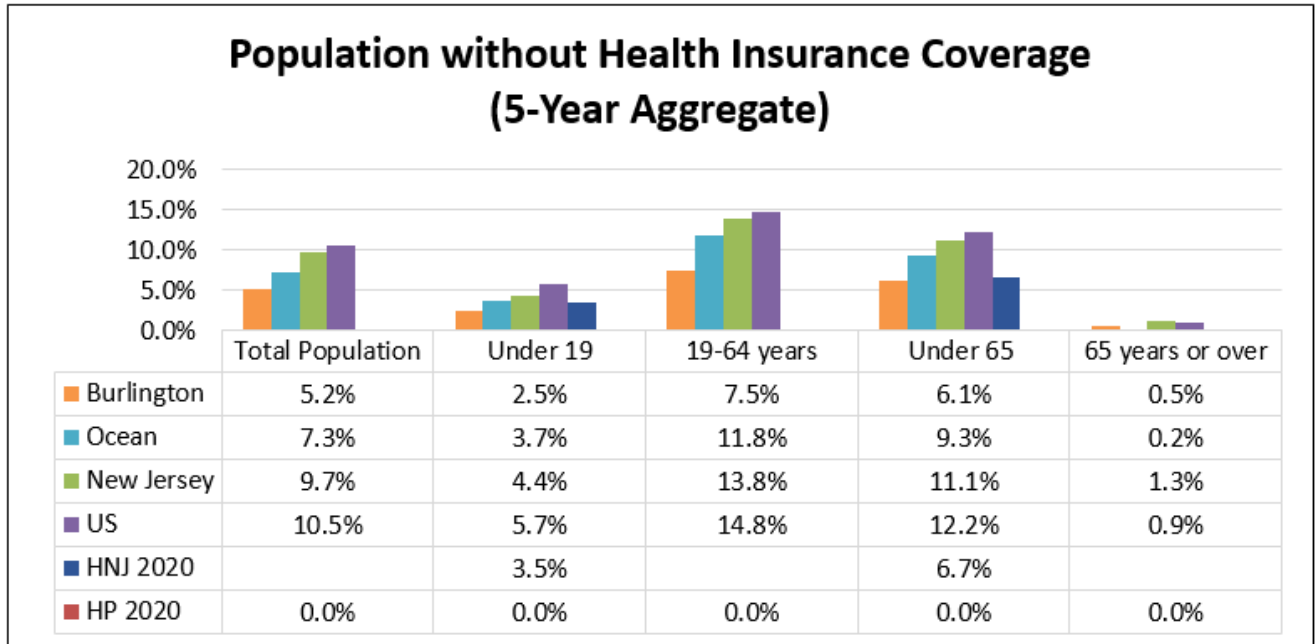
The percent uninsured is declining and lower than State and national percentages.

Burlington County meets HNJ 2020 goals for uninsured residents under ages 19 and 65, but neither county meets the HP 2020 goal to have 100% of residents insured.

Across both counties, a higher percentage of Asian, Black/African American, and Latinx residents are uninsured, compared to Whites. The percent uninsured is highest among Latinx residents. In Ocean County, one-quarter of Latinx residents are uninsured, exceeding State and national benchmarks. The percentage of uninsured Latinxs in Burlington County (10.6%) is half of the percentage of uninsured for the state and nation.

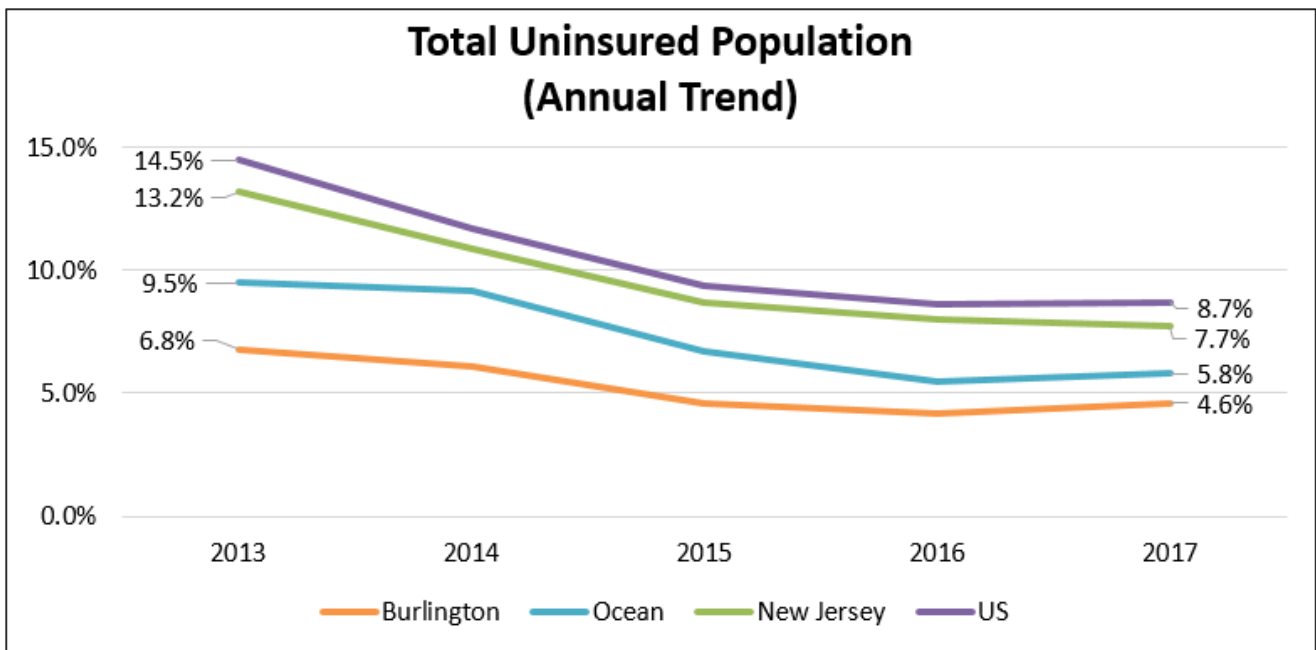
Latinx residents are more likely to be uninsured than any other racial/ethnic group, particularly in Ocean County.

Approximately 60% of Burlington County residents are covered by employer-based insurance, higher than the State and national rates and consistent with a more prominent white collar workforce. Ocean County mirrors the nation for health insurance coverage. Approximately 45% of residents are covered by employer-based insurance; a higher percentage are covered by Medicaid or two or more types of insurance.

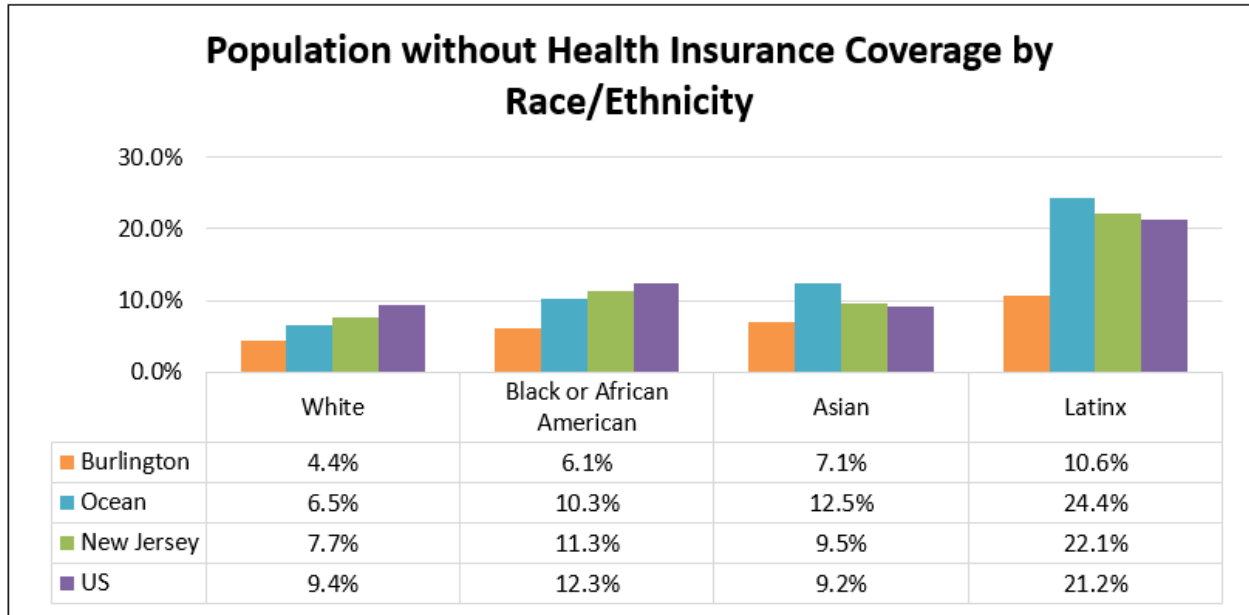


Source: US Census Bureau, 2013-2017

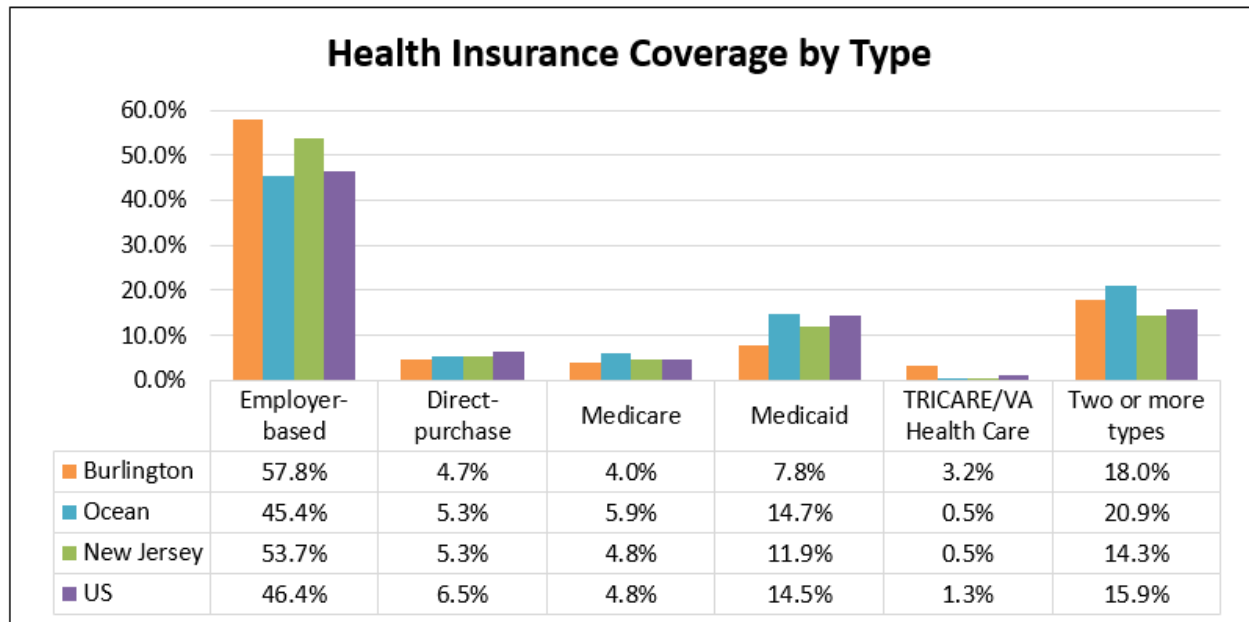
*HNJ 2020 goals are not available for all reported age groups.



Source: US Census Bureau, 2013-2017



Source: US Census Bureau, 2013-2017



Source: US Census Bureau, 2013-2017

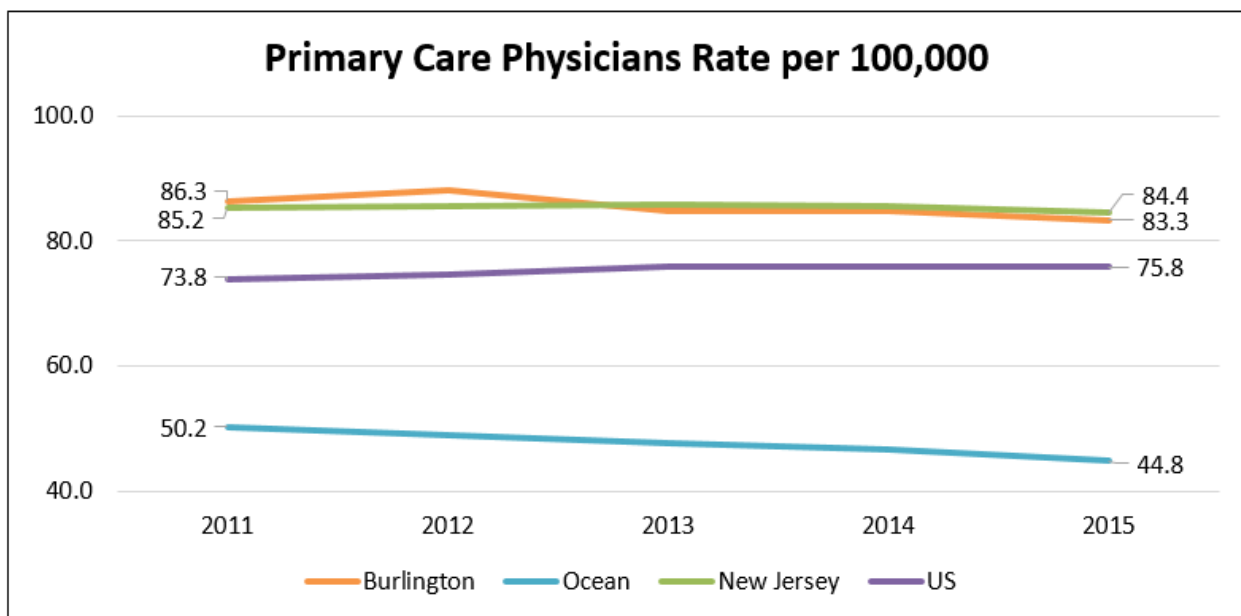
Provider Access

Provider rates are measured as the number of providers in an area per 100,000 people, and are measured against State and national benchmarks for primary, dental, and mental healthcare. The following graphs show the change in provider rates over the past five reporting years, as available.

Burlington County has higher provider rates than the State and/or nation; the mental health provider rate is more than double the national rate.

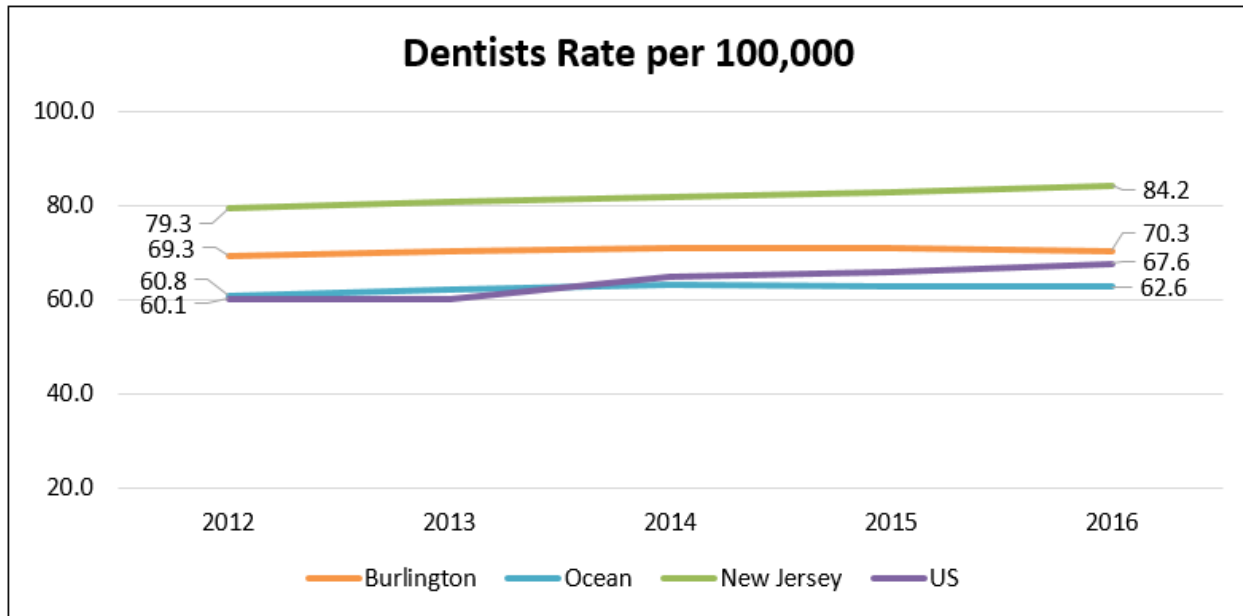
Provider rates in Burlington County are generally comparable to or better than State and national rates. Primary care and dental provider rates have been stable, but the mental health provider rate increased exponentially from 2014 to 2017 and is more than double the national rate. Ocean County has lower rates of all reported providers compared to the State and national rates. The primary care physician rate declined over the past five years, while the dentist and mental health provider rates increased slightly.

Ocean County has lower rates of primary, dental, and mental health providers than the State and nation; the primary care provider rate declined.

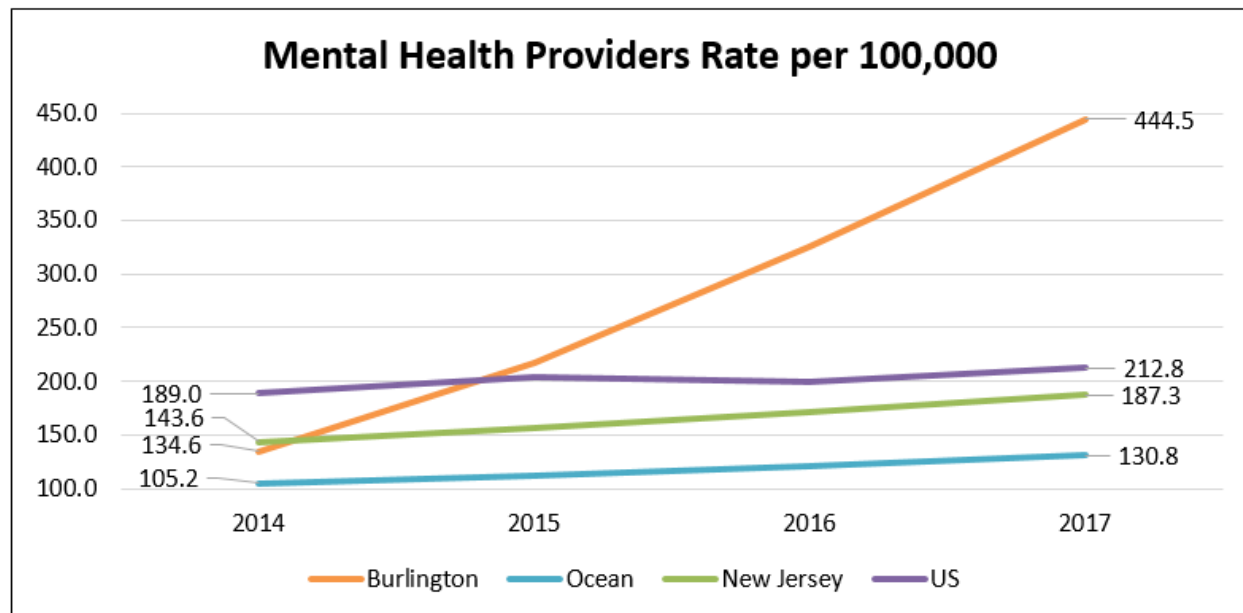


Source: Health Resources & Services Administration, 2011-2015

*Providers are identified based on the county in which their preferred professional mailing address is located. Provider rates do not take into account providers that serve multiple counties or satellite clinics.



Source: Health Resources & Services Administration, 2012-2016



Source: Centers for Medicare and Medicaid Services, 2014-2017

*An error occurred in the County Health Rankings method for identifying mental health providers in 2013. Data prior to 2014 are not shown.

The Health Resources & Services Administration (HRSA) is responsible for designating Health Professional Shortage Areas (HPSAs), Medically Underserved Areas (MUAs), and Medically Underserved Populations (MUPs). Shortage areas are determined based on a defined ratio of total health professionals to total population. According to HRSA, MUAs and MUPs identify geographic areas and populations with a lack of access to primary care services. MUAs have a

Nearly all of Deborah's Immediate Service Area is a designated MUA or MUP.

shortage of primary care health services for residents within a geographic area, while MUPs are specific sub-groups of people living in a defined geographic area with a shortage of primary care health services.

There are no HPSAs in Burlington and Ocean Counties. The following areas are considered MUAs or MUPs, and include nearly all of Deborah's Immediate Service Area.

Burlington County MUAs/MUPs

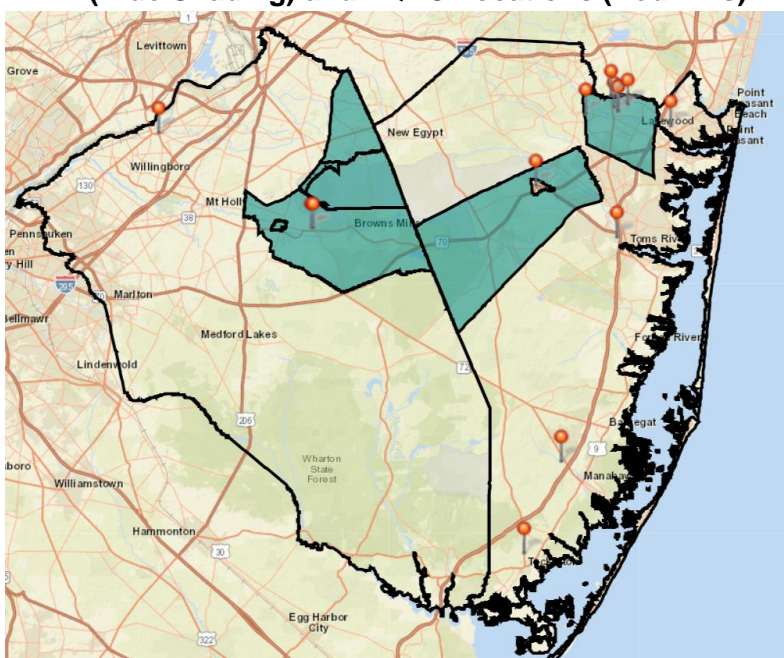
- Pemberton/Browns Mills (Medically Underserved Population: Low-Income)
 - New Hanover Township
 - North Hanover Township
 - Pemberton Borough / Pemberton Township
 - Wrightstown Borough

Ocean County MUAs/MUPs

- Lakewood Service Area (Medically Underserved Area)
 - Lakewood Township
 - Manchester Township

Federally Qualified Health Centers (FQHCs) are defined as “community-based healthcare providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas.” Services are provided on a sliding fee scale based on patient ability to pay. FQHCs are critical to serving the healthcare needs of medically underserved populations. Burlington County has three FQHCs and Ocean County has 11 FQHCs, listed in Appendix D.

Medically Underserved Areas in Burlington and Ocean Counties (Blue Shading) and FQHC Locations (Red Pins)



Routine Healthcare Access

Health insurance coverage and provider availability can impact the number of residents who have a primary care provider and receive routine care. Both counties have a similarly low uninsured rate, and fewer adults report cost as a barrier to receiving care.

Consistent with having a low uninsured rate, fewer adults in either county report cost as a barrier to receiving care.

Consistent with having lower provider rates, Ocean County adults are less likely to receive routine physical or dental care. Roughly 70% of adults had a routine health or dental visit within the past year; the percentage of adults receiving a routine health visit decreased. Burlington County adults are more likely to receive routine care when compared to Ocean County and the State, and the percentage is increasing.

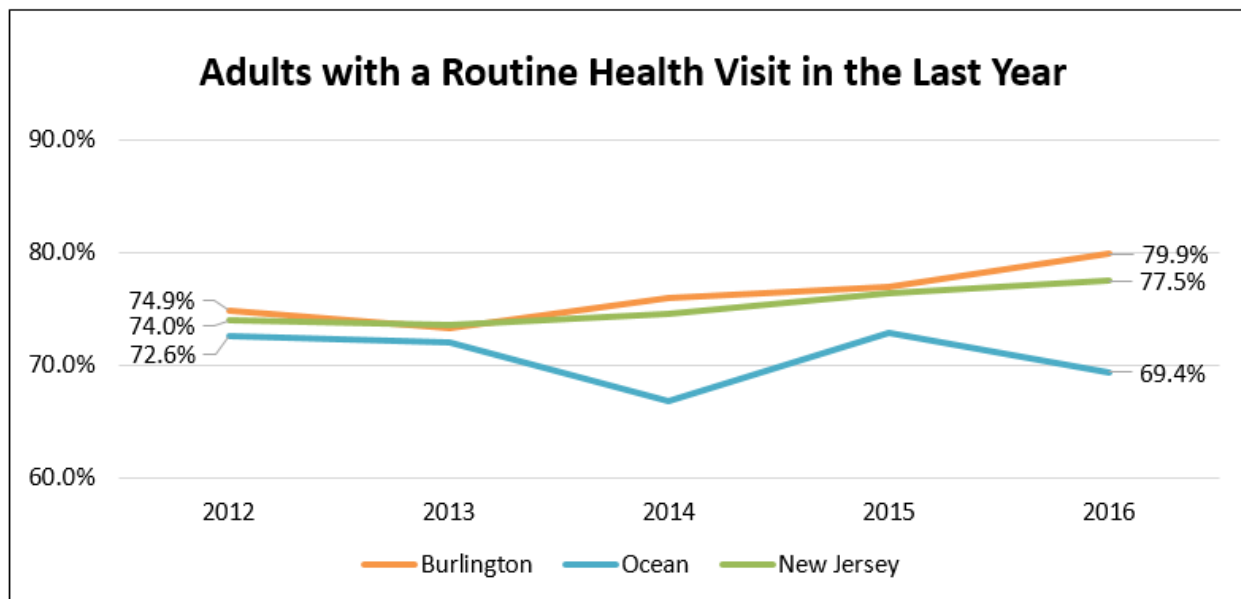
Ocean County has fewer available providers; adults are less likely to receive routine physical or dental care.

**Age-Adjusted Adult Healthcare Access
(Highlighting = Lower than State Benchmarks)**

	Unable to Afford Care	Without a Regular Doctor	Routine Health Visit in Last Year	Dental Visit in Last Year
Burlington County	12.6%	15.0%	79.9%	73.6%
Ocean County	10.3%	19.1%	69.4%	72.9%
New Jersey	13.4%	19.5%	77.5%	73.3%
HNJ 2020	NA	10.0%	NA	NA

Source: NJ Department of Health, 2016

*National comparisons are only available as crude rates and are excluded.



Source: NJ Department of Health, 2012-2016

Overall Health Status

Burlington and Ocean Counties received the following rankings for health outcomes out of 21 counties in New Jersey, as reported by the 2018 University of Wisconsin County Health Rankings & Roadmaps program. Health outcomes are measured in relation to premature death (before age 75) and quality of life. Burlington County maintained its position in the rankings from the 2016 CHNA, while Ocean County rose one position.

2018 Health Outcomes County Health Rankings
#9 Burlington County (#9 for 2016 CHNA)
#10 Ocean County (#11 for 2016 CHNA)

Both counties have a lower premature death rate than the nation, and fewer adults self-report having “poor” or “fair” health status compared to the State and nation. Burlington County has a lower premature death rate than Ocean County; adults in the county report a lower average of poor physical or mental health days.

Average life expectancy is not equally distributed across the counties. Within Deborah’s Immediate Service Area, life expectancy is generally 75-80.9 years with the exception of Browns Mills and Pemberton, where life expectancy is less than 75 years. The finding is consistent with greater socioeconomic barriers among residents in these areas.

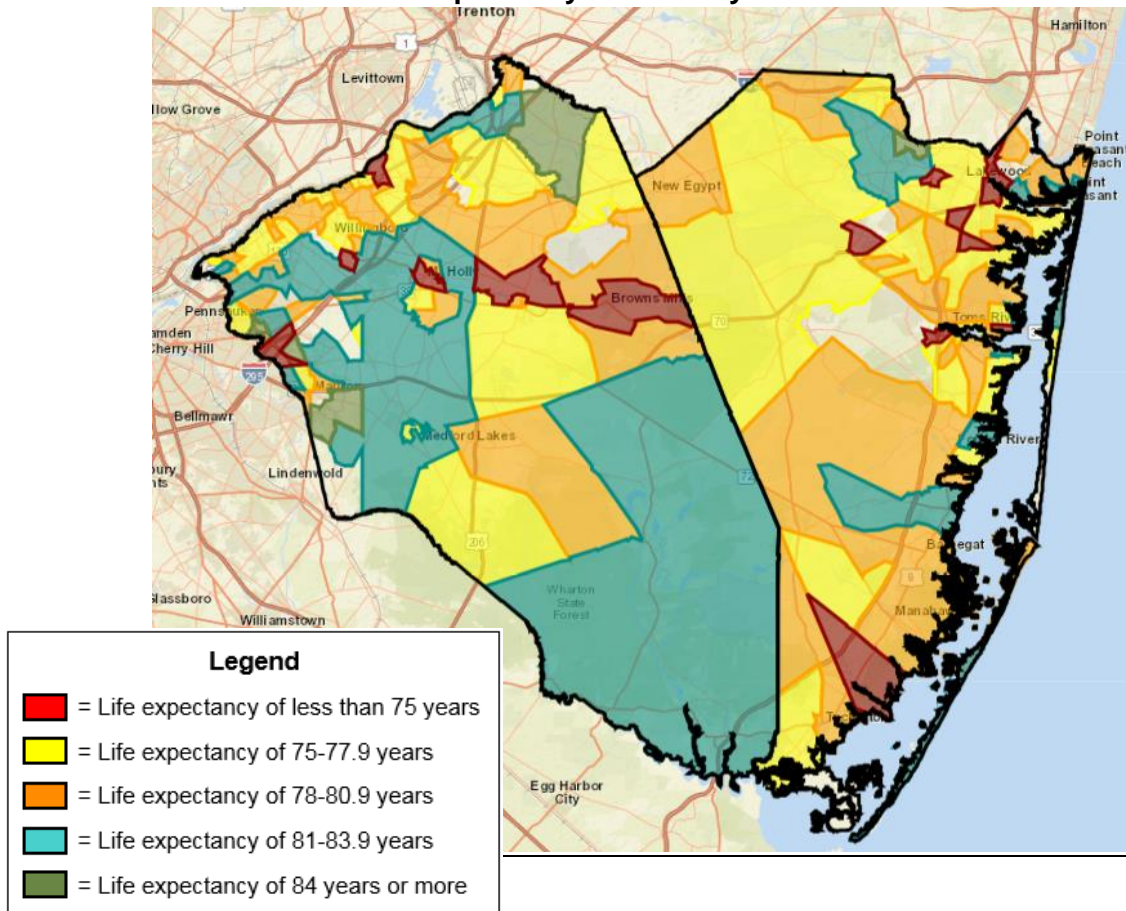
Life expectancy within portions of Deborah’s Immediate Service Area, including Browns Mills and Pemberton, is less than 75 years.

Health Outcomes Indicators (Green = Lower than State and National Benchmarks)

	Premature Death Rate per 100,000	Adults with “Poor” or “Fair” Health Status	30-Day Average - Poor Physical Health Days	30-Day Average - Poor Mental Health Days
Burlington County	5,797	12.8%	3.4	3.3
Ocean County	6,398	14.2%	3.7	3.8
New Jersey	5,469	16.5%	3.5	3.4
United States	6,700	16.0%	3.7	3.8

Source: National Center for Health Statistics, 2014-2016; Centers for Disease Control and Prevention, 2016

Life Expectancy in Years by Census Tract



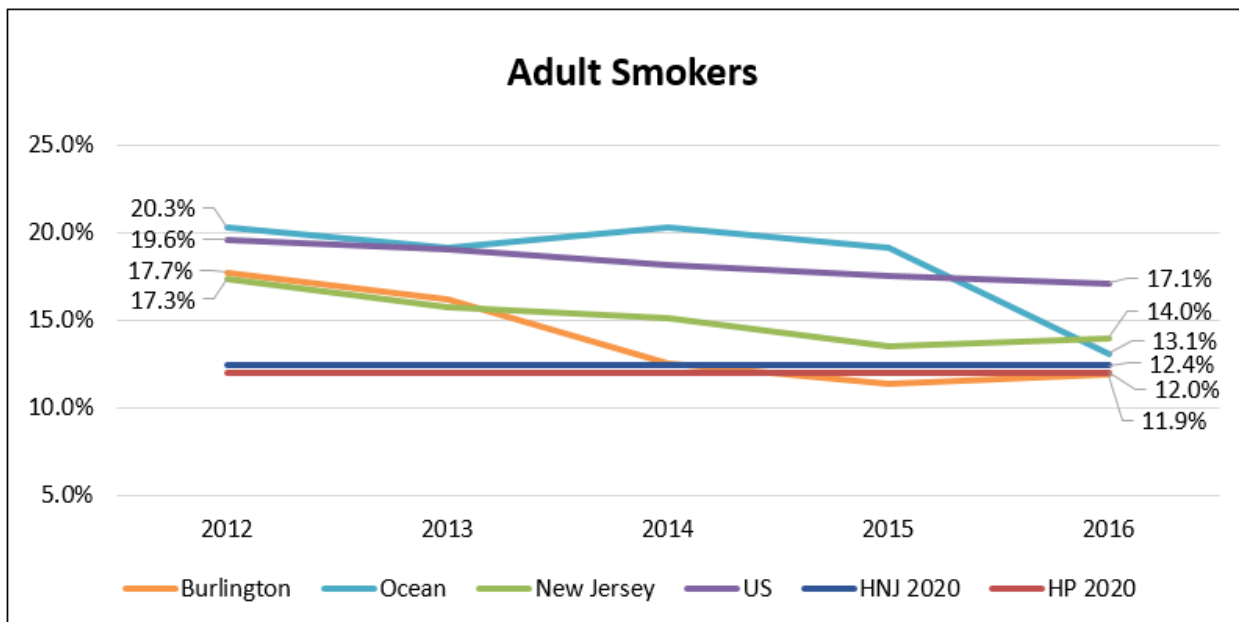
Health Behaviors

Health behaviors may increase or reduce the likelihood of disease or early death. Individual health behaviors include risk factors like smoking and obesity, or health promoting behaviors like exercise, good nutrition, and stress management. The prevalence of these health behaviors is provided below, with benchmark comparisons, as available.

Tobacco Use

The percentage of adult smokers in both counties is lower than State and national percentages. Burlington County also meets HNJ and HP 2020 goals. In both counties, the percentage of adult smokers declined 6-7 percentage points from 2012 to 2016.

The percentage of adult smokers decreased 6-7 percentage points in both counties.

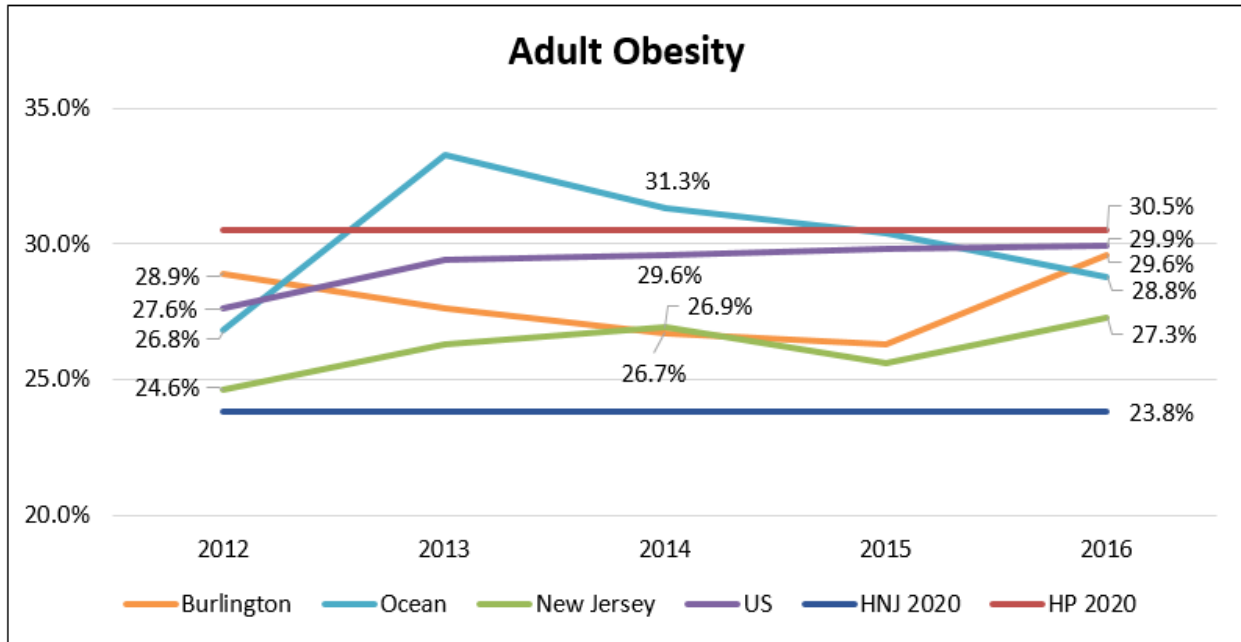


Source: Centers for Disease Control and Prevention, 2012-2016; NJ Department of Health, 2012-2016
 *The HNJ 2020 goal is based on an age-adjusted percentage. All other percentages are crude to allow for national benchmarking.

Obesity

Obesity is associated with an increased risk of disease and mortality, as well as a reduced quality of life. Healthy People 2020 sets a goal of having no more than 30.5% of all adults obese. In both Burlington and Ocean Counties, approximately 30% of adults are obese. The percentages exceed the state and HNJ 2020 benchmarks and are consistent with the national benchmarks. The percentage of obese adults in Burlington County decreased from 2012 to 2015, but increased sharply in 2016. The percentage of obese adults in Ocean County is declining.

Approximately 30% of adults are obese, consistent with the nation.
 Adult obesity increased in Burlington County and declined in Ocean County.



Source: Centers for Disease Control and Prevention, 2012-2016; NJ Department of Health, 2012-2016
 *The HNJ 2020 goal is based on an age-adjusted percentage. All other percentages are crude to allow for national benchmarking.

Healthy Eating and Food Insecurity

Food insecurity, defined as being without a regular source of sufficient and affordable nutritious food, negatively impacts the opportunity for healthy eating and healthy weight management. Food insecurity is reflective of a variety of social factors including employment, income, access to healthy food options, transportation, housing, and other factors.

Food insecurity among residents in both counties decreased from the 2016 CHNA.

Food insecurity decreased for both counties, the State and the nation since the 2016 CHNA. A lower percentage of residents are food insecure as compared to the State and nation. Ocean County has a slightly elevated percentage of food insecure children and children eligible for free or reduced price lunch, consistent with higher reported poverty rates among this population. Eligibility for free lunch includes households with an income at or below 130% of the poverty income threshold, while eligibility for reduced price lunch includes households with an income between 130% and 185% of the poverty threshold.

**Food Insecure Residents
 (Green = Lower than State and National Benchmarks)**

	All Residents		Children	
	2013	2016	2013	2016
Burlington County	11.1%	9.9%	14.8%	11.4%
Ocean County	11.0%	9.4%	20.4%	15.9%
New Jersey	12.4%	10.3%	18.3%	13.5%
United States	15.1%	12.9%	23.7%	17.5%

Source: Feeding America, 2013 & 2016

Children Eligible for Free or Reduced Price School Lunch

	Percent
Burlington County	26.1%
Ocean County	34.2%
New Jersey	37.6%

Source: National Center for Education Statistics, 2015-2016

Physical Activity

Regular physical activity can reduce the likelihood of obesity and improve overall health outcomes. Access to physical activity includes access to parks, gyms, pools, etc. More than 80% of residents in both counties have access to physical activity venues, but one-quarter of adults in Burlington County and one-third of adults in Ocean County are physically inactive. The Ocean County percent of physically inactive adults represents a 7-10% percentage point increase from previous years (2012-2015).

Ocean County residents have greater access to physical activity venues, but one-third of adults are physically inactive.

**Physical Activity
(Red = Higher than State Benchmark)**

	Access to Physical Activity	Physically Inactive Adults (Age-Adjusted)
Burlington County	83.3%	23.9%
Ocean County	89.1%	34.8%
New Jersey	95.0%	29.2%
United States	83.0%	NA*

Source: Business Analyst, Delorme Map Data, ESRI, & US Census Tigerline Files, 2010 & 2016; NJ Department of Health, 2016

*National comparisons are only available as crude rates and are excluded.

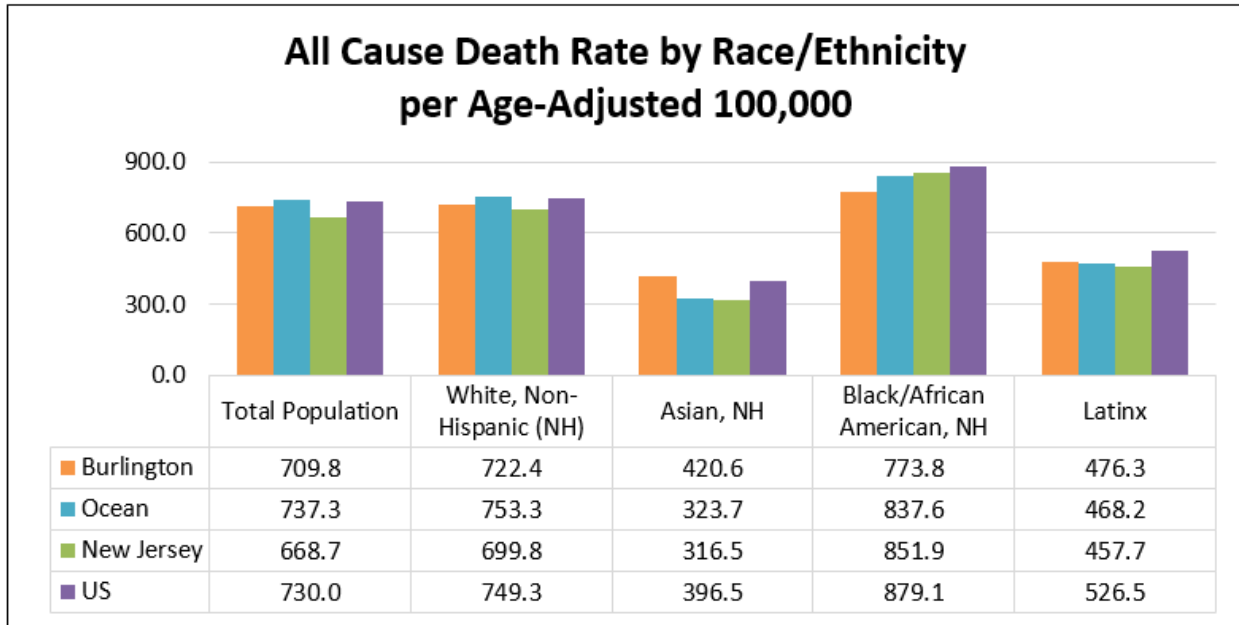
Mortality

The all cause age-adjusted death rate is higher in both counties compared to the State, but similar to the nation. Among racial and ethnic groups, Blacks/African Americans have the highest death rate. The Black/African American death rate exceeds the White death rate by 51 points in Burlington County and 84 points in Ocean County.

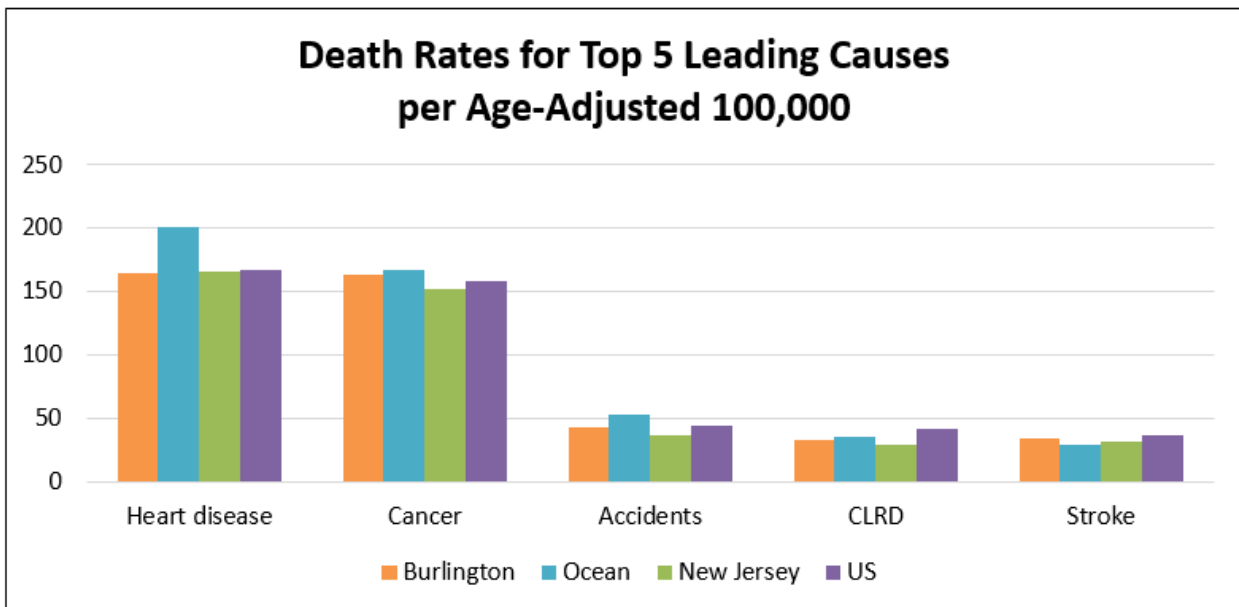
Blacks/African Americans have the highest rate of death among racial and ethnic groups.

The top five causes of death in the nation based on a five-year aggregate, in rank order, are heart disease, cancer, accidents, chronic lower respiratory disease, and stroke. Both counties have a higher rate of death due to cancer than the State and nation. Ocean County also has higher rates of death due to heart disease and accidents. The accidental death rate is 15 points higher than the State rate, and highest among seniors 85 years or over, followed by young adults ages 25-34. The senior accidental death rate is likely driven by falls, while the young adult death rate may be impacted by more individuals employed in blue collar jobs.

Ocean County has a higher accidental death rate, particularly among seniors 85+ and young adults ages 25-34.



Source: Centers for Disease Control and Prevention, 2013-2017



Source: Centers for Disease Control and Prevention, 2013-2017

Chronic Diseases

Chronic diseases are among the most prevalent and costly health conditions in the United States. More than two thirds of all deaths are caused by one or more of these five chronic diseases: heart disease, cancer, stroke, chronic obstructive pulmonary disease, and diabetes. Chronic diseases are often preventable through reduced risk behaviors like tobacco and alcohol use, increased physical activity and good nutrition, early detection of risk factors, and effective primary and community management of disease.

Heart Disease and Stroke

Burlington County adults report a higher prevalence of coronary heart disease and heart attack than adults across the State, while Ocean County adults report a higher prevalence of stroke. Despite having higher disease rates, adults in both counties report a lower prevalence of risk factors, including high blood pressure and high cholesterol. It is worth noting that approximately one-quarter of adults in both counties still report having these risk factors.

Burlington and Ocean county adults report a higher prevalence of at least one form of heart disease

The heart disease death rate is declining across New Jersey and the nation. The Burlington County death rate is also declining and consistent with State and national rates. The Ocean County death rate has been stable over the past decade and is more than 30 points higher than State and national rates. Death rates for all reported racial and ethnic groups in Ocean County exceed state and national benchmarks; the death rate is highest among Blacks/African Americans.

The Ocean County heart disease death rate has been stable, contrary to state and national trends; the current rate is 30 points higher than State and national rates.

Age-Adjusted Heart Disease Prevalence among Adults (Red = Higher than State Benchmark)

	Angina/Coronary Heart Disease	Heart Attack	Stroke
Burlington County	5.2%	5.3%	1.6%
Ocean County	1.7%	2.8%	3.6%
New Jersey	3.5%	3.8%	2.6%

Source: NJ Department of Health, 2016

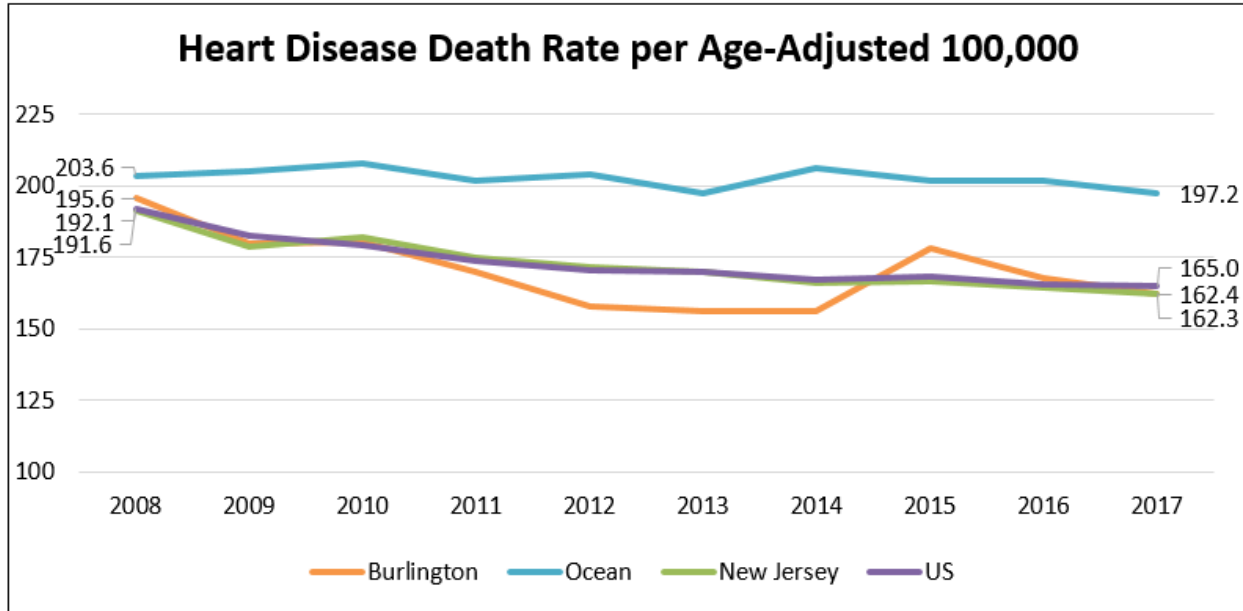
*National comparisons are only available as crude rates and are excluded.

Age-Adjusted High Blood Pressure and High Cholesterol Prevalence among Adults (Green = Lower than State Benchmark)

	High Blood Pressure	High Cholesterol
Burlington County	27.5%	24.8%
Ocean County	28.4%	29.9%
New Jersey	28.2%	31.6%

Source: NJ Department of Health, 2015

*National comparisons are only available as crude rates and are excluded.



Source: Centers for Disease Control and Prevention, 2008-2017

Heart Disease Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	White, Non-Hispanic	Black/African American, Non-Hispanic	Asian/Pacific Islander, Non-Hispanic	Latinx
Burlington County	169.3	162.3	86.3	85.9
Ocean County	204.3	224.6	89.9	112.6
New Jersey	175.1	196.7	74.5	102.6
United States	170.3	210.9	87.2	116.6

Source: Centers for Disease Control and Prevention, 2013-2017

Coronary heart disease (CHD) is characterized by the buildup of plaque inside the coronary arteries. Several types of heart disease, including CHD, are risk factors for stroke. Burlington County has a higher prevalence of CHD, but a lower death rate, which typically indicates early detection and effective treatment. Ocean County has a lower prevalence of CHD, but a higher death rate, presenting an opportunity for screening and treatment.

**Coronary Heart Disease and Stroke Death Rates
(Red = Higher than State and National Benchmarks;
Green = Lower than State and National Benchmarks)**

	Coronary Heart Disease Death per Age-Adjusted 100,000	Stroke Death per Age-Adjusted 100,000
Burlington County	85.4	33.9
Ocean County	134.1	29.3
New Jersey	97.6	31.1
United States	97.1	37.1
HNJ 2020	94.3	28.6
HP 2020	103.4	34.8

Source: Centers for Disease Control and Prevention, 2013-2017

Cancer

Cancer is the second leading cause of death in America, and although often treatable, it is a significant contributor to morbidity. New Jersey has a higher incidence of cancer than the nation. The Burlington County cancer incidence rate exceeds State and national rates, but the death rate is nearly equal to the national death rate. The Ocean County incidence rate also exceeds State and national rates, but the death rate is the highest reported rate and exceeds the national rate by 16 points. This finding indicates increased cancer burden in Ocean County.

Both counties have higher cancer incidence than the state and nation; Ocean County also has a higher death rate, indicating increased cancer burden.

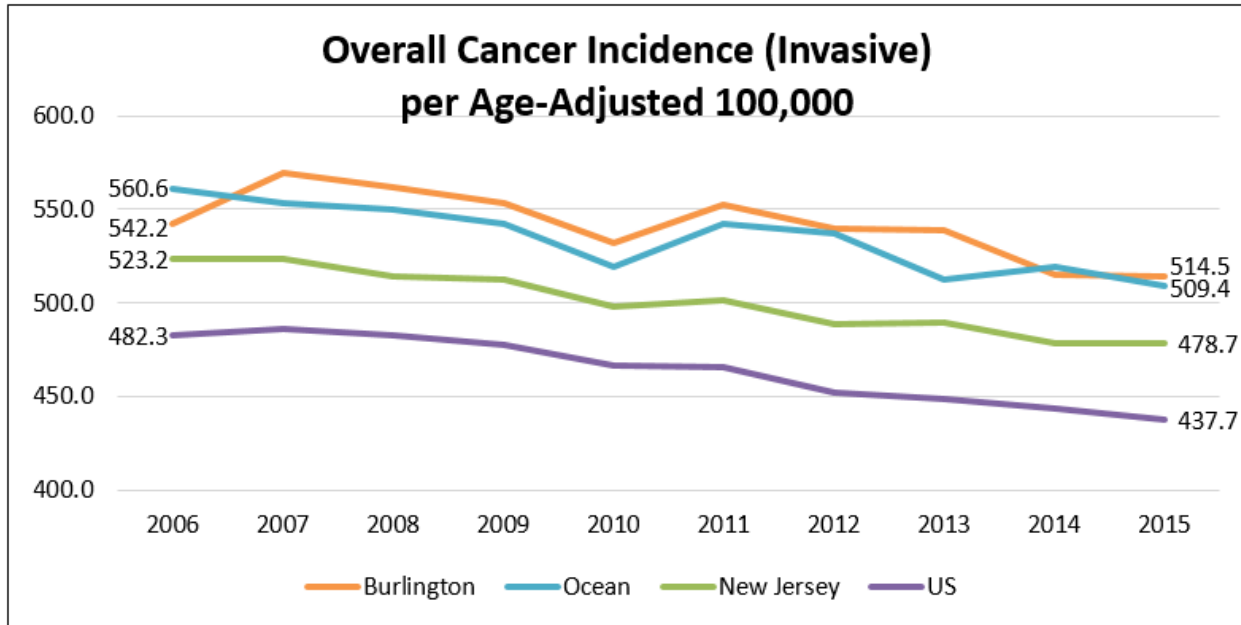
Blacks/African Americans have a lower cancer incidence rate, but a higher cancer death rate, presenting an opportunity to increase early detection.

Cancer incidence is higher among Whites than Blacks/African Americans, but the cancer death rate is higher among Blacks/African Americans than Whites. This finding suggests that Blacks/African Americans may not receive recommended screenings for early detection and treatment.

The most commonly diagnosed cancers include female breast, colorectal, lung, and male prostate. In comparison to the State and nation, Burlington County incidence rates are highest for male prostate and female breast cancers, but death rates for these cancer types are only slightly elevated. Approximately 80% of Burlington County adults receive cancer screenings, comparable to or better than the State rates.

Ocean County incidence and death rates due to lung cancer exceed the state and nation, consistent with a historically high rate of adult smoking.

In comparison to the State and national rates, the Ocean County cancer incidence rate is highest for lung cancer. The death rate due to lung cancer is also higher, exceeding the State rate by nearly 8 points. Smoking is a key contributor to lung cancer incidence. The Ocean County adult smoking rate declined in 2016, but it was historically high at approximately 20%.

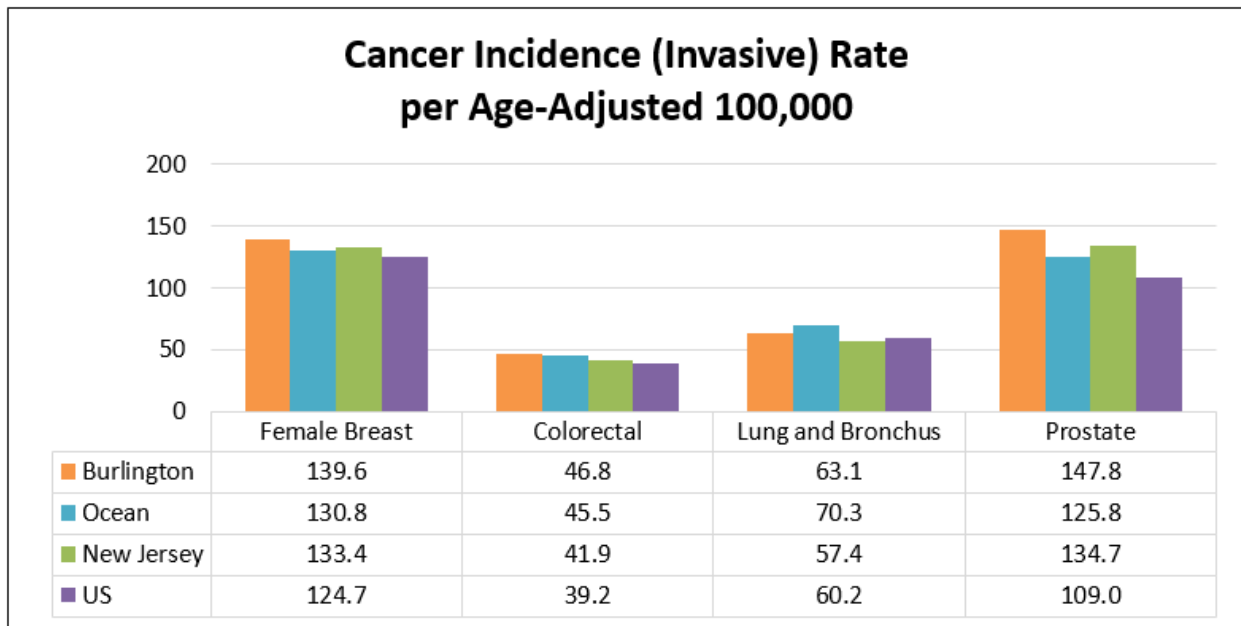


Source: Centers for Disease Control and Prevention, 2006-2015; NJ Department of Health, 2006-2015

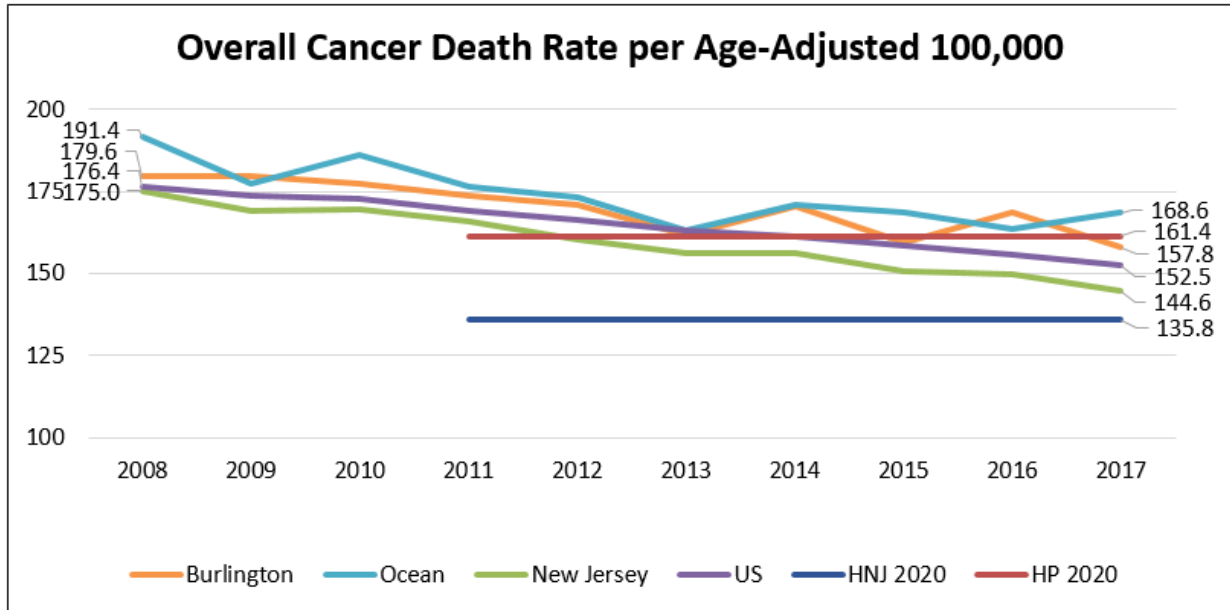
Overall Cancer Incidence (Invasive) per Age-Adjusted 100,000 by Race and Ethnicity

	White	Black/African American	Asian/Pacific Islander	Latinx
Burlington County	543.5	479.5	284.4	519.4
Ocean County	521.6	435.8	261.0	500.9
New Jersey	497.8	448.5	268.8	392.8
United States	450.9	454.9	290.8	346.9

Source: Centers for Disease Control and Prevention, 2011-2015; NJ Department of Health, 2011-2015



Source: Centers for Disease Control and Prevention, 2011-2015; NJ Department of Health, 2011-2015

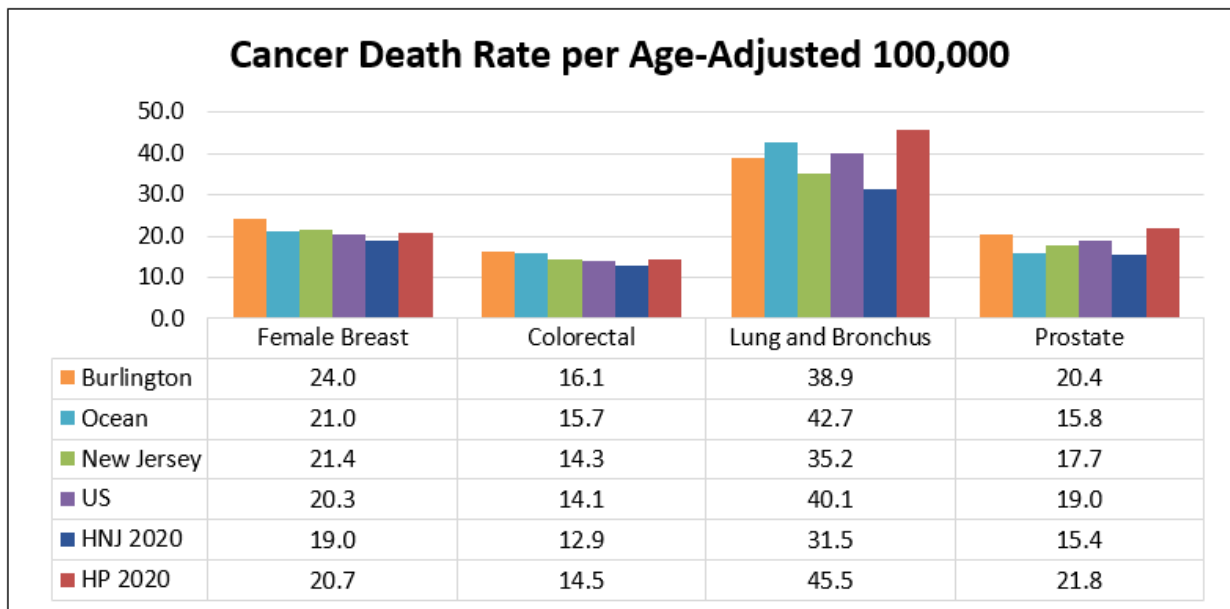


Source: Centers for Disease Control and Prevention, 2008-2017

Cancer Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	White, Non-Hispanic	Black/African American, Non-Hispanic	Asian/Pacific Islander, Non-Hispanic	Latinx
Burlington County	168.4	174.3	82.2	108.3
Ocean County	171.6	181.9	68.0	91.1
New Jersey	161.5	182.1	73.7	98.1
United States	163.2	185.9	98.6	110.9

Source: Centers for Disease Control and Prevention, 2013-2017



Source: Centers for Disease Control and Prevention, 2013-2017

Age-Adjusted Cancer Screenings
(Red = Lower than State Benchmarks; Green = Higher than State Benchmarks)

	Up to Date Colorectal Screening (ages 50-75)		Mammogram in the Last Two Years (ages 50-74)		Pap Test in the Last Three Years (ages 21-65)	
	2014	2016	2014	2016	2014	2016
Burlington County	68.3%	76.7%	82.5%	81.4%	90.2%	77.6%
Ocean County	63.5%	62.4%	74.5%	82.0%	83.2%	87.1%
New Jersey	65.4%	65.2%	78.3%	80.6%	83.9%	82.2%
HNJ 2020	70.2%	70.2%	87.5%	87.5%	93.6%	93.6%

Source: NJ Department of Health, 2014 & 2016

*National comparisons are only available as crude rates and are excluded.

Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is the third most common cause of death in the nation. CLRD encompasses diseases like chronic obstructive pulmonary disorder (COPD), emphysema, and asthma, all of which contribute to lower quality of life and increased risk of early death. Consistent with the 2016 CHNA, both counties have a higher rate of adult asthma and CLRD death compared to the State rates. Death rates are lower than the nation.

Consistent with the 2016 CHNA, both counties have a higher rate of adult asthma and CLRD death than the State.

Age-Adjusted Asthma and CLRD Prevalence
(Red = Higher than State Benchmark; Green = Lower than State Benchmark)

	Asthma Diagnosis (Current)	COPD Diagnosis
Burlington County	9.5%	3.4%
Ocean County	9.2%	5.4%
New Jersey	8.2%	5.8%

Source: NJ Department of Health, 2016

*National comparisons are only available as crude rates and are excluded.

CLRD Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Total Population	White, Non-Hispanic	Black/African American, Non-Hispanic	Asian/Pacific Islander, Non-Hispanic	Latinx
Burlington County	32.6	35.3	23.5	NA*	NA*
Ocean County	35.1	36.5	23.0	NA*	13.2
New Jersey	29.1	32.8	27.3	7.2	14.7
United States	41.4	46.3	29.8	12.3	17.6

Source: Centers for Disease Control and Prevention, 2013-2017

*Asian/Pacific Islander and Latinx death rates are limited due to low counts.

Diabetes

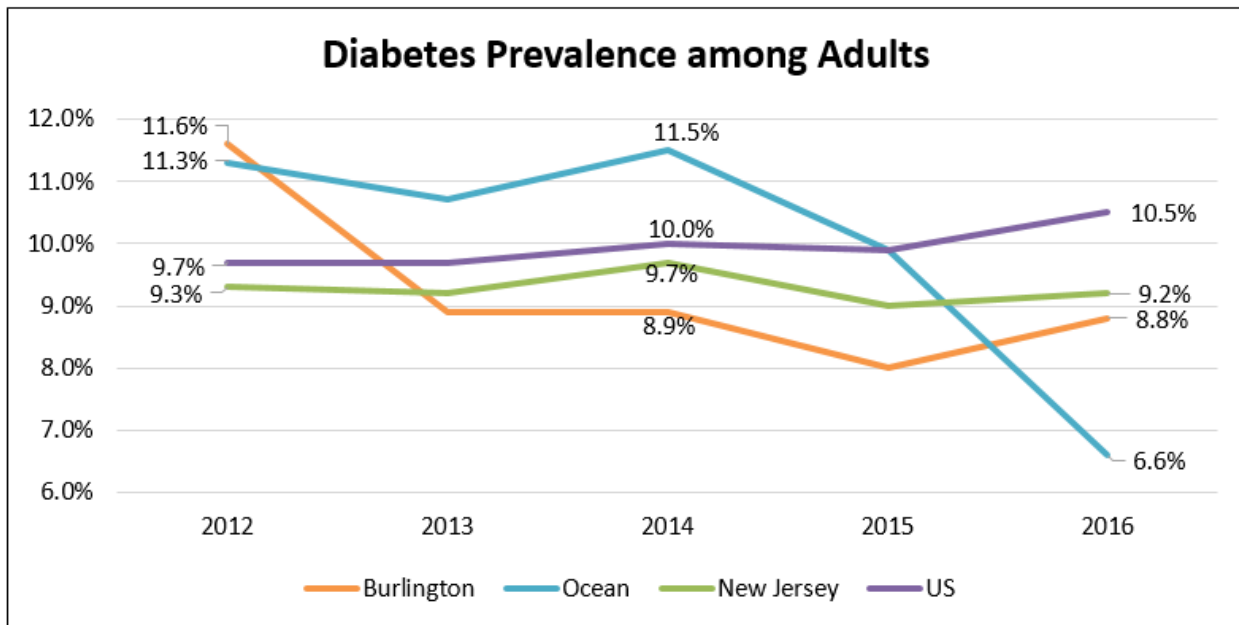
Diabetes is among the top 10 causes of death in the nation. According to the American Diabetes Association, diabetes and prediabetes affect more than 110 million Americans and cost \$322 billion per year. Diabetes can cause a number of serious complications. Type II diabetes, the most common form, is largely preventable through diet and exercise.

Contrary to the national trend, the percentage of Burlington and Ocean County adults with a diabetes diagnosis is declining. The Ocean County diabetes prevalence rate is declining rapidly, falling 5 percentage points from 2014 to 2016. Adults in both counties report a lower prevalence of diabetes than is reported in the State and nation. Among Medicare enrollees with a diabetes diagnosis, a similar or higher percentage receive an annual recommended hA1c screening as compared to those in the State and nation.

Diabetes prevalence is decreasing, contrary to the national trend.

Both counties have a lower diabetes death rate than the nation, and a lower or similar death rate to the State rate. Death rates continued to decline from the 2016 CHNA. However, Blacks/African Americans are adversely impacted with a diabetes death rate that is 8-11 points higher than the White death rate.

The overall diabetes death rate is lower than the national rate, but higher among Blacks/African Americans compared to Whites.



Source: Centers for Disease Control and Prevention, 2012-2016; NJ Department of Health, 2012-2016
 *All percentages are crude versus age-adjusted to allow for national benchmarking.

Diabetes Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Total Population	White, Non-Hispanic	Black/African American, Non-Hispanic	Asian/Pacific Islander, Non-Hispanic	Latinx
Burlington County	18.2	16.7	27.8	NA*	NA*
Ocean County	14.5	14.5	22.5	NA*	12.3
New Jersey	18.3	16.3	34.9	13.2	19.5
United States	21.2	18.7	38.4	15.8	25.3

Source: Centers for Disease Control and Prevention, 2013-2017

*Asian/Pacific Islander and Latinx death rates are limited due to low counts.

Annual hA1c Screenings among Medicare Enrollees 65-75 Years (Green = Higher than State and National Benchmarks)

	Percent Receiving hA1c Screening
Burlington County	84.5%
Ocean County	86.4%
New Jersey	84.5%
United States	85.0%

Source: Dartmouth Atlas of Health Care, 2014

Chronic Conditions in the Emergency Department

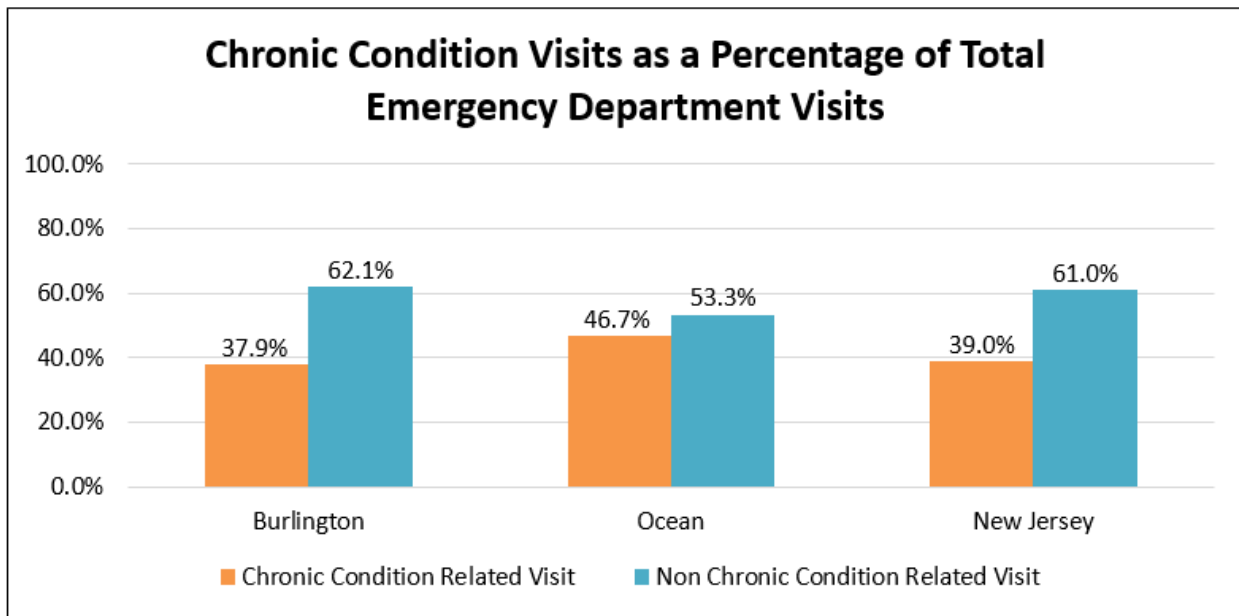
To illustrate the impact of chronic conditions on the New Jersey healthcare system, the New Jersey Hospital Association's Center for Health Analytics, Research & Transformation (CHART) analyzed 2017 patient record data from more than 3 million emergency department (ED) visits across 68 New Jersey acute care hospitals. According to CHART, "This analysis of chronic conditions reveals some of the many factors within New Jersey communities that are eroding efforts to improve the health of the people of New Jersey. The prevalence of chronic conditions is exacerbated in the most socio-economically challenged areas such as Atlantic City, Jersey City, and Trenton and is more actively prominent in the African-American population."

The following data depicts CHART findings for patients with chronic conditions presenting at Burlington and Ocean County EDs. Note: Chronic condition related visits were associated with patients that had a chronic condition either as the primary or contributing factor associated with their ED visit. Only patients who were treated, released, and not admitted to the hospital were considered as part of the analysis.

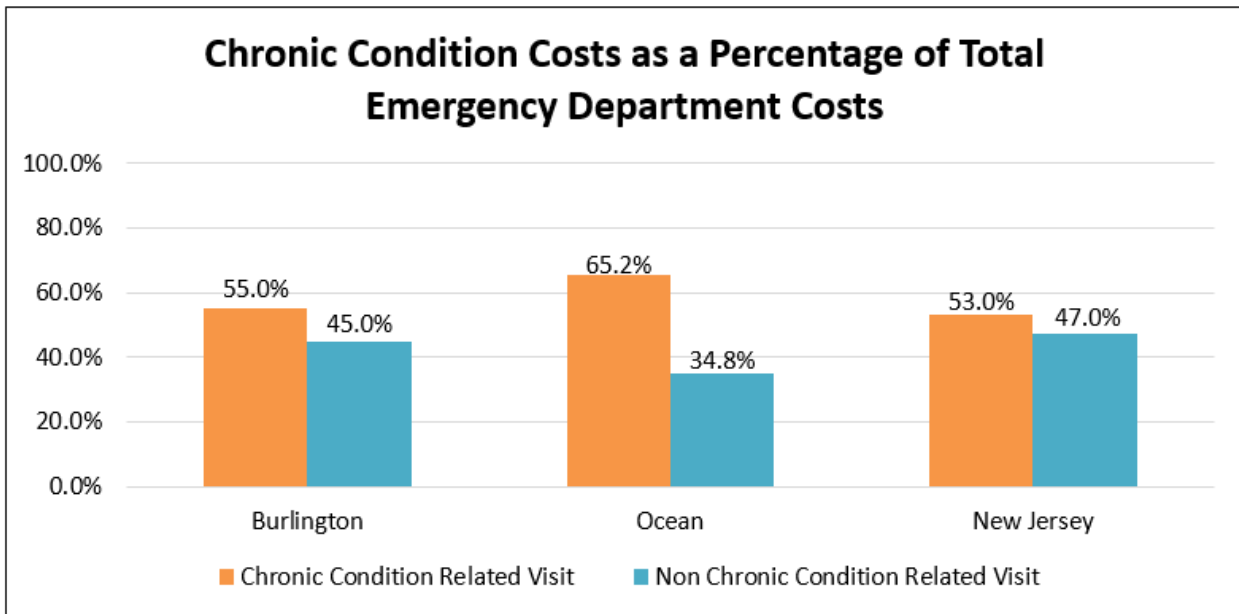
Across Burlington County EDs, approximately 38% of visits and 55% of costs were due to patients with a chronic condition, similar percentages to the State rate. In contrast, across Ocean County EDs, nearly 50% of visits and 65% of costs were due to patients with a chronic condition. The ED use rate per 1,000 population for patients with a chronic condition was also higher in Ocean County (161.51) compared to Burlington County (121.5) and the State overall (129.62). These findings are consistent with the demographic indicators for Ocean County, where a higher percentage of

Among Ocean County EDs, nearly 50% of visits and 65% of costs were due to patients with a chronic condition, higher than Burlington County or NJ.

residents are seniors who are more prone to multiple chronic diseases, and where economic indicators are less favorable.



Source: New Jersey Hospital Association, 2017



Source: New Jersey Hospital Association, 2017

The following tables display the top ten zip codes of origin for patients presenting at Burlington and Ocean County EDs with one or more chronic conditions. In both counties, residents of the top zip codes are older and/or experience higher poverty rates and lower median household income, supporting the CHART findings that the prevalence of chronic conditions is exacerbated in the most socio-economically challenged areas.

**Burlington County Chronic Disease Patients in the ED
by Top 10 Zip Codes of Origin**

	ED Visits with a Chronic Condition Present
08046, Willingboro	6,882
08015, Browns Mills	6,203
08016, Burlington	5,156
08053, Marlton	3,579
08054, Mount Laurel	3,380
08075, Riverside	3,212
08060, Mount Holly	2,958
08052, Maple Shade	2,707
08088, Vincentown	2,321
08505, Bordentown	2,150

Source: New Jersey Hospital Association, 2017

**Ocean County Chronic Disease Patients in the ED
by Top 10 Zip Codes of Origin**

	ED Visits with a Chronic Condition Present
08701, Lakewood	11,263
08753, Toms River	9,900
08759, Manchester Township	9,216
08757, Toms River	8,454
08724, Brick	7,888
08527, Jackson	7,263
08723, Brick	5,776
08755, Toms River	5,412
08742, Point Pleasant Beach	4,329
08005, Barnegat	3,848

Source: New Jersey Hospital Association, 2017

The CHART data analysis found that 39% of statewide ED visits were associated with patients that had one or more of the 11 chronic conditions listed in the table below. Chronic conditions are presented in descending order by prevalence across the State.

Across both Burlington and Ocean Counties, hypertension, drug/substance abuse, high cholesterol, diabetes, and anxiety were the most prevalent chronic conditions seen among ED patients. The top conditions are consistent with the State listing with the exception of anxiety, which replaced asthma as the fifth most prevalent condition. Ocean County EDs reported a higher

The top 5 chronic conditions present among Burlington and Ocean County ED patients were hypertension, substance abuse, diabetes, high cholesterol, and anxiety.

prevalence of all 11 chronic conditions except asthma and obesity as compared to the State rates. Burlington County EDs also reported a higher prevalence of all conditions except drug/substance abuse, diabetes, and asthma.

Chronic Disease Prevalence in the Emergency Department for Treat-and-Release Patients

	Burlington County	Ocean County	New Jersey
Hypertension	20.3%	25.5%	19.0%
Drug/Substance Abuse	10.8%	12.7%	12.1%
Diabetes	8.1%	9.8%	8.1%
High Cholesterol	10.0%	11.3%	7.9%
Asthma	5.6%	5.8%	7.1%
Anxiety	6.7%	8.1%	5.2%
COPD	2.7%	4.8%	2.6%
Chronic Kidney Disease	2.9%	3.5%	2.5%
Heart Failure	1.3%	1.1%	0.8%
Depression	0.2%	0.5%	0.1%
Obesity	1.2%	0.9%	1.0%

Source: New Jersey Hospital Association, 2019

The following table and graphs analyze the top five most prevalent chronic conditions in Burlington and Ocean county EDs by gender and age. Females generally comprised a higher percentage of ED patients with one or more of these conditions, with the exception of drug/substance abuse. Anxiety was the most prevalent condition among female ED patients.

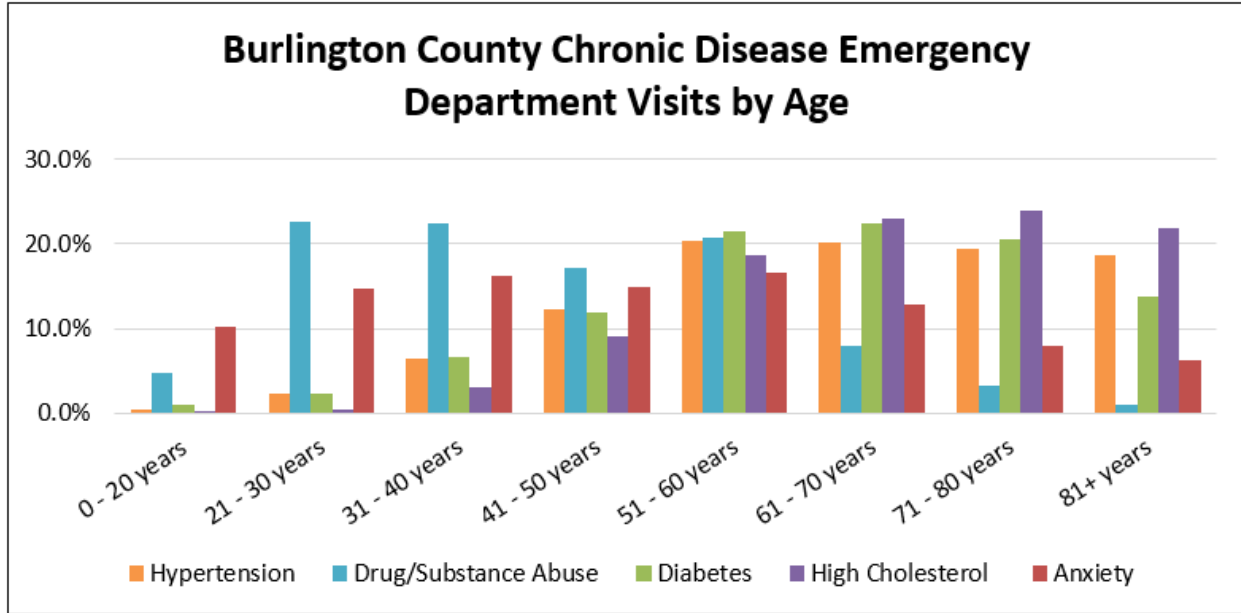
Female ED patients were disproportionately affected by anxiety with roughly 2/3 of the volume being female.

In both counties, the prevalence of ED visits by patients with diabetes, high cholesterol, and/or hypertension was higher among older age groups. Younger patients had a higher prevalence of anxiety and/or drug/substance abuse conditions. However, it is worth noting that in both counties, the prevalence of anxiety among ED patients was similar across adults age 20 to 60.

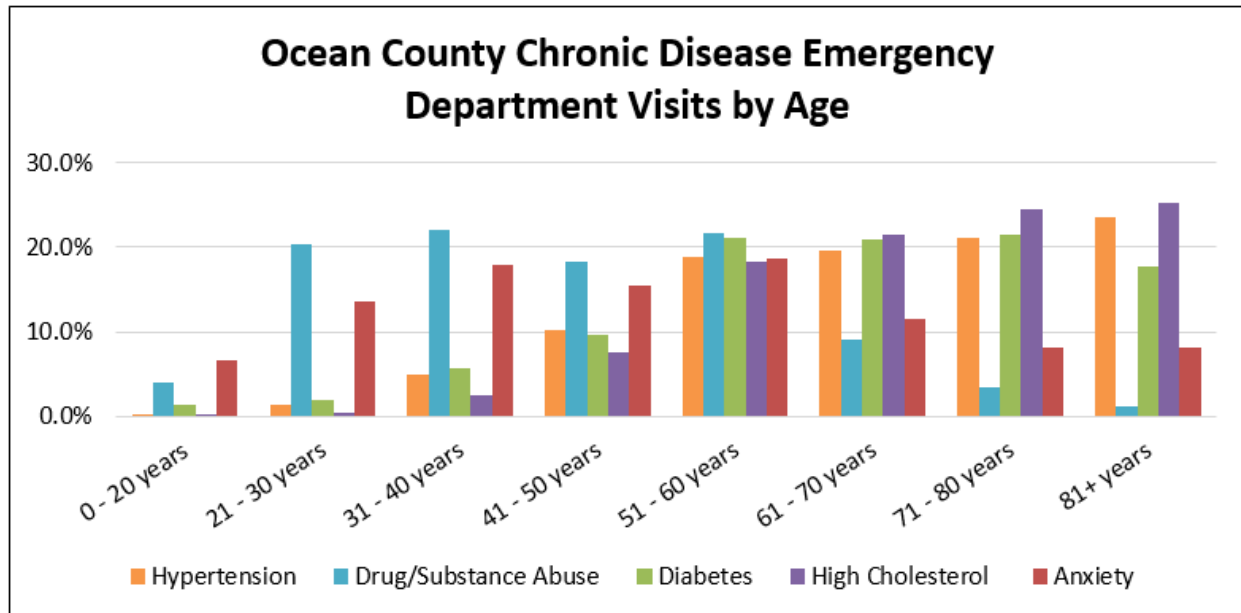
Chronic Disease Emergency Department Visits by Gender

	Burlington County		Ocean County	
	Female	Male	Female	Male
Hypertension	56.1%	43.9%	53.4%	46.6%
Drug/Substance Abuse	47.1%	52.9%	46.2%	53.8%
Diabetes	53.6%	46.4%	48.9%	51.1%
High Cholesterol	54.7%	45.3%	52.7%	47.3%
Anxiety	66.3%	33.7%	64.3%	35.7%

Source: New Jersey Hospital Association, 2017



Source: New Jersey Hospital Association, 2017



Source: New Jersey Hospital Association, 2017

Consistent with patient age-related findings, Medicare was the majority payer among patients presenting at the ED with diabetes, high cholesterol, and/or hypertension. The top payers for patients presenting with anxiety and/or drug/substance abuse were varied, but largely Medicare and Medicaid. However, a higher percentage of Burlington County patients with anxiety and/or drug/substance abuse disorders were covered by a HMO, while a higher percentage of Ocean County patients were self-pay.

Chronic Disease Patients in the Emergency Department by Payer Type

	Burlington County	Ocean County	Burlington County	Ocean County	Burlington County	Ocean County
	Hypertension		Drug/Substance Abuse		Diabetes	
Medicare	53.2%	61.6%	20.8%	19.5%	55.0%	60.7%
Medicaid	6.6%	12.0%	24.8%	38.8%	6.7%	13.7%
Blue Cross	8.2%	10.5%	7.8%	12.3%	7.7%	10.1%
Self-pay	3.4%	4.0%	11.4%	16.4%	3.3%	4.6%
HMO	20.6%	7.2%	27.5%	8.2%	19.5%	6.6%
Commercial	2.3%	1.8%	2.0%	1.8%	2.3%	1.6%
Other	5.7%	3.0%	5.7%	3.1%	5.5%	2.7%

Source: New Jersey Hospital Association, 2017

Chronic Disease Patients in the Emergency Department by Payer Type

	Burlington County	Ocean County	Burlington County	Ocean County
	High Cholesterol		Anxiety	
Medicare	61.2%	67.6%	37.7%	35.9%
Medicaid	4.3%	9.2%	14.5%	28.8%
Blue Cross	7.8%	10.1%	9.7%	13.8%
Self-pay	1.6%	2.2%	4.6%	7.3%
HMO	18.2%	6.6%	25.5%	9.5%
Commercial	1.9%	1.6%	1.9%	2.2%
Other	4.9%	2.6%	6.0%	2.5%

Source: New Jersey Hospital Association, 2017

Senior Health

Chronic Disease Amongst Medicare Beneficiaries

Seniors face a growing number of challenges related to health and well-being as they age. People over 65 are more prone to chronic disease, social isolation, and disability. The following sections highlight key health indicators for the region's senior population.

According to the CDC, "Among Medicare fee-for-service beneficiaries, people with multiple chronic conditions account for 93% of total Medicare spending."

"Among Medicare fee-for-service beneficiaries, people with multiple chronic conditions account for 93% of total Medicare spending."

The tables below note the percentage of Medicare Beneficiaries who have been diagnosed with a chronic condition. Cells highlighted in red represent percentages that are higher than State and national benchmarks.

Among Medicare Beneficiaries 65 years or over, approximately 73% in Burlington County and 80% in Ocean County have two or more chronic conditions. Ocean County Medicare Beneficiaries are more likely to have four or more chronic conditions than the average patients in the State or nation. Medicare Beneficiaries in both counties have a higher prevalence of arthritis, cancer, hypertension, and stroke than those in the State and nation.

Ocean County senior Medicare Beneficiaries are more likely to have 4 or more chronic conditions than the State or nation.

**Chronic Condition Diagnoses among Medicare Beneficiaries 65 Years or Over
(Red = Higher than the State and Nation; Green = Lower than the State and Nation)**

	Burlington County	Ocean County	New Jersey	United States
Alzheimer’s Disease	11.9%	11.6%	12.3%	11.3%
Arthritis	33.8%	38.9%	33.1%	31.3%
Asthma	8.4%	10.0%	8.4%	7.6%
Cancer	10.8%	11.6%	10.3%	8.9%
COPD	10.6%	15.5%	11.1%	11.2%
Depression	12.9%	12.8%	12.4%	14.1%
Diabetes	30.2%	34.9%	32.5%	26.8%
Heart Failure	13.9%	17.4%	16.8%	14.3%
High Cholesterol	56.7%	66.5%	57.0%	47.8%
Hypertension	64.9%	70.4%	64.5%	58.1%
Ischemic Heart Disease	30.6%	40.9%	35.0%	28.6%
Stroke	5.2%	5.2%	5.1%	4.2%

Source: Centers for Medicare & Medicaid Services, 2015

**Number of Chronic Conditions among Medicare Beneficiaries 65 Years or Over
(Red = Higher than State and National Benchmarks)**

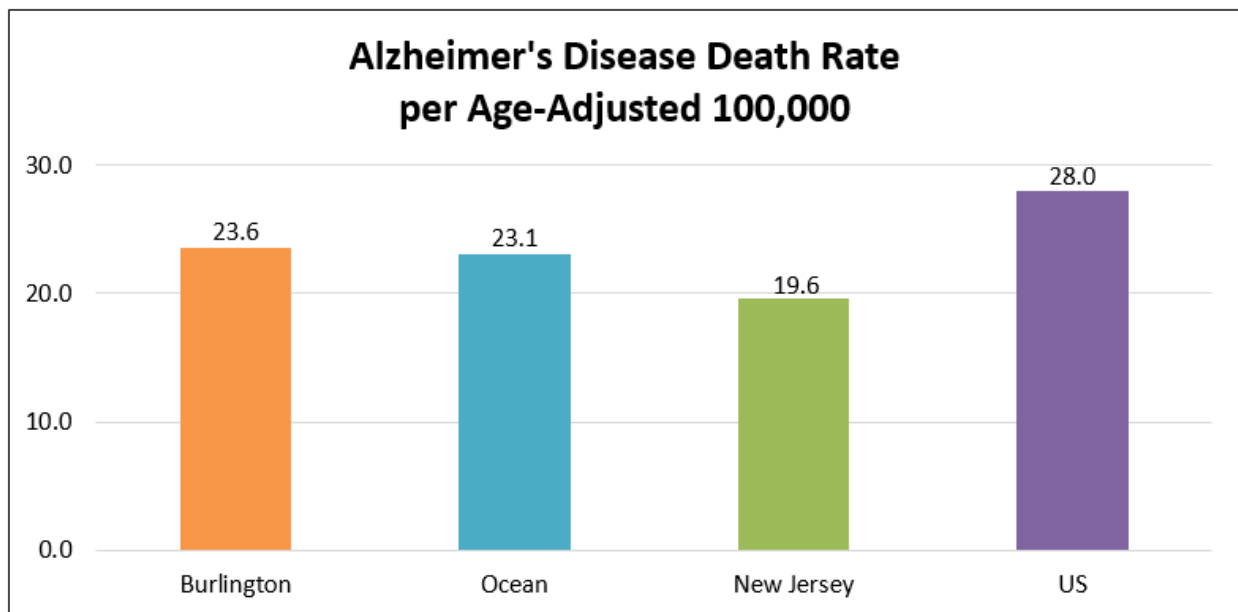
	Burlington County	Ocean County	New Jersey	United States
0 to 1 condition	26.8%	19.9%	26.2%	32.3%
2 to 3 conditions	30.6%	28.6%	29.7%	30.0%
4 to 5 conditions	24.5%	28.1%	24.8%	21.6%
6 or more conditions	18.2%	23.4%	19.4%	16.2%

Source: Centers for Medicare & Medicaid Services, 2015

Alzheimer’s Disease

Alzheimer’s disease is currently the sixth leading cause of death in the United States. According to the National Institute on Aging, “Alzheimer’s disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills, and, eventually, the ability to carry out the simplest tasks. In most people with Alzheimer’s, symptoms first appear in their mid-60s. Estimates vary, but experts suggest that more than 5.5 million Americans, most of them age 65 or older, may have dementia caused by Alzheimer’s.”

Approximately 12% of Medicare Beneficiaries in both counties have an Alzheimer’s disease diagnosis, consistent with the numbers across the State and nation. The Alzheimer’s disease death rate is similar to the rate in the State and lower than that in the nation.

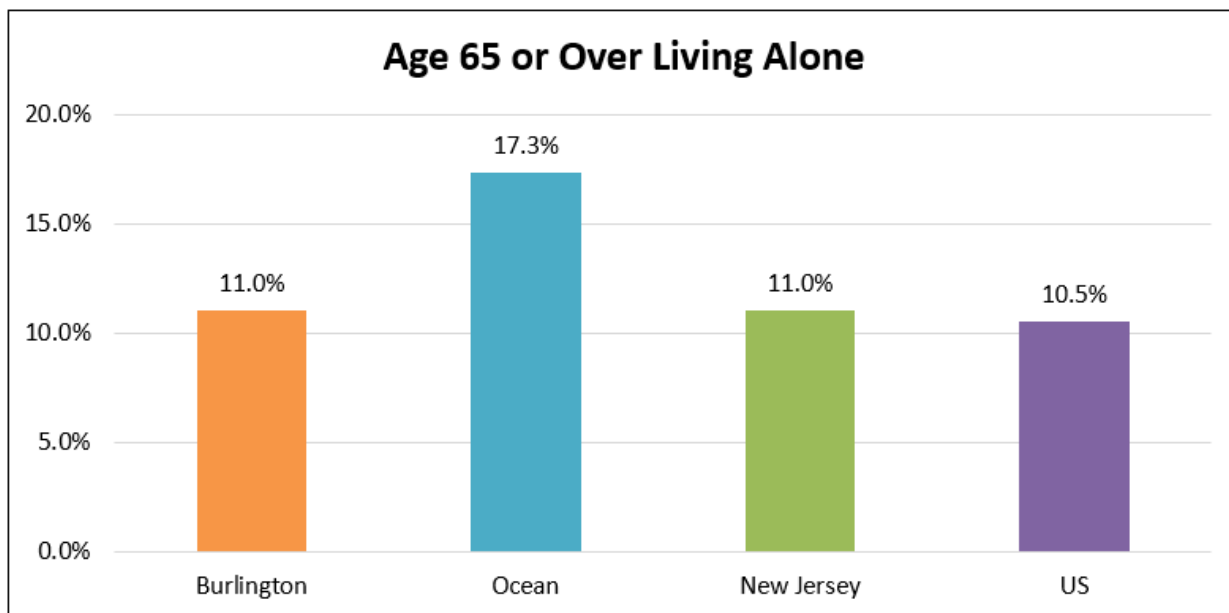


Source: Centers for Disease Control and Prevention, 2013-2017

Social Isolation Among Seniors

As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors age 65 or over who live alone. Ocean County seniors are more likely to live alone, compared to residents of the State and nation.

Seniors in Ocean County are more likely to manage multiple chronic conditions and live alone.



Source: US Census Bureau, 2013-2017

Immunizations

Pneumococcal disease continues to be a leading cause of serious illness among older adults. According to the CDC, approximately 20%–25% of pneumococcal cases are potentially preventable with proper vaccination. Approximately three quarters of older adults in both counties have received a pneumonia vaccination, higher than the rate in the State and similar to that of the nation.

The Advisory Committee on Immunization Practices recommends all individuals age six months or older receive the flu vaccine, but the vaccine is a priority for older adults. Nearly two-thirds of older adults in both counties receive a flu vaccine, similar to the rates in the State and higher than the national rate. The percentage of adults receiving a flu vaccine increased from the 2016 CHNA.

The percentage of seniors receiving a flu vaccine increased from the 2016 CHNA.

Vaccination Rates among Older Adults Age 65+

	Ever Received a Pneumonia Vaccination	Had a Flu Vaccination in the Last Year
Burlington County	73.9%	62.3%
Ocean County	72.3%	60.9%
New Jersey	66.5%	60.9%
United States	73.4%	58.6%
HNJ 2020	72.2%	67.4%
HP 2020	90.0%	90.0%

Source: NJ Department of Health, 2016

Behavioral Health

Mental Health

Approximately 1 in 10 Burlington County adults report 14 or more days of poor mental health in an average month and/or a history of depression, lower than State benchmarks. The percentage of adults with diagnosed depression declined 6 percentage points from 2015 to 2016. In contrast, nearly 1 in 5 Ocean County adults report consistently poor mental health and/or a history of depression. The percentage of adults with diagnosed depression increased 5 percentage points from 2015 to 2016.

The percentage of Ocean County adults with a history of diagnosed depression is nearly double the percentage for Burlington County adults.

The Ocean County suicide rate has been variable over the past decade. The Burlington County suicide rate increased from 2009 to 2014, but declined through 2017. The 2017 death rate for both counties is slightly higher than the State rate, but meet the HP 2020 goal.

Additional suicide data for Burlington County was provided by the Burlington County Medical Examiner Office. The data includes death counts through 2018 by mode of death. Suicide deaths decreased annually in Burlington County from 2015 (n=48) to 2018 (n=41). In 2018, gunshot wounds and hanging accounted for 16 suicide deaths each and 78% of all suicide deaths collectively. The number of suicides due to gunshot wounds increased slightly from 2014 to 2018, while the number of suicides due to hanging decreased slightly. Similar data are not available for Ocean County.

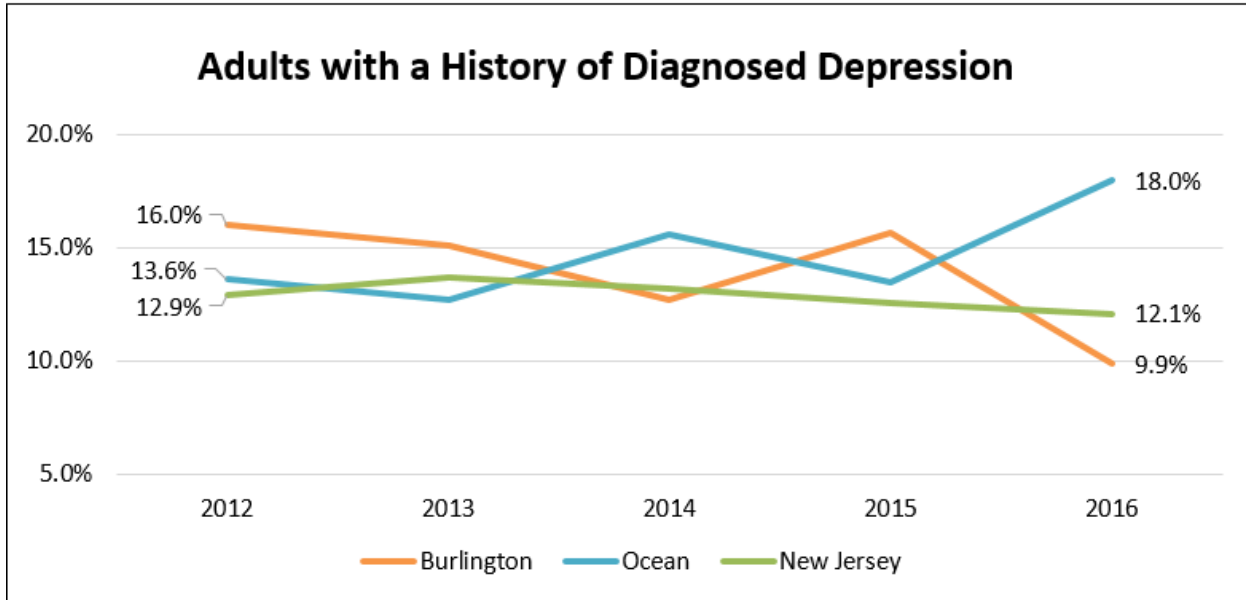
Mental and behavioral disorders span a wide range of disorders, including disorders due to psychoactive substance use, anxiety disorders, schizophrenia and other delusional disorders, and mood or personality disorders. The disorders are not induced by alcohol and other psychoactive substances, but they may result from substance abuse. The mental and behavioral disorders death rate has trended opposite of the suicide rate within the two counties. The Burlington County death rate has been variable over the past decade, while the Ocean County rate has slowly increased. Current rates are similar to or lower than the State rates.

Age-Adjusted Mental Health Measures
(Red = Higher than State Benchmark; Green = Lower than State Benchmark)

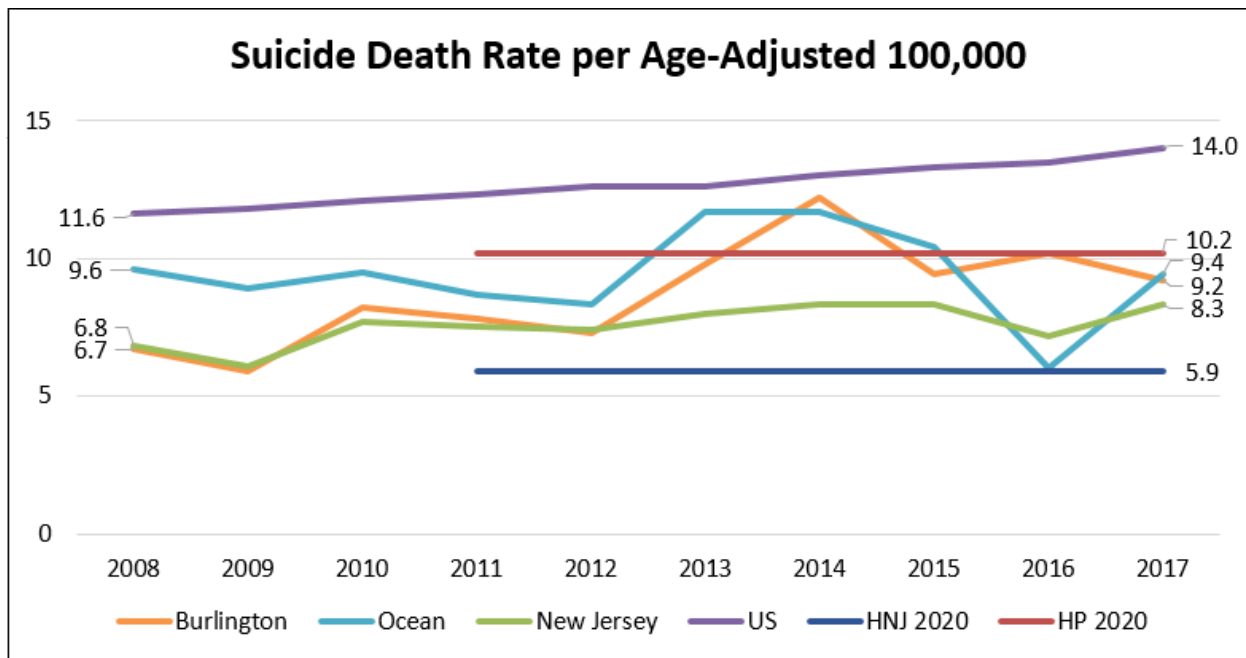
	Poor Mental Health 14 or More of the Past 30 Days	History of Diagnosed Depression
Burlington County	8.5%	9.9%
Ocean County	15.4%	18.0%
New Jersey	10.7%	12.1%

Source: NJ Department of Health, 2016

*National comparisons are only available as crude rates and are excluded.



Source: NJ Department of Health, 2012-2016



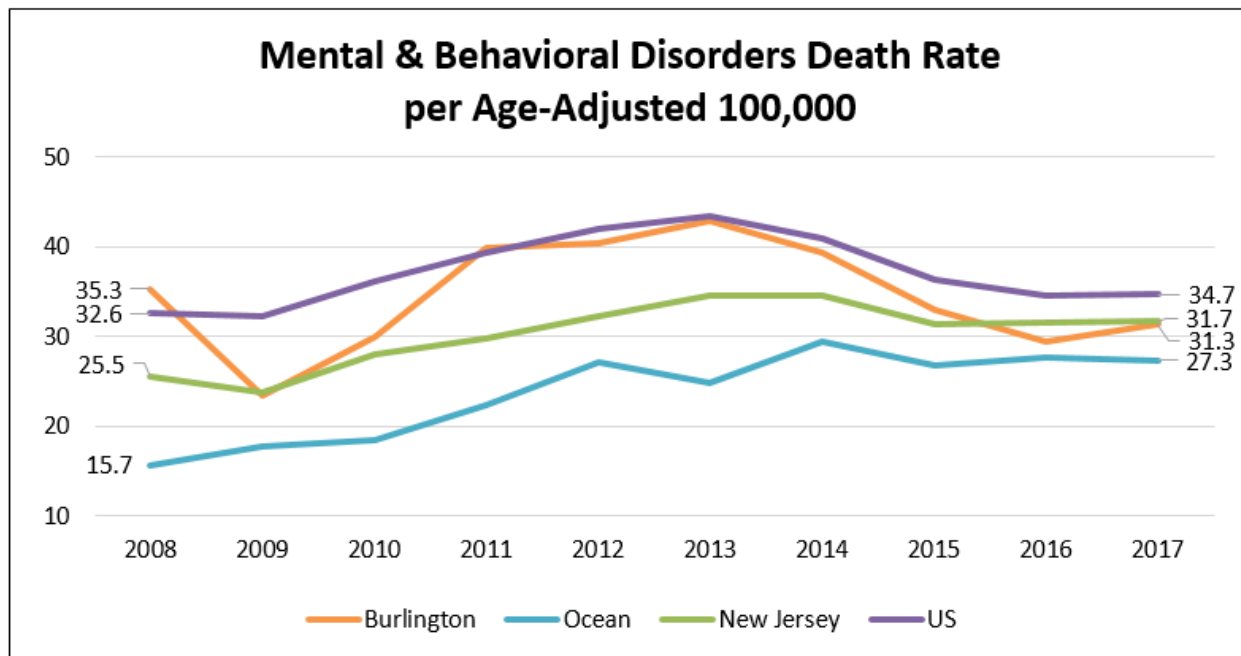
Source: Centers for Disease Control and Prevention, 2008-2017

Burlington County Suicide Deaths by Mode

	2015	2016	2017	2018
Gunshot wound	14	15	16	16
Hanging	19	18	17	16
Drugs O/D	8	8	3	4
Stab/cut	1	1	5	3
Asphyxia/fire	1	0	0	1
CO poison	1	1	0	0
Asphyxia/helium	2	0	0	0
Asphyxia/nitrogen	1	0	1	0
Drowning	1	0	0	0
Asphyxia/plastic bag	0	1	0	0
Ethylene glycol	0	1	0	0
Aspirin overdose	0	1	0	0
Asphyxia/tape	0	0	1	0
Asphyxia	0	0	1	0
Asphyxia/bag	0	0	0	1
Total	48	46	44	41

Source: Burlington County Medical Examiner's Office, 2015-2018

*Ocean County data are not available.



Source: Centers for Disease Control and Prevention, 2008-2017

Behavioral Health in the Emergency Department

The following tables depict the distribution of behavioral health patients in Burlington and Ocean County hospital emergency departments (ED) by age and payer mix. Behavioral health diagnoses encompass both mental health and substance abuse conditions. Emergency department visits include visits to all hospitals within Burlington or Ocean County.

The percentage of ED visits due to a primary behavioral health diagnosis remained stable from the 2016 CHNA at approximately 4% in Burlington County and 5% in Ocean County. The number of behavioral health ED visits has been variable, but generally increasing in both counties. Adults ages 22 to 54 continue to account for nearly 60% of behavioral health ED visits. The percentage of visits among adults 55 years or over increased by approximately 1 percentage point, consistent with an aging population.

The number of behavioral health ED visits generally increased, but accounted for a similar percentage of all ED visits.

The percentage of Medicaid behavioral health patients increased two-fold in both counties from 2012 to 2016, likely driven by the expansion of Medicaid coverage in the State. Charity care/uninsured patients declined by more than half. In Burlington County, Blue Cross/Commercial patients accounted for the highest percentage of behavioral health patients, followed by Medicaid and Medicare. In Ocean County, Medicaid patients accounted for the highest percentage of behavioral health patients, followed by Medicare and Blue Cross/Commercial.

The percentage of Medicaid behavioral health patients doubled, while the percentage of charity care/uninsured patients declined by more than half.

Behavioral Health Patients in the ED (Primary Diagnosis)

	2012	2013	2014	2015	2016
Burlington County					
Total Behavioral Health Visits	5,692	5,448	5,803	6,217	5,835
Percentage of ED Visits Due to a Behavioral Health Diagnosis	4.3%	4.3%	4.6%	5.0%	4.3%
Ocean County					
Total Behavioral Health Visits	10,371	10,393	10,268	10,761	10,913
Percentage of ED Visits Due to a Behavioral Health Diagnosis	4.8%	5.1%	5.2%	5.3%	5.4%

Source: New Jersey Hospital Association, 2012-2016

Behavioral Health Patients (Primary Diagnosis) in the ED by Age

	2012	2013	2014	2015	2016
Burlington County					
0 – 12	231	238	245	277	227
13 – 21	1,192	1,172	1,226	1,370	1,196
22 – 54	3,363	3,125	3,216	3,423	3,246
55 and over	906	913	1,116	1,147	1,166
Total Behavioral Health Visits	5,692	5,448	5,803	6,217	5,835
Ocean County					
0 – 12	236	276	250	284	272
13 – 21	1,722	1,759	1,622	1,657	1,585
22 – 54	6,050	5,929	5,971	6,151	6,376
55 and over	2,363	2,429	2,425	2,669	2,680
Total Behavioral Health Visits	10,371	10,393	10,268	10,761	10,913

Source: New Jersey Hospital Association, 2012-2016

Behavioral Health Patients (Primary Diagnosis) in the ED by Payer

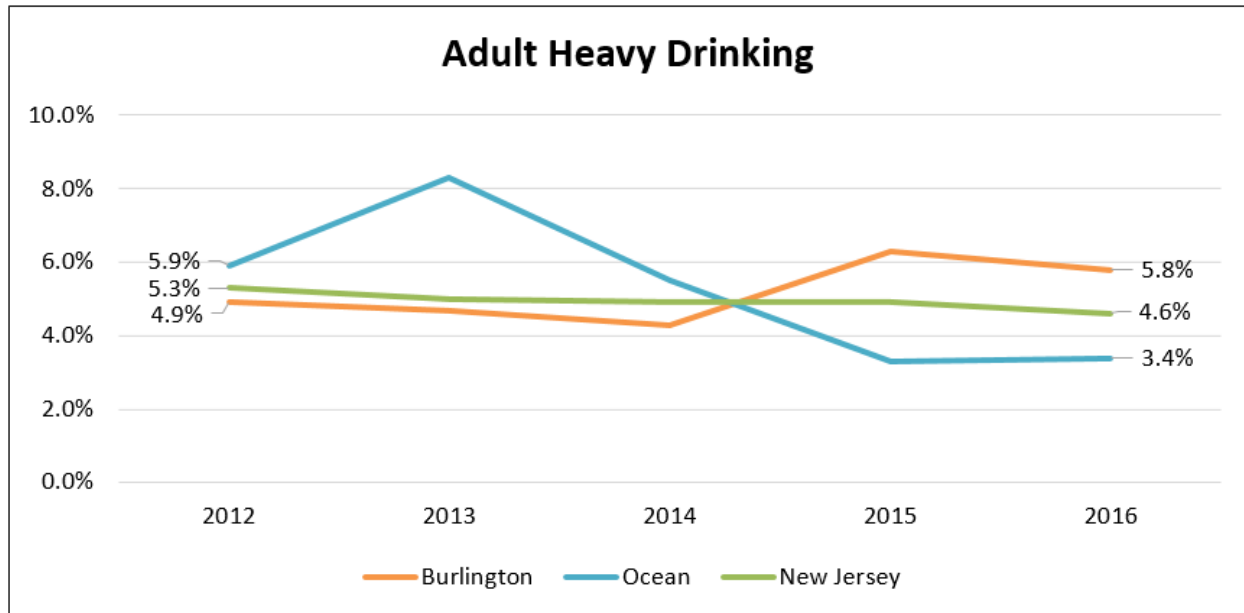
	2012	2013	2014	2015	2016
Burlington County					
Medicare – HMO & FFS	18.1%	18.9%	18.0%	18.2%	17.5%
Medicaid – HMO & FFS	12.9%	12.8%	24.7%	27.4%	24.4%
Blue Cross/Commercial	36.3%	36.5%	39.5%	40.9%	42.2%
Charity Care/Uninsured	26.9%	26.7%	13.6%	8.4%	10.3%
Other	5.8%	5.1%	4.2%	5.1%	5.5%
Total Behavioral Health Visits	5,692	5,448	5,803	6,217	5,835
Ocean County					
Medicare – HMO & FFS	23.7%	24.6%	25.9%	25.6%	24.8%
Medicaid – HMO & FFS	17.1%	18.1%	30.0%	36.7%	39.0%
Blue Cross/Commercial	27.8%	25.6%	24.4%	23.6%	22.8%
Charity Care/Uninsured	30.0%	30.8%	18.5%	12.9%	12.5%
Other	1.3%	0.9%	1.2%	1.1%	0.9%
Total Behavioral Health Visits	10,371	10,393	10,268	10,761	10,913

Source: New Jersey Hospital Association, 2012-2016

Substance Use Disorder

Heavy drinking is defined as two or more drinks per day for men and one or more drinks per day for women. The percentage of adult heavy drinkers increased slightly in Burlington County and decreased slightly in Ocean County. The percentage of driving deaths due to driving under the influence (DUI) declined in both counties from the 2016 CHNA. Burlington County has a lower percentage of driving deaths due to DUI (19.4%) compared to the State (23.3%); Ocean County has a rate (24.3%) similar to the State.

The percentage of driving deaths due to DUI declined in both counties from the 2016 CHNA.



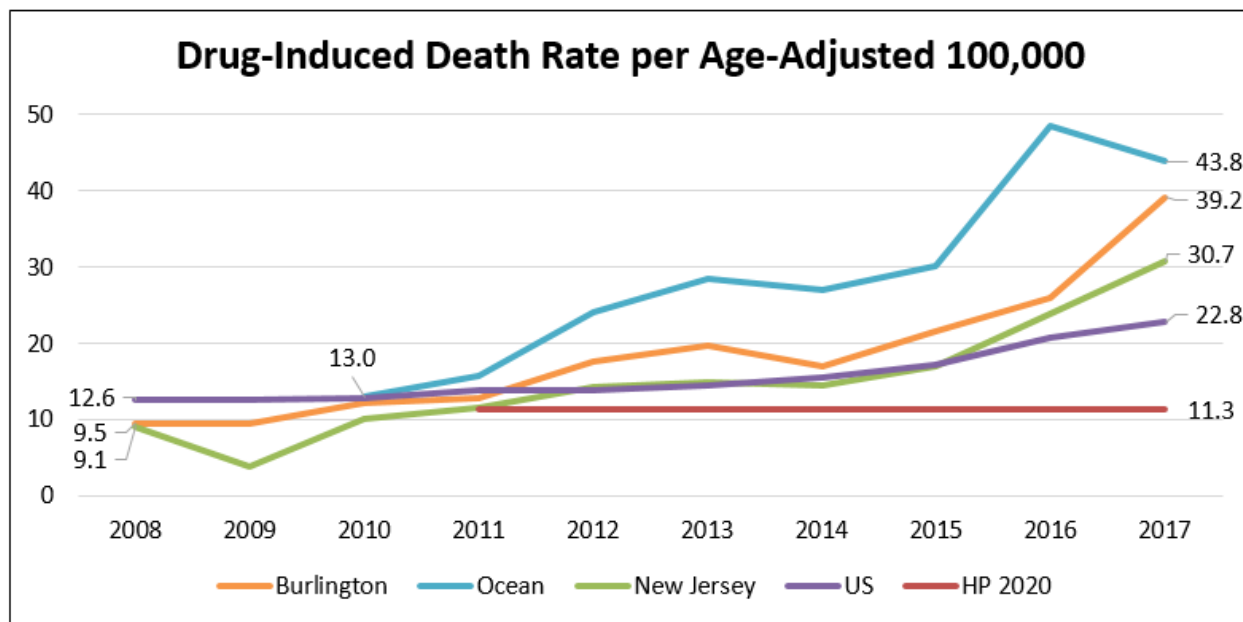
Source: NJ Department of Health, 2012-2016

Drug-induced deaths include all deaths for which drugs are the underlying cause, including drug overdoses and deaths from medical conditions resulting from chronic drug use. The drug-induced death rate continued to increase in both counties from the 2016 CHNA report. From 2014 to 2017, the death rate more than doubled in Burlington County and increased 17 points in Ocean County. The current death rates are similar and exceed State and national benchmarks. The Ocean County death rate is nearly double the national death rate.

From 2014 to 2017, the drug-induced death rate nearly doubled in Burlington County and increased 17 points in Ocean County.

According to New Jersey Department of Law & Public Safety preliminary results, the majority of drug-related deaths in 2017 were due to fentanyl and fentanyl analogs, followed by heroin. A fentanyl analog is a drug that mimics the pharmaceutical effects of the original drug (fentanyl). Consistent with an increasing drug-induced death rate, the number of suspected opioid overdoses and naloxone administrations increased over the past six years. A positive finding is that the number of dispensed opioid prescriptions declined.

Suspected drug overdoses and naloxone administration are increasing, but opioid prescriptions are decreasing.



Source: Centers for Disease Control and Prevention, 2008-2017

*The Ocean County 2008 drug-induced death rate is 10.8. The 2009 death rate is unreliable and not reported.

2017 Drug-Related Deaths by Primary Drug (Preliminary)

	Burlington County	Ocean County	New Jersey
Fentanyl and Analogs	87	102	1,379
Heroin	70	87	1,132
Cocaine	31	33	605
Oxycodone	19	22	225
Methadone	9	8	87
Morphine	7	18	123
Total	150	191	2,750

Source: NJ Department of Law & Public Safety, 2017

Burlington County Historic Opioid-Related Data

	2013	2014	2015	2016	2017	2018
Suspected Overdose Deaths	70	75	87	96	150	161
Naloxone Administrations	NA	NA	556	653	914	943
Opioid Prescriptions Dispensed	325,792	333,887	361,681	340,082	309,524	263,839

Source: NJ Department of Law & Public Safety, 2013-2018

Ocean County Historic Opioid-Related Data

	2013	2014	2015	2016	2017	2018
Suspected Overdose Deaths	154	132	157	253	191	217
Naloxone Administrations	NA	NA	624	977	621	745
Opioid Prescriptions Dispensed	454,390	450,508	483,061	450,466	417,019	357,970

Source: NJ Department of Law & Public Safety, 2013-2018

The following tables depict 2017 substance use disorder treatment admissions for residents within Burlington and Ocean Counties, regardless of where they sought treatment in New Jersey. Admissions are reported by treatment providers through the web-based New Jersey Substance Abuse Monitoring System (NJ-SAMS). Admissions represent visits, not unique patients.

Burlington County had 3,605 treatment admissions in 2017, an increase from 2,686 admissions at the time of the 2016 CHNA. Treatment clients were primarily between the ages of 25 and 34 years (38%), followed by 35 to 54 years (35%). The majority of clients were White, Non-Hispanic (76%). Twenty-one percent were unemployed and 5% were homeless. Most of the admissions were due to heroin, followed by alcohol.

Heroin is the primary drug in 50% of substance use disorder treatment admissions for Ocean County residents and 44% for Burlington County residents.

Ocean County had 7,527 treatment admissions in 2017, an increase from 6,565 admissions at the time of the 2016 CHNA. Treatment clients were primarily between the ages of 25 and 34 years (39%), followed by 35 to 54 years (36%). The majority of clients were White, Non-Hispanic (87%). Twenty-four percent were unemployed and 4% were homeless. Most of the admissions were due to heroin, followed by alcohol.

Substance Use Disorder Treatment Admissions by Primary Drug

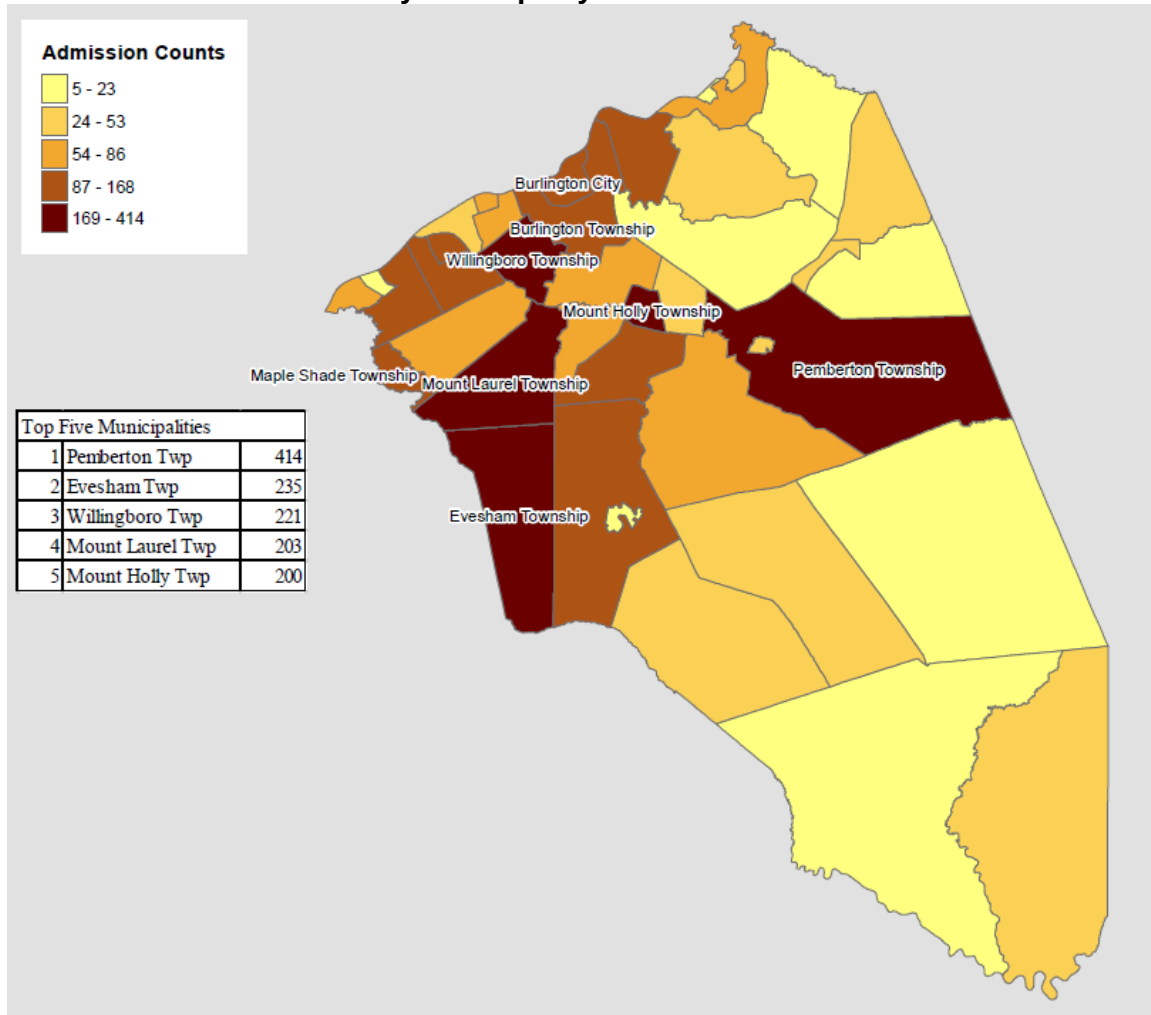
	Burlington County		Ocean County	
	Count	Percent	Count	Percent
Heroin	1,576	44.0%	3,760	50.0%
Alcohol	980	27.0%	1,934	26.0%
Marijuana	353	10.0%	748	10.0%
Other Opiates	326	9.0%	583	8.0%
Cocaine	209	6.0%	293	4.0%
Other Drugs	157	4.0%	203	3.0%
Total Admissions	3,605		7,527	
IV Drug Users	1,403		3,537	
Unduplicated Clients	2,469		4,991	

Source: NJ Department of Health, January 1, 2017 – December 31, 2017

The following maps show treatment admissions by municipality of client residence, highlighting the top five municipalities within each county. In Burlington County, Pemberton Township was the top municipality of residence with 414 total admissions. In Ocean County, Toms River Township was the top municipality of residence with 1,384 admissions. Consistent with findings for the county, the primary drug identified upon admission for Pemberton Township and Toms River Township clients was heroin, followed by alcohol.

Pemberton Township (Deborah Immediate Service Area) and Toms River Township are the top municipalities of residence for substance use disorder treatment clients.

Burlington County Substance Use Disorder Treatment Admissions by Municipality of Residence

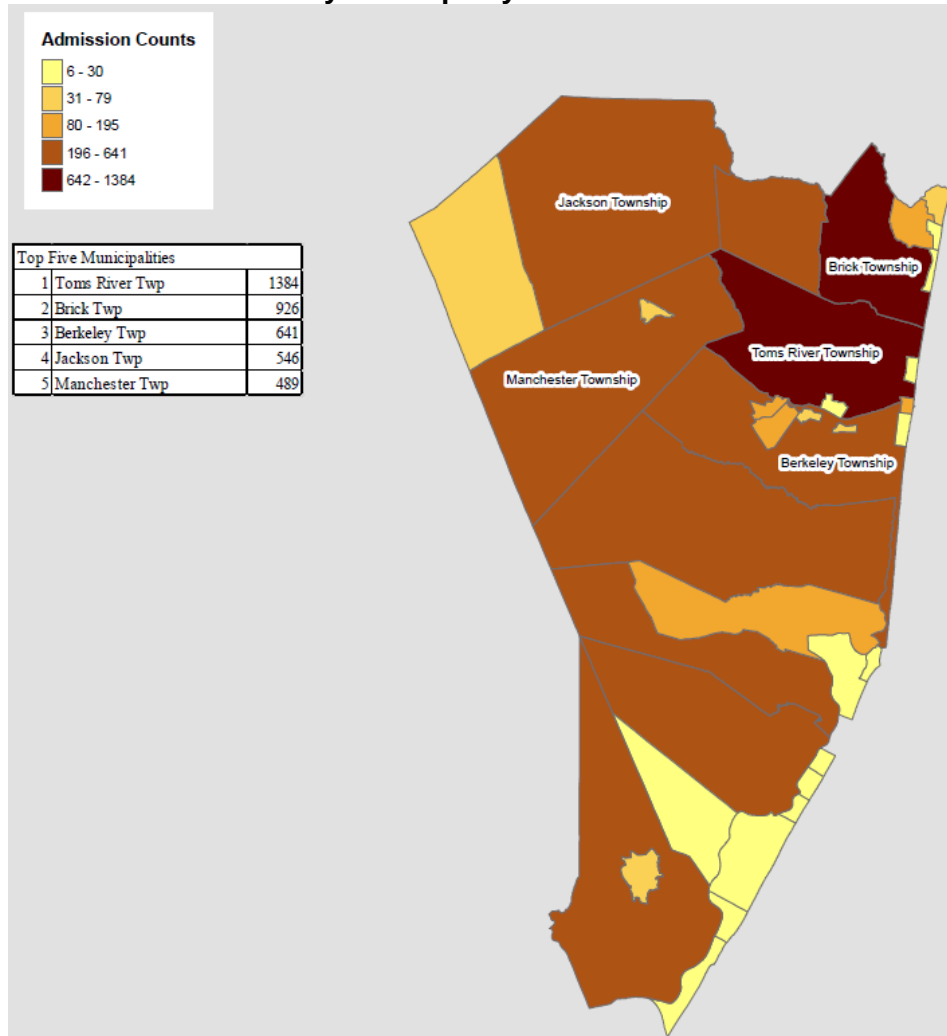


Substance Use Disorder Treatment Admissions by Primary Drug for Top Five Municipalities in Burlington County

	Alcohol		Cocaine/ Crack		Heroin		Other Opiates		Marijuana/ Hash		Other/ Unknown		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
Pemberton Township	89	21	28	7	198	48	31	7	49	12	19	5	414
Evesham Township	62	26	6	3	115	49	26	11	12	5	14	6	235
Willingboro Township	80	36	11	5	51	23	18	8	55	25	6	2	221
Mount Laurel Township	55	27	10	5	81	40	27	13	22	11	8	4	203
Mount Holly Township	41	21	15	8	87	44	27	14	21	11	9	5	200

Source: NJ Department of Health, January 1, 2017 – December 31, 2017

Ocean County Substance Use Disorder Treatment Admissions by Municipality of Residence



Substance Use Disorder Treatment Admissions by Primary Drug for Top Five Municipalities in Ocean County

	Alcohol		Cocaine/ Crack		Heroin		Other Opiates		Marijuana/ Hash		Other/ Unknown		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	
Toms River Township	347	25	74	5	691	50	94	7	129	9	49	3	1,384
Brick Township	278	30	40	4	438	47	70	8	75	8	25	2	926
Berkeley Township	134	21	17	3	381	59	49	8	52	8	8	1	641
Jackson Township	146	27	14	3	264	48	49	9	51	9	22	4	546
Manchester Township	117	24	31	6	251	51	46	9	34	7	10	2	489

Source: NJ Department of Health, January 1, 2017 – December 31, 2017

Maternal and Child Health

Total Births and Teen Pregnancy

The total birth rate is lower in Burlington County as compared to the State, but higher in Ocean County. Approximately 17% of births in Burlington County are to Black/African American mothers, while less than 15% of births in Ocean County are to non-White mothers. The findings are consistent with the demographics for the counties.

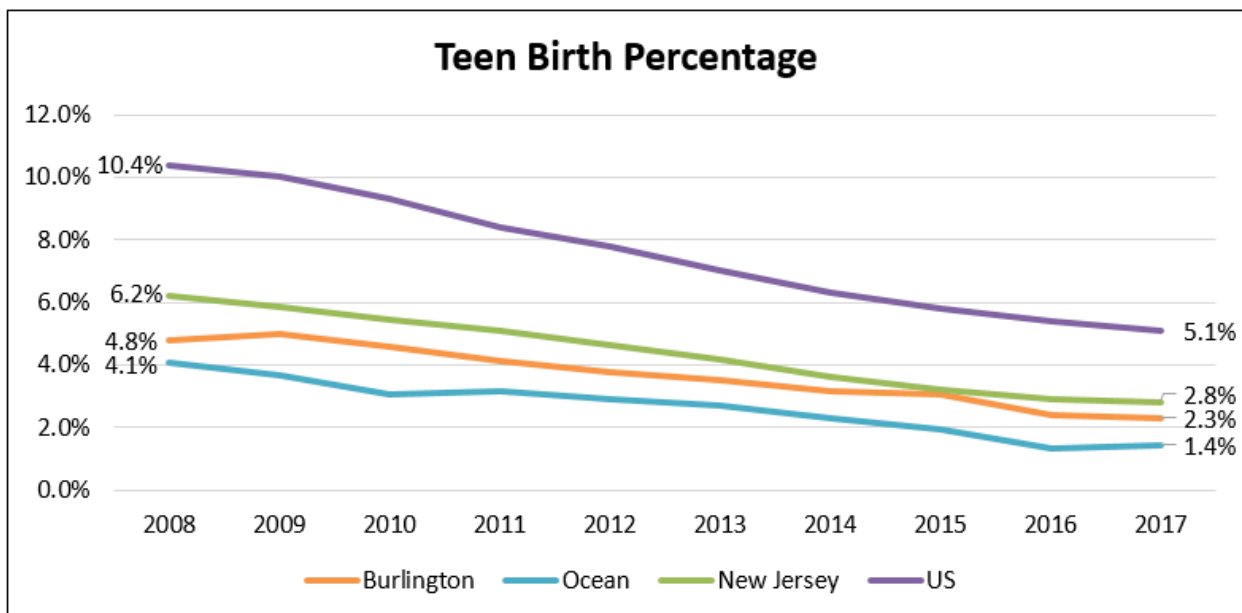
2017 County Births by Race and Ethnicity

	Total Births	Birth Rate per 1,000	Total Births to White, Non-Hispanic Mothers	Total Births to Black/African American, Non-Hispanic Mothers	Total Births to Asian/Pacific Islander, Non-Hispanic Mothers	Total Births to Latina Mothers
Burlington County	4,442	9.9	59.2%	17.2%	7.1%	11.2%
Ocean County	8,593	14.4	85.5%	2.1%	1.2%	10.1%
New Jersey	101,154	11.2	44.5%	13.4%	11.6%	26.9%

Source: NJ Department of Health, 2017

The percentage of births to teenagers declined nationally. The teen birth percentage in Burlington and Ocean counties is similar to the birth rate in the State and lower than that of the nation.

The teen birth percentage continues to decline and is lower than the State and nation.



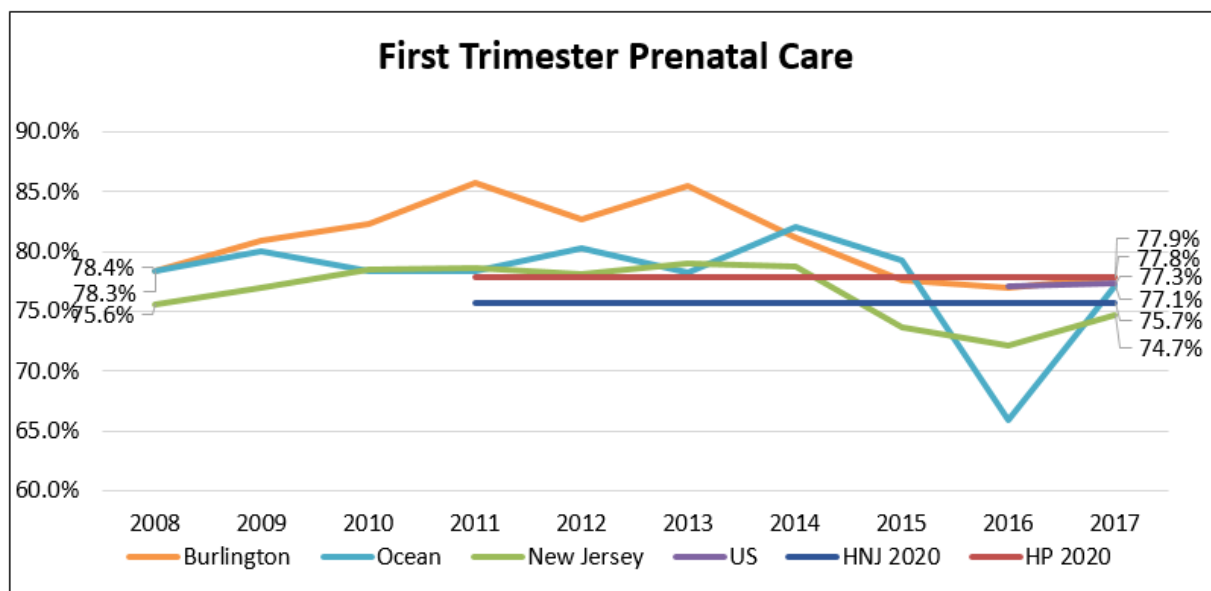
Source: Centers for Disease Control and Prevention, 2008-2017; NJ Department of Health, 2008-2017

Prenatal Care

Engaging in early prenatal care increases the chances that a mother and her baby will have a healthy pregnancy and a healthy birth. Entry into prenatal care after the first trimester can suggest barriers to accessing care. Both counties meet the HNJ 2020 goal and nearly meet the HP 2020 goal for mothers accessing early prenatal care. The percentage of mothers accessing early prenatal care has been variable, but is generally higher than the State and national benchmarks.

Both counties meet the HNJ 2020 goal and nearly meet the HP 2020 goal for first trimester prenatal care.

Note: In 2014-2015, the New Jersey Department of Health changed its data collection methods for calculating prenatal care, which resulted in a sharp decline statewide in 2015.



Source: Centers for Disease Control and Prevention, 2016-2017; NJ Department of Health, 2008-2017
 *Starting in 2016, all of the US reported data are based on the 2003 US Certificate of Live Birth, providing national indicators for timing of prenatal care. Data prior to 2016 are not reported.

Municipalities That Do Not Meet the Healthy New Jersey 2020 Goal (75.7%) for Mothers Receiving First Trimester Prenatal Care by More Than 5 Points

Burlington County		Ocean County	
Municipality	%	Municipality	%
Wrightstown Borough	64.7%	Long Beach Township	38.5% (n=5)
Willingboro Township	64.9%	Seaside Heights Borough	60.0%
Riverside Township	66.3%	South Toms River Borough	60.7%
Burlington City	67.9%	Lakehurst Borough	64.7%

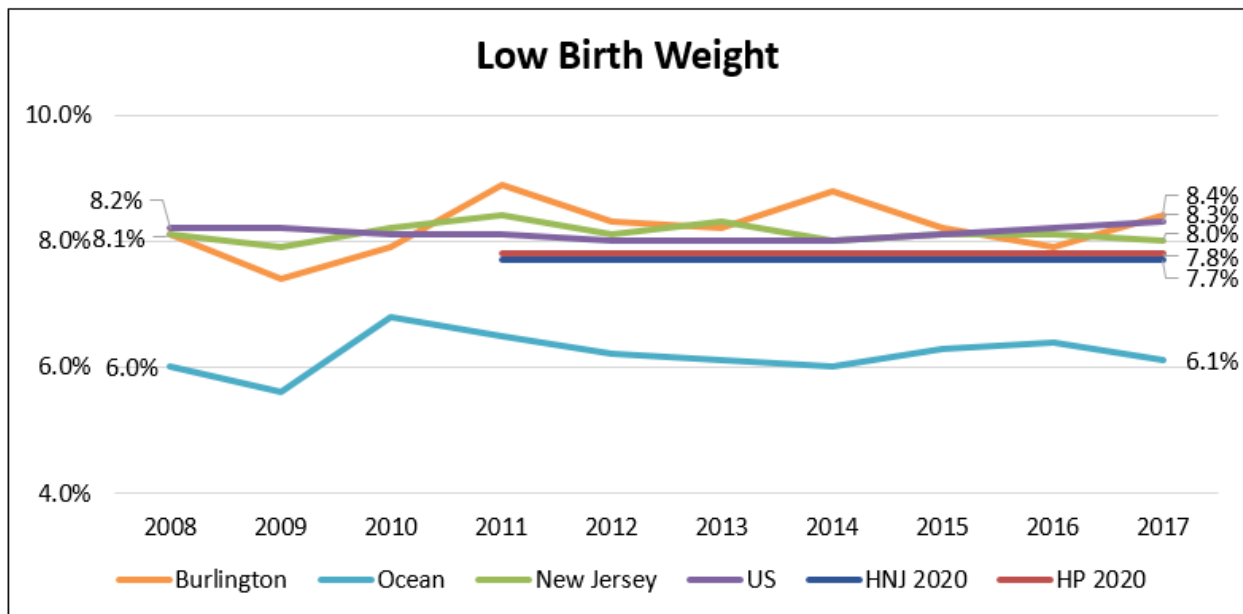
Source: NJ Department of Health, 2017

Low Birth Weight and Preterm Birth

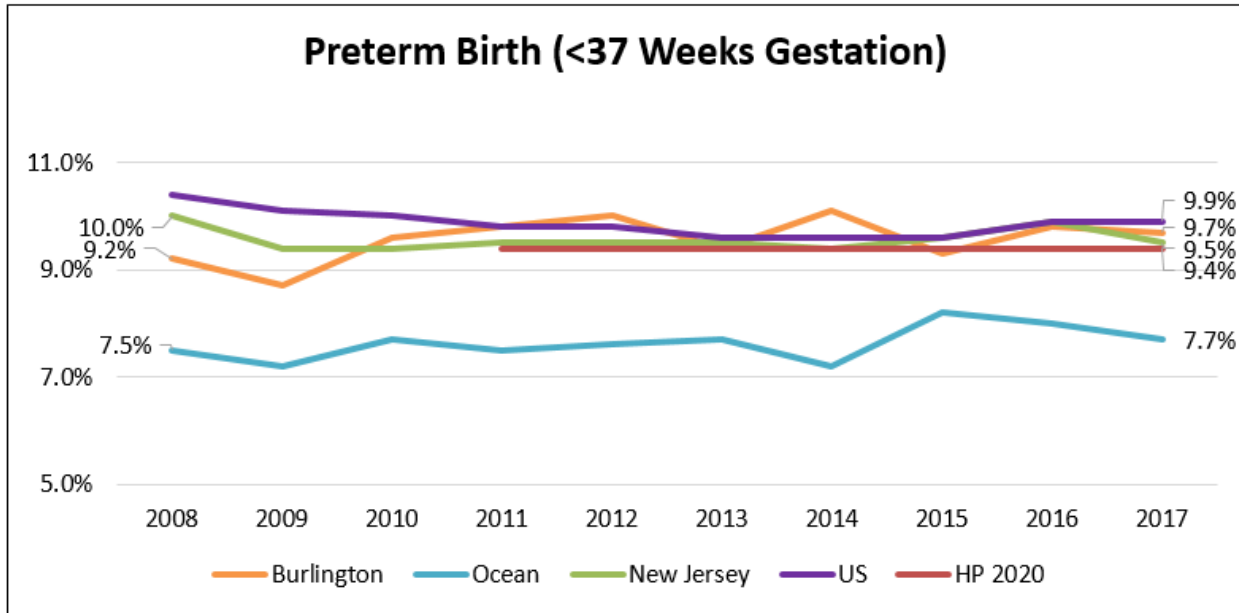
Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces. Low birth weight is often a result of premature birth, fetal growth restrictions, or birth defects and can be associated with a variety of negative birth outcomes. The Ocean County low birth weight percentage has consistently met HNJ and HP 2020 goals. The Burlington County percentage mirrors the State low birth weight rate and nearly meets HNJ and HP 2020 goals.

Preterm birth is defined as birth before 37 weeks of pregnancy, and can contribute to infant death or disability. Ocean County has consistently met the HP 2020 goal for preterm birth. The Burlington County percentage mirrors the state and nearly meets the HP 2020 goal.

Ocean County meets or nearly meets HNJ and HP 2020 goals for low birth weight, smoking during pregnancy, and preterm birth.



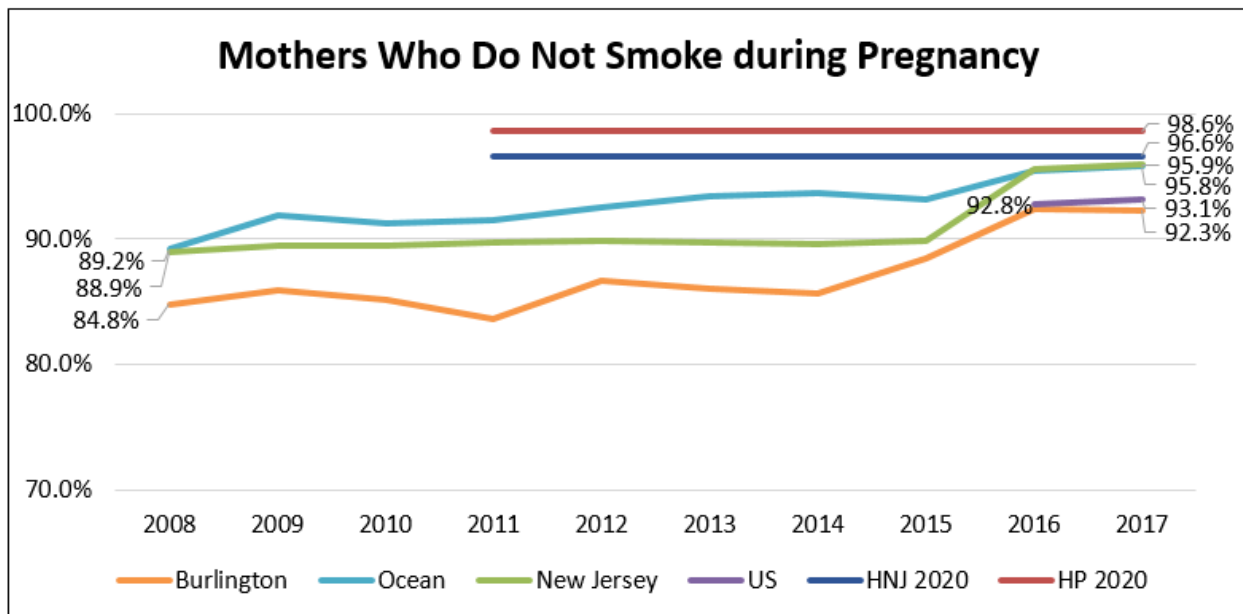
Source: Centers for Disease Control and Prevention, 2008-2017; NJ Department of Health, 2008-2017



Source: Centers for Disease Control and Prevention, 2008-2017; NJ Department of Health, 2008-2017

Smoking during Pregnancy

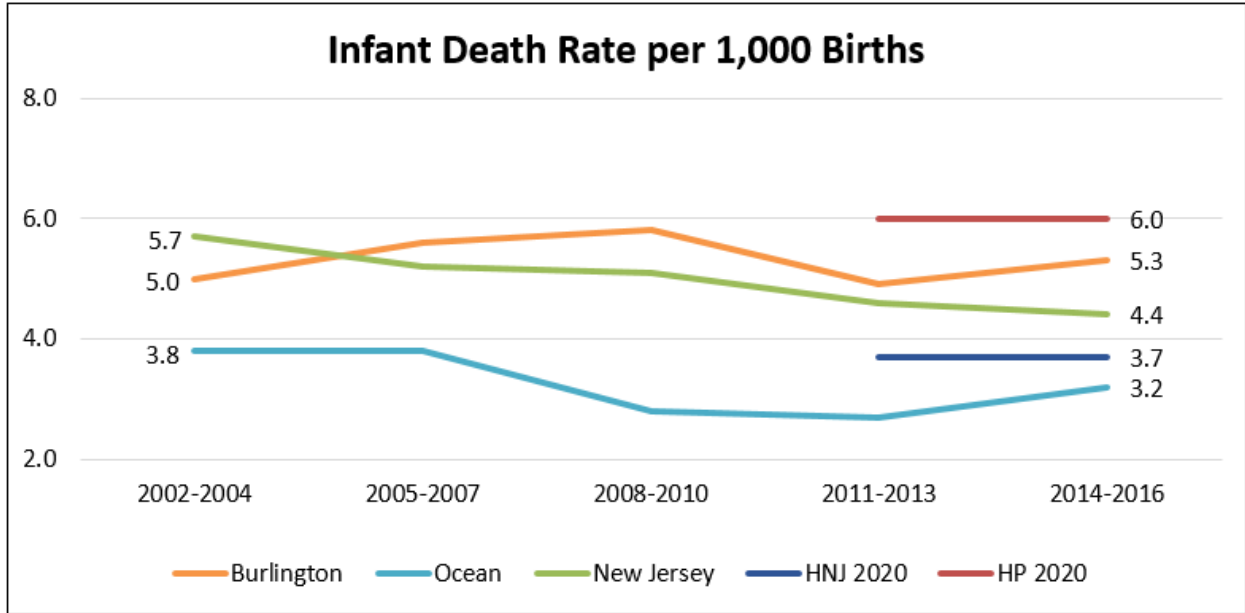
Smoking during pregnancy is associated with a variety of negative birth outcomes, including low birth weight. The percentage of non-smoking mothers increased in both counties over the past decade. Despite having a historically higher percentage of adults who report smoking, Ocean County nearly meets HNJ and HP 2020 goals for this measure. The Burlington County rate is lower than the State and national benchmarks.



Source: Centers for Disease Control and Prevention, 2016-2017; NJ Department of Health, 2008-2017
 *Starting in 2016, all of the US reported data are based on the 2003 US Certificate of Live Birth, providing national indicators for timing of prenatal care and tobacco use during pregnancy. Data prior to 2016 are not reported.

Infant Mortality

The infant death rate for Burlington and Ocean Counties has been stable. The Ocean County death rate has historically met both HNJ and HP 2020 goals, while the Burlington County death rate has historically met the HP 2020 goal.



Source: NJ Department of Health, 2002-2004 – 2014-2016

Maternal and Child Health Disparities

Maternal and child health indicators are presented in the table below by race and ethnicity. In both counties, the percentage of Black/African American and Latina mothers receiving first trimester prenatal care meets HNJ 2020 goals, but remains lower than the percentage for White mothers. Black/African American mothers in both counties and Latina mothers in Ocean County are more likely to have low birth weight and preterm babies. Consistent with the 2016 CHNA, Latina mothers are the least likely to smoke during pregnancy.

The percentage of Black/African American and Latina mothers receiving first trimester care is lower than the percentage for White mothers.

Maternal and Child Health Indicators by Race and Ethnicity

	Burlington County	Ocean County	New Jersey	HNJ 2020
Mothers Who Receive First Trimester Care				
Total Population	77.8%	77.1%	74.7%	75.7%
White, Non-Hispanic	83.1%	78.0%	83.6%	83.5%
Black/African American, Non-Hispanic	66.2%	66.1%	60.1%	61.5%
Latina	68.7%	72.4%	65.4%	68.3%
Low Birth Weight Infants				
Total Population	8.4%	6.1%	8.0%	7.7%
White, Non-Hispanic	7.2%	5.8%	6.4%	6.0%
Black/African American, Non-Hispanic	13.6%	8.9%	12.3%	12.4%
Latina	6.2%	7.5%	7.7%	7.1%
Mothers Who Do Not Smoke During Pregnancy				
Total Population	92.3%	95.8%	95.9%	96.6%
White, Non-Hispanic	91.8%	95.9%	94.8%	95.5%
Black/African American, Non-Hispanic	90.4%	92.8%	93.6%	94.4%
Latina	92.6%	96.5%	97.4%	98.2%
Preterm Births				
Total Population	9.7%	7.7%	9.5%	NA
White, Non-Hispanic	9.7%	7.3%	8.3%	NA
Black/African American, Non-Hispanic	13.2%	9.4%	13.1%	NA
Latina	6.6%	10.0%	9.7%	NA

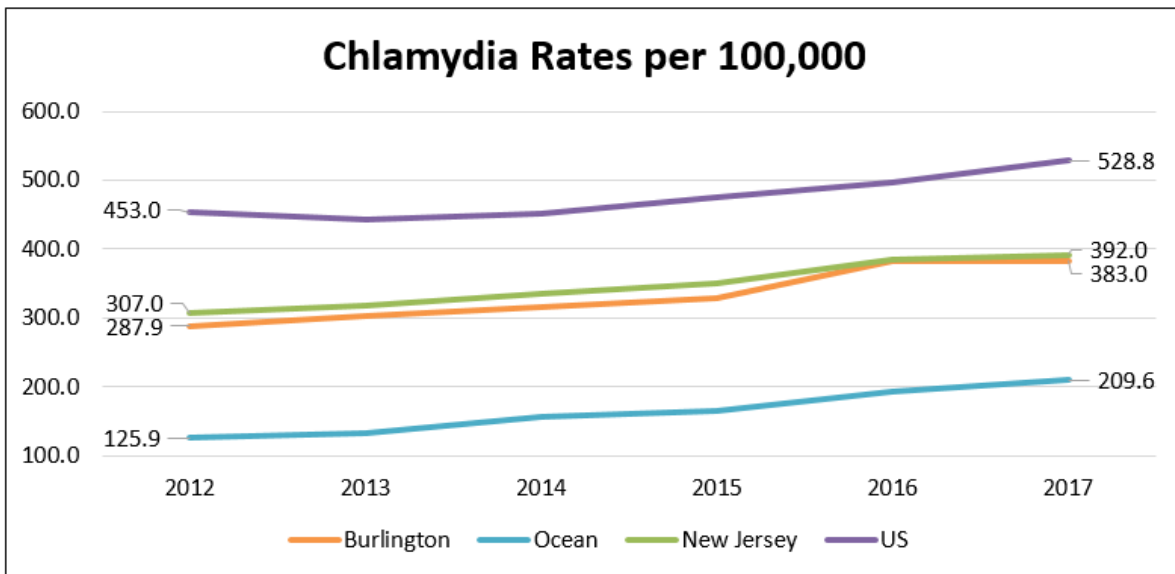
Source: NJ Department of Health, 2017

Reportable Diseases

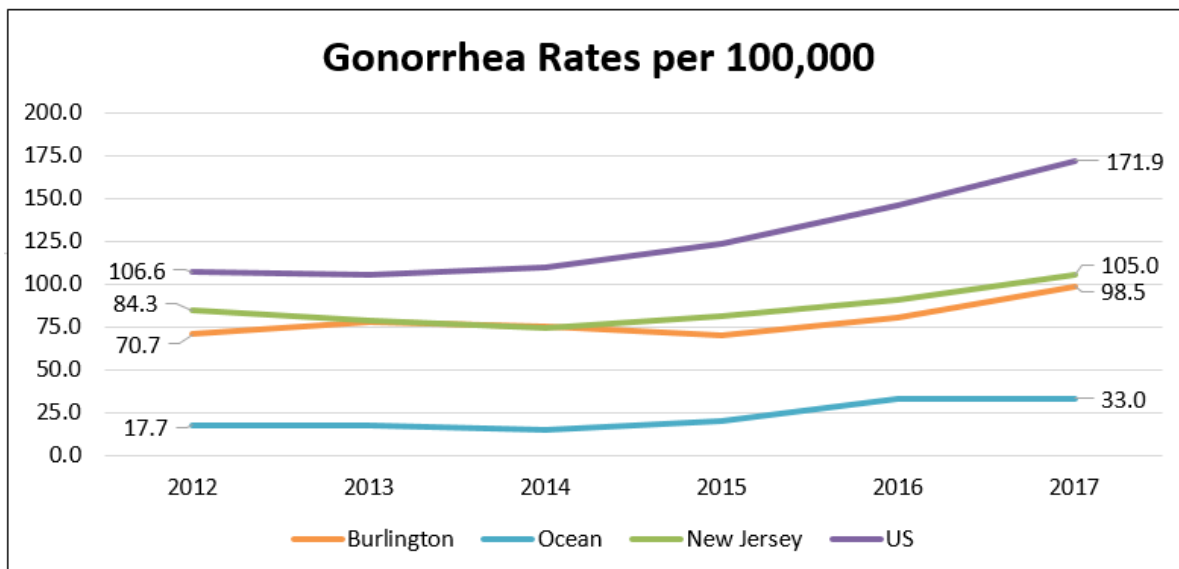
Sexually Transmitted Infections

Sexually transmitted infections (STIs) that require reporting to the CDC and State and local health bureaus upon detection include chlamydia, gonorrhea, and HIV/AIDS. The Burlington County chlamydia and gonorrhea rates are similar to the state rates and lower than the national rates, while the Ocean County rates are lower than the State and national benchmarks. However, infection rates are increasing in both counties.

Burlington and Ocean county rates of chlamydia and gonorrhea are lower than the nation, but slowly increasing.



Source: Centers for Disease Control and Prevention, 2012-2017; NJ Department of Health, 2012-2017



Source: Centers for Disease Control and Prevention, 2012-2017; NJ Department of Health, 2012-2017

Approximately 800 people in Ocean County and 900 people in Burlington County live with HIV/AIDS, accounting for nearly 5% of all individuals statewide. In Burlington County, half of individuals living with HIV/AIDS are Black/African American, while in Ocean County nearly 60% of individuals living with HIV/AIDS are White.

HIV/AIDS Prevalence

	Total People Living with HIV/AIDS	Percentage of Total Cases
Burlington County	888	2.4%
Whites, NH	282	32.0%
Blacks/African Americans, NH	466	52.0%
Latinx (any race)	126	14.0%
Transmission by IV drug use	115	13.0%
Ocean County	818	2.2%
Whites, NH	475	58.0%
Blacks/African Americans, NH	172	21.0%
Latinx (any race)	162	20.0%
Transmission by IV drug use	154	19.0%
New Jersey	37,411	100%

Source: NJ Department of Health, 2017

Secondary data findings were analyzed as part of the 2019 CHNA to inform health priorities for the Deborah service area. Secondary data is valuable for tracking and benchmarking community health status indicators, as well as for identifying emerging community needs. Additional research collected as part of the 2019 CHNA are summarized in the following report sections.

Key Informant Survey Results

Background

A Key Informant Survey was conducted with community representatives within Deborah's service area to solicit information about health needs among residents. A total of 30 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious, and social leaders; policy makers and elected officials; and others representing diverse populations including minority, low-income, and other underserved or vulnerable populations. A list of the represented community organizations and the key informants' respective titles is included in Appendix B. Key informant names are withheld from specific responses or comments for confidentiality.

These "key informants" were asked a series of questions about their perceptions of community health including health drivers, barriers to care, community infrastructure, and missing resources within the community. A summary of findings from their responses is included below. The survey was intended to gather general feedback about the health status of the community and was not intended to be a statistically representative sample of the community.

Summary of Findings

- > Cancers, substance use disorder, and heart disease and stroke were identified as the top three health concerns for Burlington and Ocean Counties by survey respondents. Approximately 1 in 4 informants identified substance use disorder and heart disease and stroke as the #1 health concerns.
- > Health habits and ability to afford healthcare were identified as the top contributing factors to community health concerns by informants with more than half selecting them within their top three choices and 24% selecting them as their #1 choice. Drug/Alcohol was identified as a top three contributing factor by 38% of informants.
- > Informants most commonly identified low-income and elderly individuals as the most at-risk populations for community health concerns. According to informants, these populations are less likely to access preventative care, and are less likely to know about or be able to access needed social services.
- > When asked if various community and healthcare services are available in the community, respondent mean scores were between 1.93 and 3.50 out of 5, indicating overall disagreement or neutral perspectives. Public transportation, affordable, safe housing, and affordable, nutritious foods were considered the least available services.
- > Mental health and substance abuse services were also chosen as missing resources by half or more of informants.
- > When asked to rate community dimensions impacting social determinants of health, respondent mean scores were between 2.93 and 3.71 out of 5, indicating overall "average" or "good" ratings. Education and health and healthcare were seen as the strongest dimensions.

Survey Participants

Survey participants were asked to indicate the counties and populations that they and/or their organization serve. Respondents could select more than one option, therefore, percentages may equal more than 100%.

Nearly three-quarters of key informants indicated that they served Burlington County, the home county of Deborah Heart and Lung Center. Half of key informants served Ocean County, while approximately 40% served other geographic areas. Other areas served by informants included neighboring New Jersey counties, parts of the Mid-Atlantic and Northeast regions (PA, NJ, DE, MD, VA), and all of the United States.

Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Burlington County	73.3%	22
Ocean County	50.0%	15
Other	36.7%	11

*Key informants were able to select multiple populations. Percentages do not add up to 100%.

Nearly half of key informants indicated that they served all populations. The most commonly served special population groups were seniors/elderly and children/youth. “Other” populations served included veterans and the business community.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Not Applicable (serve all populations)	46.7%	14
Seniors/Elderly	43.3%	13
Children/Youth	40.0%	12
Disabled	30.0%	9
Families	30.0%	9
Low Income/Poor	30.0%	9
Women	30.0%	9
Latinx	23.3%	7
Men	23.3%	7
Black/African American	20.0%	6
Uninsured/Underinsured	20.0%	6
Other	20.0%	6
Homeless	13.3%	4
LGBTQ+ Community	10.0%	3
American Indian/Alaska Native	6.7%	2
Asian/Pacific Islander	6.7%	2
Immigrant/Refugee	3.3%	1
Migrant Workers	3.3%	1

*Key informants were able to select multiple populations. Percentages do not add up to 100%.

Health Perceptions

Choosing from a wide-ranging list of health issues, key informants were asked to rank order what they perceived as the top three health concerns impacting the population(s) they serve. An option to “write in” any issue not included on the list was provided. The top responses are depicted in the table below. The table is rank ordered by the percentage of respondents that selected the issue within the top three health concerns. The number of informants that selected the issue as the #1 health concern is also shown. Note: Participants were able to select multiple options, and percentages do not equal 100%.

Nearly 60% of informants chose cancers within the top three health concerns, and 17% of informants selected it as the #1 health concern. While fewer informants selected substance use disorder and heart disease and stroke within the top three health concerns, more informants (24%) selected them as the #1 health concerns. Overweight and obesity was selected as a top three health concern by 40% of informants, and the #1 health concern by 17% of informants.

Top Health Concerns Affecting Residents

Ranking	Health Concern	Informants Selecting as a Top 3 Health Concern		Informants Selecting as the Top (#1) Health Concern	
		Percent*	Count	Percent	Count
1	Cancers	58.6%	17	17.2%	5
2	Substance use disorder	55.2%	16	24.1%	7
3	Heart disease and stroke	48.3%	14	24.1%	7
4	Overweight/Obesity	41.4%	12	17.2%	5
5	Diabetes	27.6%	8	6.9%	2
6	Mental health conditions	27.6%	8	3.4%	1
7	Alzheimer’s disease/dementia	6.9%	2	3.4%	1
8	Disability	6.9%	2	NA	NA
8	Tobacco use	6.9%	2	NA	NA
10	Respiratory disease	3.4%	1	3.4%	1

*Key informants were able to select multiple health concerns. Percentages do not add up to 100%.

Key informants were asked to similarly rank order what they perceived as the top three contributing factors to the health concerns they had indicated in the previous question. An option to “write in” any contributing factor not included on the list was provided. The top responses are depicted in the table below. The table is rank ordered by the percentage of respondents that selected the issue within the top three contributing factors. The number of informants that selected the issue as the #1 contributing factor is also shown.

Correlation between the percent of informants selecting a contributing factor within their top three choices and the percent of informants selecting a contributing factor as their #1 choice demonstrates consistent perspectives regarding the top selections: health habits and ability to afford healthcare. More than half of informants chose health habits and the ability to afford healthcare as top contributing factors to community health concerns, and 24% selected them as the #1 contributing factors. Drug/alcohol use was the third ranked contributing factor by approximately 40% of informants; 14% selected it as the #1 contributing factor.

Top Contributing Factors to Community Health Concerns

Ranking	Contributing Factor	Informants Selecting as a Top 3 Contributor		Informants Selecting as the Top (#1) Contributor	
		Percent*	Count	Percent	Count
1	Health habits (diet, physical activity)	55.2%	16	24.1%	7
2	Ability to afford healthcare (doctor visits, prescriptions, deductibles, etc.)	51.7%	15	24.1%	7
3	Drug/alcohol use	37.9%	11	13.8%	4
4	Stress (work, family, school, etc.)	24.1%	7	6.9%	2
5	Inadequate or no health insurance	24.1%	7	3.4%	1
6	Poverty	20.7%	6	3.4%	1
7	Availability of health and wellness programs	10.3%	3	6.9%	2
7	Unemployment	10.3%	3	6.9%	2
9	Social support (family, friends, social network)	10.3%	3	3.4%	1
10	Health literacy (ability to understand health information)	10.3%	3	NA	NA

*Key informants were able to select multiple contributing factors. Percentages do not add up to 100%.

Informants were asked to share open-ended feedback about community health concerns and contributing factors. Many informants spoke to the growing impact of drug use disorder on the community. Others acknowledged disparities among low-income and elderly populations as root causes of health concerns. Verbatim comments by key informants are included below.

- > *“Many low-income people or elderly do not have access to transportation, nor can they afford it. We need a train system like they have in major cities.”*
- > *“Stress levels are high for most residents in this area so it is hard for people to find time to prioritize their health (diet, exercise, rest, etc.). Income levels often force individuals to work more than one job as well. Inadequate insurance for senior family members also can leave families trying to personally care for elders while juggling a job.”*
- > *“Substance abuse has increased, I believe, and the number of healthcare providers that can actually treat those with addictive disorders is very low. Many just keep prescribing opioids rather than treating the disease of addiction... with medical assisted therapy. Doctors don’t want to go through the training, and particularly in Ocean County, the number of doctors with the license to do this is extremely low and the need is high.”*

Community Access

Key informants were asked to rate their agreement to statements pertaining to access to care and other community services using a scale of (1) “strongly disagree” to (5) “strongly agree.” Their responses are outlined in the table below.

The ability of residents to receive specialty medical care when needed received the highest mean score among access indicators. Residents accessing a regular primary care provider received the next highest mean score, however, nearly 40% of informants had neutral perceptions of this indicator, indicating they “neither agree nor disagree.”

Approximately 37% of informants “agreed” that the community they serve is healthy and 17% “agreed” that residents prioritize their health. Informants identified the negative impact of social determinants of health, including access to transportation, housing, and nutritious food, as key contributors to poor health outcomes. These social determinants received the lowest mean scores by informants across all community access indicators.

More than 40% of informants “agreed” that residents can get help with social needs when they need it. Approximately one-quarter of informants “disagreed” or “strongly disagreed.”

Community Access Indicators in Descending Order by Mean Score

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Mean Score
Residents can receive specialty medical care when they need it.	3.3%	10.0%	23.3%	60.0%	3.3%	3.50
Residents have a regular primary care provider for healthcare.	3.3%	13.3%	36.7%	46.7%	0.0%	3.27
I would describe the community as healthy.	0.0%	20.0%	43.3%	36.7%	0.0%	3.17
Residents feel safe in their neighborhoods.	3.3%	13.3%	46.7%	36.7%	0.0%	3.17
Residents can get help with social needs when they need it.	3.3%	23.3%	30.0%	43.3%	0.0%	3.13
Residents experience equity related to race, ethnicity, gender, cultural, and religious preferences.	3.3%	16.7%	53.3%	23.3%	3.3%	3.07
Residents prioritize their health and wellness.	0.0%	33.3%	50.0%	16.7%	0.0%	2.83
Residents are able to regularly access and afford nutritious foods.	3.3%	43.3%	33.3%	20.0%	0.0%	2.70
Safe housing is affordable and available.	26.7%	36.7%	26.7%	10.0%	0.0%	2.20
Residents can easily use public transportation to get to places in our community, e.g. stores, work, medical appointments, pharmacy, etc.	33.3%	50.0%	6.7%	10.0%	0.0%	1.93

Informants provided the following comments related to community access.

- > *“College students have great difficulty accessing these services in Burlington County: housing, transportation, social services (not entitled to many services).”*
- > *“I feel many residents use urgent care and emergency departments still for routine care. The housing in the area seems very high priced, although I know there are some specific low-income housing areas. There are many food stores in our area, however, many of our students are from Camden County and there is a real issue of food insecurity there. I feel the elderly have difficulty getting help with social needs.”*
- > *“Limited public transportation affects access to food banks and social services and healthcare.”*
- > *“Low income affordable housing is difficult to find in Burlington County.”*
- > *“Residents who are low-income have difficulty getting the care that they need. Older adults may not realize that there are services available for them and do not apply for them.”*
- > *“Sometimes state policies prevent residents from obtaining benefits when they need them. Safe housing is not affordable anymore.”*

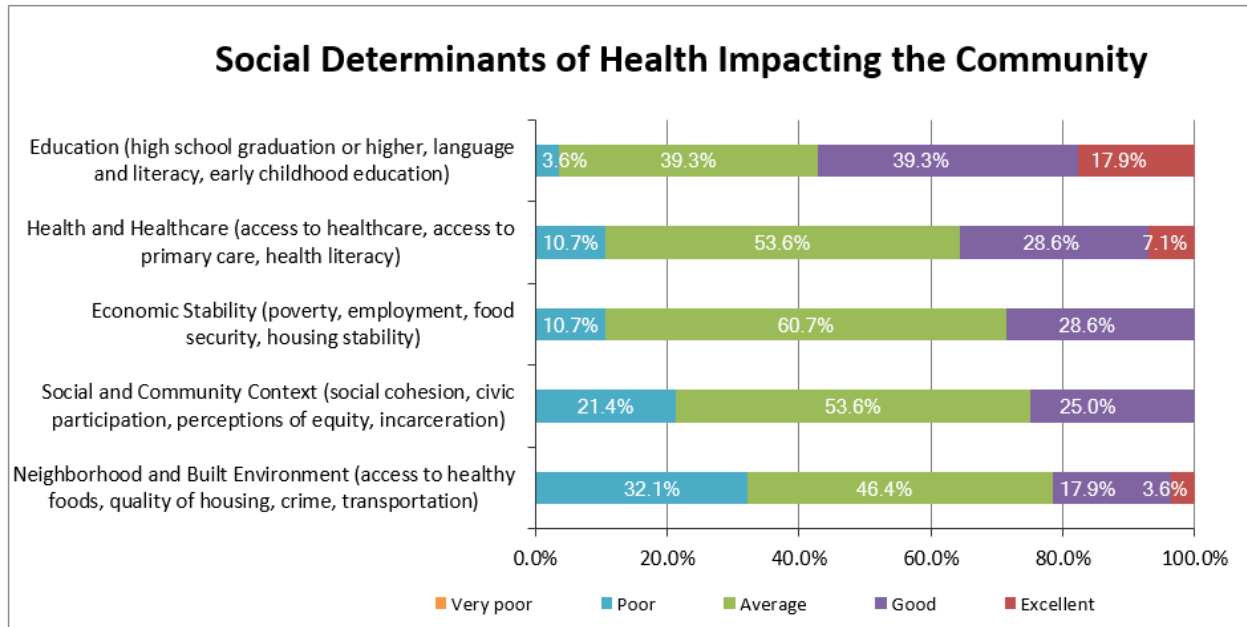
Social Determinants of Health

Healthy People 2020 defines social determinants of health as conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, function, and quality of life outcomes and risks. Informants were asked to rate five community dimensions that most highly impact social determinants of health: economic stability; education; health and healthcare; neighborhood and built environment; and social and community context using a scale of (1) “very poor” to (5) “excellent.”

The mean score for each dimension is listed in the table below in rank order, followed by a graph showing the scoring frequency. Mean scores were between 2.93 and 3.71 out of 5, with most respondents rating the listed dimensions as “average” or “good.” Education was seen as the strongest community dimension, while neighborhood and built environment was seen as the weakest community dimension.

**Ranking of Community Dimensions Impacting Social Determinants of Health
in Descending Order by Mean Score**

Ranking	Community Dimension	Mean Score
1	Education	3.71
2	Health and Healthcare	3.32
3	Economic Stability	3.18
4	Social and Community Context	3.04
5	Neighborhood and Built Environment	2.93



Key informants noted that while Burlington and Ocean Counties overall have positive social determinants of health, disparity exists within individual communities. Specific comments by informants are included below.

- > *“Looking at Ocean County as a whole, we are better than other areas; however, this masks the needs in some of the zip codes/census tracts where there are people in poverty.”*
- > *“There probably is a wide range of factors, and ratings vary, in different towns and neighborhoods.”*

Leveraging Community Resources to Impact Health

Key informants were asked what resources are missing in the community that would help residents optimize their health. Respondents could choose as many options as they saw as needed, therefore, percentages do not equal 100%.

Approximately 60% of informants chose affordable housing and transportation options as missing resources within the community. Mental health services and healthy food options were chosen as missing resources by more than 50% of informants. Substance abuse services rounded out the top five selections with nearly 50% of informants identifying it as a missing resource.

Top Missing Resources within the Community to Optimize Health

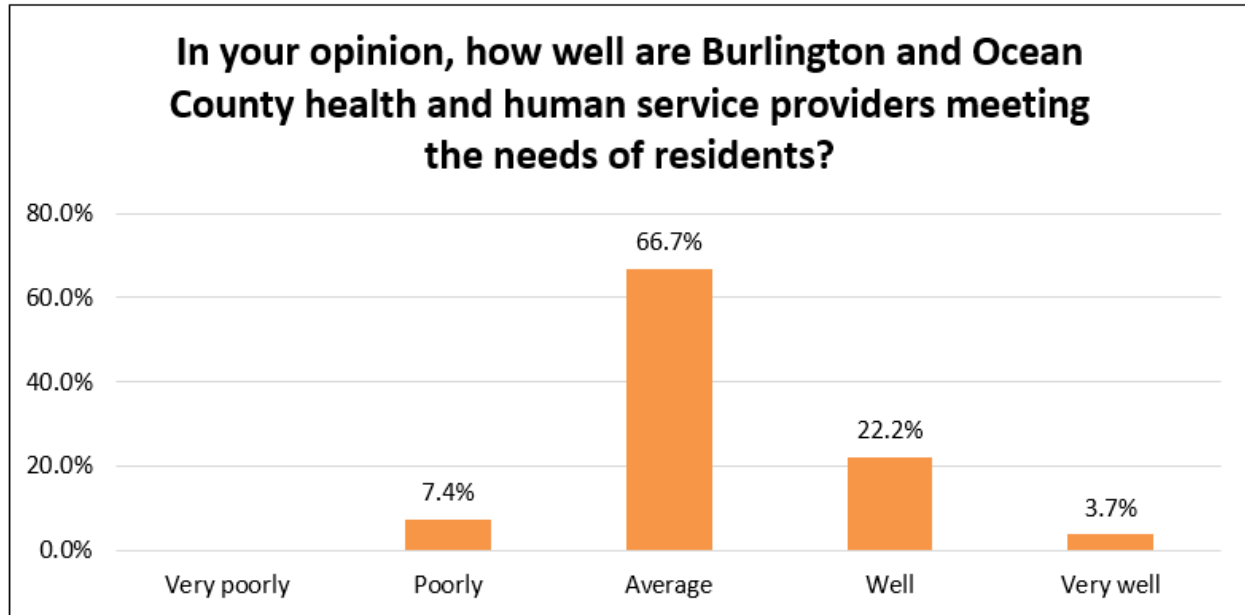
Ranking	Resource	Percent of Informants	Number of Informants
1	Affordable housing	59.3%	16
1	Transportation options	59.3%	16
3	Mental health services	55.6%	15
4	Healthy food options	51.9%	14
5	Substance abuse services	48.1%	13
6	Health and wellness education and programs	33.3%	9
7	Home healthcare services	25.9%	7
7	Multi-cultural or bilingual healthcare providers	25.9%	7
7	Social services assistance (housing, electric, food, clothing)	25.9%	7
10	Adult education (GED, training, work force development)	22.2%	6
10	Community support groups	22.2%	6

*Key informants were able to select multiple contributing factors. Percentages do not add up to 100%.

Specific comments related to missing resources in the community are included below.

- > *“We have everything that I checked, but not enough.”*
- > *“I was looking for a home health aide that was Spanish speaking for one of my clients who accepted NJ Horizon Health. It was a major headache and tedious task.”*
- > *“Healthy food options are available, but once again not affordable to some of the population.”*

Informants were asked to rate Burlington and Ocean County health and human service providers on how well they are meeting the needs of residents, using a scale of (1) “very poorly” to (5) “very well.” Approximately 67% of informants rated providers as “average,” while 26% said they are doing “well” or “very well.”



Lastly, informants were asked to share any other insights that could help improve health among residents in the Burlington and Ocean County communities. Informants provided the following suggestions.

- > “[Need] Increased employment and job-related health insurance.”
- > “Maybe offer a mobile clinic to different site locations that would be more accessible to parents with small children.”
- > “There needs to be some increase in capacity and resources to assist some of the members in the community.”

Key Informant Survey findings were considered in conjunction with statistical secondary data to determine health priorities. Key Informant Survey data is valuable in informing community strengths and gaps in services, as well as wider community context for secondary data findings. Additional research collected as part of the 2019 CHNA are summarized in the following report sections.

Community Survey Results

Background

A Community Survey was conducted with residents of Burlington and Ocean Counties to gather insights into health status, risk behaviors, barriers to accessing health services, and the health and social needs of community members. The survey was conducted from March through July 2019 with adults aged 18 or over. The survey was made widely available to the community as an electronic link using print ads, websites, email, and social media. Paper surveys were also made available and shared by community organizations. The survey was not intended to be a representative sample of the greater community, but rather provide general insights into respondents' perceptions and health status.

Summary of Findings

Common strengths shared or perceived among survey participants are outlined below:

- > Less than 2% of respondents were uninsured and 87% of respondents reported having a primary care physician or personal doctor.
- > Less than 7% of respondents used urgent care clinics as their medical home, while 85% of respondents used a doctor's office as their medical home.
- > Only 4% of respondents identified "no transportation" as a barrier to receiving medical services; 93% of respondents used a personal car to get to medical appointments.

Areas of opportunities were also indicated and are outlined below for improvement:

- > While 87% of respondents had a regular doctor, 21% had not visited a doctor for a routine preventive check-up within the past year.
- > Respondents indicated that lack of convenient appointment times are a key barrier to accessing care. Other barriers were perceptions of "feeling healthy," lack of available appointments, and inability to afford care (copays, deductibles, prescriptions, etc.).
- > Heart disease and aging-related issues were identified as the top community health concerns by 36% of respondents. Other top health concerns according to respondents were overweight/obesity and substance abuse.
- > Approximately 29% of respondents rated outlets for physical activity and healthy food options as the top missing or lacking resources in the community. Mental health services were chosen as the top missing resource in the community by 25% of respondents.
- > Within the past month, more than 1 in 10 respondents reported being worried about running out of food before they had money to buy more. Approximately 1 in 5 respondents ate less than they desired and/or were not able to eat a balanced meal because they could not afford food.

Demographics

A total of 789 community members completed the survey. The largest percentage of respondents resided in zip code 08015, Browns Mills (24.6%), which is the home zip code of Deborah Heart and Lung Center. The majority of respondents were females (80%) and Whites (78%). The most represented age groups were 55-64 (31%) and 65+ (23%). Approximately 7% of respondents were active duty military and/or had an immediate family member who actively served. Half of respondents (50%) had ever served in a branch of the armed forces. Demographic data for all survey respondents is shown in the following charts.

Top 10 Zip Codes of Residence

Zip Code	County	Percent	Count
08015, Browns Mills	Burlington	24.6%	194
08088, Vincentown	Burlington	8.2%	65
08060, Mount Holly	Burlington	4.7%	37
08757, Toms River	Ocean	4.1%	32
08054, Mount Laurel	Burlington	3.8%	30
08068, Pemberton	Burlington	3.0%	24
08759, Manchester Township	Ocean	3.0%	24
08016, Burlington	Burlington	2.8%	22
08753, Toms River	Ocean	2.8%	22
08048, Lumberton	Burlington	2.4%	19

Respondent Demographics

	Percent	Count
Gender		
Female	80.1%	632
Male	19.8%	156
Gender Fluid	0.1%	1
Transgender	0.0%	0
Age		
18-24	2.5%	20
25-34	10.1%	80
35-44	13.7%	108
45-54	19.5%	154
55-64	31.3%	247
65+	22.8%	180

Respondent Demographics cont'd

	Percent	Count
Race/Ethnicity		
White or Caucasian	77.7%	613
Black or African American	10.4%	82
Latinx	4.7%	37
Asian or Asian American	4.3%	34
Other (please specify)*	2.2%	17
American Indian or Alaska Native	0.5%	4
Native Hawaiian or other Pacific Islander	0.3%	2

*Most common responses: Two or more races, multi-racial

Military Association

	Percent	Count
Are you or an immediate member of your family active duty military?		
Yes	6.8%	54
No	93.2%	735
Have you or an immediate member of your family ever served in a branch of the armed forces?		
Yes	50.4%	398
No	49.6%	391

About 98% of survey respondents reported that they had health insurance. Respondents were asked to “check all that apply” in indicating their insurance provider. Approximately 72% of respondents indicated private health insurance coverage, including employer-based and self-purchased. About 29% of respondents indicated federal or state subsidized programs including Medicare and/or Medicaid. “Other” insurance types indicated by respondents included specific providers such as Aetna, AARP, United Healthcare, and Medicare supplements, among others, which may have been private or public programs.

Health Insurance Coverage

	Percent*	Count
Type of Insurance		
Private insurance (employer-based or purchased)	72.4%	571
Medicare	22.9%	181
Other (please specify)	7.6%	60
Military (VA or Tricare)	7.5%	59
Medicaid/NJ Family Care	6.1%	48
None/Uninsured	1.9%	15
Indian Health Services	0.1%	1

*Respondents were able to select multiple options. Percentages do not add up to 100%.

Health insurance coverage can impact the number of individuals who have a regular primary care provider and receive routine care. Approximately 13% of respondents did not have a regular primary care doctor, and 21% had not visited a doctor for a routine preventive check-up within the past year.

Health Insurance and Preventive Care

	Percent	Count
Do you have one person you think of as your primary physician or personal doctor?		
Yes	86.7%	684
No	13.3%	105
How long has it been since you last visited a doctor for a routine preventive checkup?		
Within the past year	78.8%	622
Within the past 2 years	11.9%	94
Within the past 5 years	4.9%	39
5 or more years ago	3.8%	30
Never	0.5%	4

Respondents primarily sought medical care from a doctor's office. Seven percent of respondents reported using urgent care clinics as their medical home. The most common health systems used by respondents included Deborah (53%) and Virtua (50%). Virtua Memorial Hospital is located within a 20 minute drive of Browns Mills, the residence of 25% of respondents. "Other" health systems indicated by respondents included Capital Health, Jefferson, Penn Medicine, and CentraState. Nearly all respondents (93%) used a personal car to get to medical appointments. "Other" transportation options used by respondents included Ocean Ride and LogistiCare.

Respondents could choose multiple reasons for not receiving needed medical services. More than half (57.5%) noted that appointment times are not convenient, with limited night or weekend hours. Approximately one-quarter of respondents identified the following barriers to receiving care: they feel healthy; appointments are not available; and/or they cannot afford care (copays, deductibles, prescriptions, etc.). Among reasons chosen as "other," residents noted lack of time/busy schedules and inability to take time off of work.

Healthcare Access

	Percent	Count
Where is the main place you seek medical care?		
Doctor's office	84.7%	668
Urgent care clinic	6.7%	53
Community clinic or Federally Qualified Health Center (FQHC)	3.4%	27
Other (please specify)	2.5%	20
Hospital emergency room	2.3%	18
Pharmacy	0.4%	3
What hospital/health system(s) do you use?*		
Deborah Heart and Lung Center	52.7%	414
Virtua	50.3%	395
Other (please specify)	17.1%	134
RWJ Barnabas Health	12.6%	99
Lourdes Health System	12.0%	94
Cooper University Health Care	11.3%	89
Hackensack Meridian Health	7.8%	61
Southern Ocean Medical Center	4.6%	36
What is your main form of transportation to get to medical appointments?		
Personal car (drive myself)	93.4%	737
Family member/friend	4.3%	34
Other (please specify)*	0.9%	7
Public transportation (bus, railroad)	0.6%	5
Rideshare program (senior, disabled)	0.3%	2
Taxi/Uber/Lyft	0.3%	2
Walk or bike	0.3%	2

*Respondents were able to select multiple options. Percentages do not add up to 100%.

Healthcare Access cont'd

	Percent	Count
What are the 3 most common reasons that you do not receive medical services that you need?*		
Appointment times are not convenient (no night/weekend hours)	57.5%	279
Feel healthy ("Don't need to go to the doctor")	28.2%	137
Appointments are not available	26.6%	129
Inability to pay (copays, deductibles, prescriptions, no insurance)	23.3%	113
Fear of diagnosis or treatment	18.8%	91
Lack of providers available in the community	14.8%	72
Difficulty navigating the healthcare system	13.2%	64
Lack of awareness of preventive care (checkups, screenings)	8.2%	40
Other (please specify)**	7.2%	35
Fear of doctor(s)	4.3%	21
No transportation	3.7%	18
No childcare	3.5%	17
Language barriers	0.6%	3

*Respondents were able to select multiple options. Percentages do not add up to 100%.

Choosing from a wide-ranging list of health issues, respondents were asked to identify the three biggest health concerns for residents of their community. The top three health concerns identified by respondents were heart disease (36%), aging-related issues (36%), and overweight/obesity (34%). It is worth noting that one-third of respondents also selected substance abuse as a top community health concern.

Top 10 Community Health Concerns

Ranking	Community Health Concern	Percent	Count
1	Heart disease	36.1%	285
2	Aging-related issues (e.g. dementia, impairment, isolation)	36.0%	284
3	Overweight/Obesity	33.8%	267
4	Substance abuse	32.8%	259
5	Cancers	30.5%	241
6	Diabetes	28.9%	228
7	High blood pressure	25.6%	202
8	Mental health conditions	20.2%	159
9	Disability	9.0%	71
10	Tobacco use	8.4%	66

*Respondents were able to select multiple options. Percentages do not add up to 100%.

Respondents were asked what resources are missing or lacking in the community that would help improve their health. Respondents could choose as many options as they saw as needed. The top 10 responses are shown below. Approximately 29% of respondents chose outlets for physical activity and healthy food options. Mental health services were chosen as missing resources by 25% of respondents.

Top 10 Missing or Lacking Resources to Improve Health

Ranking	Community Missing Resource	Percent	Count
1	Outlets for physical activity	28.7%	212
2	Healthy food options	28.6%	211
3	Mental health services	25.4%	188
4	Community health screenings	22.9%	169
5	Affordable housing	21.4%	158
6	Health and wellness education and programs	20.2%	149
7	Transportation options	17.6%	130
8	Senior services	16.9%	125
9	Dental care	15.8%	117
10	Community support groups	15.0%	111

*Respondents were able to select multiple options. Percentages do not add up to 100%.

Access to healthy food options is an indicator of food insecurity, defined as being without a regular source of sufficient and affordable nutritious food. Within the past month, 15% of respondents reported being worried about running out of food before they had money to buy more. Approximately 21% ate less than they desired and 18% were not able to eat a balanced meal because they could not afford food.

Food Insecurity Experienced in the Past Month

	Percent	Count
Did you worry that food at home would run out before your family got money to buy more?		
Often	3.2%	25
Sometimes	13.1%	103
Never	83.8%	661
Did you have to eat less because your family didn't have enough money to buy food?		
Often	2.7%	21
Sometimes	17.9%	141
Never	79.5%	627
How often were you not able to eat a balanced meal because your family didn't have enough money?		
Often	4.6%	36
Sometimes	13.7%	108
Never	81.7%	645

Lastly, respondents were asked to share their awareness of the programs and services offered by Deborah. Consistent with Deborah's specialty area, respondents were most aware of cardiology, cardiac rehabilitation, and pulmonology services. Respondents were least aware of Deborah's oncology services, hematology clinic, and HeroCare Connect™. HeroCare Connect™ is a partnership program with Cooper University Health Care to increase access to specialty medical services for active duty/retired military, activated national guardsmen, veterans, and family members of any current or former military members across southern New Jersey.

Respondents Who Are Aware of Deborah Services and Programs

Service or Program	Percent	Count
Cardiology (diagnostic, interventional, surgical)	96.8%	732
Cardiac Rehabilitation	84.1%	636
Pulmonology	79.1%	598
Vascular Services	75.1%	568
Pulmonary Rehabilitation	69.6%	526
Peripheral Arterial Disease (PAD) Screenings	69.2%	523
Sleep Center	69.2%	523
Sudden Cardiac Arrest Screenings for Teenagers	64.0%	484
Pediatric Cardiology	63.8%	482
Women's Health Expo	61.1%	462
Diabetes	60.1%	454
Electrophysiology	59.0%	446
Imaging	57.9%	438
Vein Center	53.7%	406
Bariatric Surgery	53.6%	405
Wound Care	52.0%	393
Smoking Cessation Program	48.1%	364
Physical Therapy	46.4%	351
Hyperbaric Services	45.2%	342
"Gift from Captain Buscio" Program	40.6%	307
HeroCare Connect™	36.6%	277
Hematology Clinic	36.4%	275
Oncology Services	27.6%	209

Community Survey findings were considered in conjunction with statistical secondary data and Key Informant Survey findings to determine health priorities for the Deborah service area. Community Survey data is valuable in assessing the community's perception of health needs and readiness to take on issues collectively. Additional research collected as part of the 2019 CHNA are summarized in the following report sections.

Partner Forum Summary

Background

The Partner Forum was held on Tuesday, June 25, 2019 at Deborah's Winderman Auditorium in Browns Mills. A total of 21 people attended representing Deborah, health and social service agencies, local government, military personnel, and civic organizations. The objective of the forum was to share data from the CHNA and garner feedback on community health priorities, as well as opportunities for collaboration among partner agencies.

Research from the CHNA was presented at the session with audience discussion and questions. Large and small group dialogue was facilitated to discuss research findings, existing resources and initiatives to address priority areas, and new or innovative opportunities for cross-sector collaboration.

A summary report of the outcomes of the large and small group discussion follows.

Large Group Discussion

The presentation of CHNA findings culminated with a list of three key community health needs and contributing factors derived from CHNA data analysis. The list of needs is shown below. Social determinants of health were recognized as cross-cutting factors across all health issues.

1. Access to Care
 - a. Affordability
 - b. Latinx uninsured
 - c. Military personnel, veterans
 - d. Ocean County provider availability

2. Mental Health/Substance Use Disorder
 - a. Depression
 - b. Suicide
 - c. Overdoses, drug-induced deaths (heroin, fentanyl)

3. Chronic Conditions
 - a. Heart disease, cancer
 - b. Emergency department usage, costs
 - c. Overweight/Obesity
 - d. Senior chronic condition comorbidities
 - e. Disparities: Racial/Ethnic, Ocean County

Participants agreed that these issues are the top health concerns for Burlington and Ocean County residents. Through large group discussion, participants also identified vaping as a community health concern, contributing to chronic conditions and behavioral health needs, and children's health as a cross-cutting issue.

Small Group Discussion

Following large group dialogue and consensus on priority health needs for the community, facilitators led small group table discussions for each priority area. A common discussion guide was used to facilitate discussion and capture participant insights.

Participants were instructed through a four-part facilitation that asked the following questions:

- 1) What are some of the striking findings from the CHNA research? Do the findings reflect what you witness in the community? Why or why not?
- 2) How have you or your organization been successful in improving outcomes related to the priority health areas? List specific programs, initiatives, partnerships, etc.
- 3) What are new or innovative programs that you or your organization have or plan to implement to address the priority health areas? What programs are you aware of in other communities that this region should explore?
- 4) Based on your conversation, where do you see potential for further cross-agency or cross-sector work to improve the health of residents?

The following section summarizes key themes and specific comments from the small group discussion grouped by identified community health need.

Access to Care

- > Funding for health insurance enrollment navigators declined, and current enrollment services are primarily only offered via hotlines. The Center for Family Services is one of the few organizations still offering trained enrollment navigators to assist residents.
- > Community resource connection services like Aunt Bertha and 211 continue to be underutilized by providers and residents. Lack of awareness, lack of internet service, and difficulty navigating the systems are barriers to using these resources.
- > Social service websites and application forms are intimidating for some residents; navigators are needed to assist in identifying and accessing available services.
- > Developmental disabilities and intellectual disabilities are growing needs in the community, requiring intensive care and social supports.
- > Lack of transportation prevents people from receiving care. Public transportation services are difficult to implement due to the large, rural geography of the counties. The Ocean County Health Department is partnering with the Department of Transportation to increase awareness of available public transportation routes. They are also exploring partnerships with Uber and Lyft to provide medical transportation, establishing schedules and routes along the NJ Transit lines.
- > Television stations like Channel 19, serving Pemberton Township, Pemberton Heights and Joint Base MDL, and Family Success Centers, “one-stop” shops for wrap-around resources and supports, may be used to increase awareness of available community services.
- > The New Jersey Hospital Association is assessing NowPow, a platform to share, track, and coordinate social support referrals among medical patients, for implementation among providers.

- > Walmart is an underutilized partner in community health promotion efforts. The retailer offers health risk assessments at kiosks located in the stores that could be used to share health information and resources. Walmart also employs health and wellness directors as part of their pharmacy services. The Ocean County Health Department has partnered with Joseph Michael, a Market Health and Wellness Director in Toms River.

Mental Health/Substance Use Disorder

- > Burlington County has a higher reported rate of mental health providers per 100,000 population, but the rate does not reflect specific provider shortages (e.g. psychiatrists), long wait times for appointments, or providers that do not accept insurances.
- > Lack of pediatric mental healthcare in the community causes military families to be reassigned to areas with available services.
- > Lack of inpatient mental healthcare in the community contributes to higher ED utilization for behavioral health conditions.
- > Schools are seeing growing mental health concerns among the student population, but have limited resources to address them. School-based therapists, in particular, are a missing resource.
- > The Opioid Overdose Recovery Program (OORP), a 2-year funded project by the Governor's Council on Alcoholism and Drug Abuse and the Department of Children and Families, utilizes Recovery Specialists and Patient Navigators to engage individuals reversed from an opioid overdose to provide non-clinical assistance, recovery supports and referrals for assessment and treatment. Funding for the program is in jeopardy due to high patient refusal of OORP services.
- > Individuals with chronic pain and injuries have trouble obtaining prescription opioids due to new prescribing practices; alternative pain management options are needed.
- > Use of Xanax and alcohol is increasing among adolescents between the ages of 12 and 16; heroin use is increasing among young adults age 18 or over.
- > Federally Qualified Health Centers may not accept TRICARE insurance coverage, limiting care access for veterans, particularly in rural areas.
- > Effective July 1, 2019, Robins' Nest, Cape Counseling Services, and NewPoint Behavioral Health Care merged to become Acenda. FamCare, Inc., offering affordable family planning services, will also join Acenda. As a result of the merger, Acenda will operate 56 locations across 10 NJ counties, offering more than 100 integrated, community-based programs for youth, families, and expectant parents.
- > The Burlington County Community Action Program exists to combat the causes and reduce the effects of poverty in Burlington County. The organization provides affordable housing programs, parent education, and Head Start, among others.
- > The Pinelands Family Success Center offers free activities, workshops, and activities, including youth enrichment, stress management and life skills training, parent support and education, and linkages to community resources, among others.
- > Hope One, an innovative mobile substance abuse recovery vehicle launched in 2017 to help fight opioid and heroin addiction, is expanding into other counties in NJ, including Burlington County.

- > Libraries and police departments are key resource hubs; there is opportunity to employ social workers at these locations to provide resources and education and increase awareness of services.
- > Activities to engage residents in their community and improve health are needed in both counties. Participants recommended a community wellness center equipped with a pool, free movies on the beach, and a fishing derby. Activities may be partially funded through grant dollars, as available.

Chronic Conditions

- > Adult diabetes prevalence declined in both counties, but diabetes prevention continues to be a community focus due to increases in the number of individuals with pre-diabetes. Access and affordability of insulin are also growing concerns.
- > Chronic condition education is needed, including signs and symptoms and disease management. Additionally, care coordinators or community health workers are needed to follow-up with individuals with chronic disease to assist them in applying disease management tools.
- > Chronic condition prevalence is increasing among the military population; greater prevention efforts are needed for personnel and their families.
- > Parents of children with asthma may not understand the seriousness and complexity of the disease, and compliance with asthma management tactics is difficult to track among patients. The American Lung Association promotes the Asthma-Friendly Schools Initiative, available to nurses, educators, school aides, etc., to create a comprehensive, long-term asthma management plan.
- > The American Lung Association's Better Breathers Club is a support group for individuals with lung disease. The program provides education, support, and tools to manage lung disease.
- > Yoga Power, an American Lung Association program, introduces yoga and breathing techniques to students and provides them with tools to help manage stress.
- > Harmonica playing is an effective way to improve outcomes for patients with COPD and other lung diseases, exercising the muscles needed to breathe and strengthening abdominal muscles for a more productive cough. The COPD Foundation and PEP (Pulmonary Empowerment Program) now offer the first nationwide harmonica program.
- > Vaping is becoming a significant public health issue, especially among youth, due to non-regulation and wide accessibility and availability of products. The American Lung Association has started "The Vape Talk," which includes a series of teen education and prevention videos.
- > Lack of access to affordable, healthy foods contributes to poor health outcomes and chronic disease. Fast foods are the only options for some busy families.
- > The Food Bank of South Jersey offers nutrition and diabetes management classes. A new pilot program also offers recipes and cooking demonstrations in food pantries to encourage the use of healthy foods.

- > The commissary at Joint Base MDL labels food options based on their nutritional value. A “recipe of the week” is also promoted, with all recipe ingredients easily accessible in one area.
- > The Beth Greenhouse, located at the RWJBarnabas Health Newark Beth Israel Medical Center, produces more than 5,000 pounds of produce each year. According to RWJBarnabas Health, “The Greenhouse is a unique way to educate community residents, provide year-round needed access to healthy foods, and offer job training opportunities to those with intellectual disabilities.”
- > The Virtua campus in Camden offers support groups for individuals managing chronic conditions at food pantry locations.
- > Recess Runners is a national program to encourage physical activity among youth. The program uses a world map to track students’ activity and help them reach their fitness goals. Participants recommended using Fitbit and other activity trackers to create more physical activity challenges for youth and adults.

Partner Forum results were reviewed with the CHNA committee and correlated with statistical secondary data, Key Informant Survey, and Community Survey findings to inform priority health needs and community health improvement strategies.

Focus Groups Summary

Background

As part of the 2019 CHNA, two Focus Groups were conducted with residents, one each in Burlington and Ocean Counties. The objectives of the Focus Groups were to define barriers to accessing healthcare services; better understand drivers or motivators for accessing preventative healthcare; explore individual perceptions and experiences with healthcare delivery and recommendations for improvement; and determine challenges that impact health and disease management. A total of 36 people participated in the discussion groups. Following is a breakdown of the locations and participants per group.

Focus Group Locations and Attendees

Three B's Bar and Bistro, Lakehurst: 14 attendees

John F. Kennedy Center, Willingboro: 22 attendees

Key Discussion Takeaways

Healthcare Provider Insights

- **Participants seek collaborative, personal relationships with their providers.** All but one participant had health insurance and a primary care provider. The individual without health insurance was a Deborah patient, and received financial assistance and care from the hospital. Participants valued providers who take the time to listen and talk with patients; provide feedback and monitoring of their health; and are up-to-date with new medical practices. Among African American participants, it was also important that their provider reflect their ethnicity and be aware of their unique health needs.
 - “I like that my doctor sits down with me, takes a personal interest, and knows more than just my diagnosis.”
 - “It’s important that my doctor looks like me [African American]. He knows about medications that don’t react well and recommends cancer screenings because we’re at higher risk.”
 - “My doctor is respectful. He educates me about my health and then lets me make my decision.”
- **Long appointment wait times, lack of provider engagement erode patient satisfaction.** Participants felt that their providers are “not as available” to them, and are rushed during appointments. Other negative perceptions of providers included lack of eye contact or engagement and being on their computer during the appointment.
 - “You need more than 10 minutes to express your health needs. I feel like just a number.”
 - “You wait so long for an appointment, but then there is not enough time with the doctor.”

- **Most patients can be seen in 1-2 days for emergent needs and within a week for specialty care.** While most participants could secure timely appointments for emergent needs, some participants noted waiting 4 to 5 days for an appointment. These individuals were often referred to urgent care, where “the service was good, but it’s more expensive.” Wait times for specialists are generally a few days to a week, with longer wait times for out of network specialists.
- **A number of hospital mergers occurred in New Jersey causing some patient dissatisfaction.** A few participants were frustrated that they were treated as new patients when their medical home was acquired by another system, having to fill out new patient paperwork and forms. The same participants were also frustrated that their provider now only refers within the system.
- **Participants were comfortable asking their health provider questions when they didn’t understand a diagnosis or treatment protocol.** Patients are more informed and ask more questions of their providers due to easy access to online medical knowledge. “People are more selective, more educated now. They’re more discerning of providers.”
- **Participants valued online medical portals, noting convenience, on-demand medication refills, and access to test results.**
 - “I like that the information follows you to other doctors.”
 - “It’s excellent. You can ask questions and get an answer right away.”
- **Participants were divided in their perceptions of the use and value of telehealth. Convenience for minor ailments or care requiring long travel time were positives. Quality and accurate diagnosis were of concern.** In general, participants were willing to try telehealth for minor concerns or follow-up appointments, but were hesitant to use it for advanced conditions or initial diagnostic appointments.
 - “If I say I have a sore throat, how are they going to look at my throat?”
 - “If quality is the same, I would be interested [in telehealth]. As long as there were no connection issues.”
- **Diversity and inclusion training and updated patient forms are needed to support the health of LGBTQ+ residents.** The LGBTQ+ community generally lacks a medical environment where they feel “welcomed, seen, and heard.” Updating patient intake forms is one of the first steps to providing inclusive care; recommendations are outlined below. As one participant noted, it is important that providers be educated on these updates, and address patients accordingly. “If doctors went out of their way to use the pronouns I was brave enough to provide, it would make me feel 100% myself.”

Recommendation for LGBTQ-Inclusive Patient Intake Forms:
 - Ask patients their preferred pronoun and gender identity
 - Ask patient sex as well as gender, or ask the gender assigned at birth
 - Include “non-binary” as a preferred gender identity
 - Include “Mx” as an option for titles prefixing a patient’s name

- **Healthcare costs, particularly prescription costs, are a significant barrier to care.** Deductibles and copays were concerns for participants, particularly for individuals with high deductible plans, but prescription costs were a top financial stressor. Participants reduced their prescription costs by using bulk mail order services, shopping local pharmacies for the best price, and searching for coupons. A few participants went out of the country for cheaper medications. Seniors were identified as among the most at risk for foregoing care or not following care instructions due to inability to afford prescriptions.
 - “I have a high deductible plan. Sometimes you have to use it. Other times, you have to put things [procedures] off.”
 - “I used to go in the donut hole in November. Then it was September, then it was May, and now it’s April.”
 - “My first question after heart surgery was, ‘Am I going to be on an expensive medication?’”
 - “The HSA is great, but if you don’t use it, you lose it. You have to budget plan for unanticipated expenses.”
 - “We have to prepare for our senior population. They’re living longer. If they can’t afford their medication, they start choosing between it and food.”

- **Participants want a better understanding of their bills and insurance coverage.** Participants had difficulty understanding medical bills, and would prefer itemized bills. A few participants had received incorrect bills due to wrong medical coding. These individuals called their provider office to correct the bill, but felt that many residents are not comfortable addressing billing concerns. Participants also had trouble understanding their insurance benefits, including their financial responsibility.
 - “I don’t know when my copay is due and when it’s not.”
 - “I would like to receive emails or alerts with an explanation of [health insurance] benefits for what I’m covered for.”
 - “The insurance company is constantly sending us information, but you get so much information. You could be overlooking it.”

Health Perceptions

- **Community activities and services, including parks, senior centers, food programs, and health education, were generally seen as robust in both Burlington and Ocean Counties.** Lack of awareness of services and cost limits participation among residents. In Willingboro, participants identified opportunities for additional health education programs in schools and quarterly health fairs and screenings, sponsored by the local health systems. Willingboro churches are ready partners in these activities.
 - “Activities can be expensive. People don’t have the funds to do things.”
 - “Ocean County offers a lot of services because of the seniors.”
 - “The Food Bank of South Jersey has a summer feeding program. It covers breakfast, lunch, dinner, and snack, but Burlington County is notorious for not participating.”
 - “We need to promote things that bring people together as a community.”

- **Lack of transportation limits access to community services.** The communities are primarily rural with limited public transportation options. Few participants had used services like Uber or Lyft, and those that had found them expensive. A few healthcare providers, including Deborah, offer volunteer medical transportation programs. These programs are valued by patients, but require coordination among drivers and patients. Patients often don't remember who drove them to the hospital or how to get back home.
- **Fast-paced, busy lifestyles and lack of quick, healthy food options are top barriers to living healthy. Cost of healthy foods is also a barrier to eating healthy.**
 - "Other communities have Whole Foods with organic breakfast bars. We don't have that here [Willingboro], we have McDonalds."
 - "There's no supermarket in Willingboro. The quality of fruits and vegetables at local markets is not good."
 - "We're not taking care of ourselves. We're so busy, we just grab what we can to eat."
 - "We need more healthy restaurants and food, but we need fast, healthy food."
- **Mental health concerns are "a big chunk of overall wellness," but services are lacking.** One participant with a Medicaid insurance plan stated, "We can't find a single psychiatrist in NJ for our daughter." Other participants shared that many insurance plans don't cover comprehensive mental health services. Community organizations, including churches, schools, and Burlington County Community Action Program, were identified as existing supports for individuals with mental illness.

Focus group findings were reviewed with the CHNA committee and correlated with statistical secondary data, Key Informant Survey results, Community Survey findings, and Partner Forum feedback to inform priority health needs and community health improvement strategies.

Evaluation of Community Health Impact from 2017-2019 Community Health Improvement Plan

In 2016, Deborah completed a CHNA and developed a supporting three-year plan for community health improvement to address identified health priorities. The strategies implemented to address the health priorities support our continued commitment to the health and well-being of the communities we serve.

Guided by the findings from the 2016 CHNA and input from key community stakeholders, Deborah leadership identified the following priorities for 2017-2019:

- > Linkages to Care
- > Chronic Disease Management
- > Cancer
- > Issues of Aging
- > Support the LGBTQ Community

The following section highlights Deborah's strategies to address these priorities.

CHNA Priority Area 1: Linkages to Care

Goal: Improve access to healthcare and assist in coordination of care.

Deborah collaborated with Landmark Health Care Facilities to construct a new Medical Office Building on Deborah's campus, and identify prospective tenants based on community healthcare needs. The new building, opened in 2018, is home to a host of health care services previously unavailable in the immediate service area, including an urgent care clinic, X-rays, a family medicine office, an outpatient pharmacy, physical therapy, and cardiac rehabilitation.

The first tenant in the new Medical Office Building was Central Jersey Urgent Care. The opening of the Urgent Care Center brought a needed service to the community, for both adults and pediatrics, and an alternative to avoidable emergency department visits.

Central Jersey Urgent Care Visits by Year

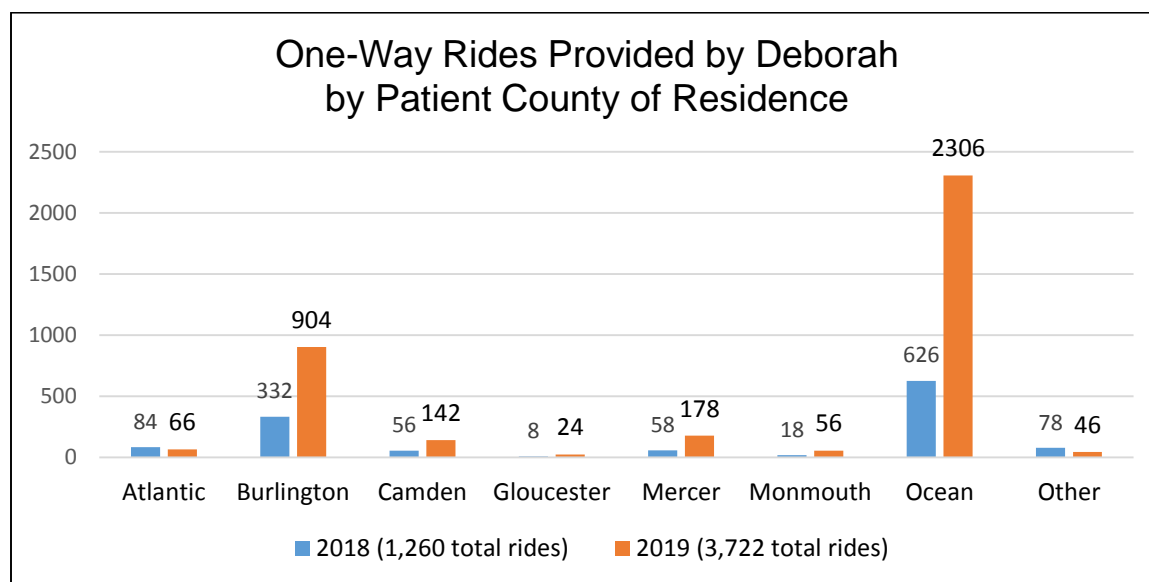
	2018 (Jul. 1 – Dec. 31)	2019 (Jan. 1 – Nov. 22)
Adults	4,115	8,846
Pediatrics	1,865	3,525

Deborah physical therapy services, provided by Ivy Rehab, opened in the new Medical Office Building in January 2019. Prior to their opening, physical therapy services were unavailable to residents of Deborah's immediate service area. Between January and October 2019, Ivy Rehab had 6,120 patient visits, averaging 29.7 patients per day in October.

The Deborah Cardiac Rehab Program opened in the new Medical Office Building in March 2019. The program offers state-of-the-art cardiac rehabilitative services, with top-of-the line

equipment and highly trained specialists to help patients who have recently had cardiac surgery, as well as patients with a variety of on-going cardiac conditions who would benefit from rehab services. Between March and October 2019, the program had 1,243 patient visits, averaging 8.6 patients per day in October.

Following the 2016 CHNA, Deborah conducted a comprehensive review of available patient transportation options and needs. In response to the identified needs, Deborah entered into an agreement with Stout Transportation Services in 2018 to provide medical transportation for Deborah patients in need of a ride. The service transports patients to and from their residence to Deborah Heart and Lung Center and Deborah affiliated practices. The following is a breakdown of the total one-way rides provided to patients by county of residence.



Note: "Other" counties include Bucks and Philadelphia in Pennsylvania and Cape May, Cumberland, Essex, Hudson, Hunterdon, Middlesex, Salem, and Somerset in New Jersey.

On September 13, 2019, Deborah partnered with Georgies Pharmacy to initiate a MEDS to BED program. The program allows Deborah providers to submit electronic prescription requests to Georgies Pharmacy, which are then filled and delivered to patient homes. The pharmacy further provides medication education and two follow-up calls to ensure patient adherence to medication instructions. Georgies Pharmacy is located in the new Medical Office Building on Deborah’s campus. Since the start of the program, 104 patients have used the service.

In January 2017, Deborah opened an Adolescent Medicine Clinic in partnership with Rowan School of Osteopathic Medicine. Adolescent medicine specialists from Rowan are available to evaluate adolescent patients for issues related to hypertension, obesity, hyperlipidemia, and nutrition. In May 2019, the practice started a new program, the "Healthy Heart Initiative."

Timely access to psychiatry services is limited in our service area, and nationwide, due to a shortage of available psychiatrists. To better meet the needs of our patients and providers,

Deborah implemented a telepsychiatry service to provide virtual access to urgent and emergent psychiatry services. This service, available all day, every day, provided access for 78 patients in 2018 and 62 patients from January to September 2019.

In August 2019, Deborah initiated a teleneurology program to better serve patients with acute ischemic stroke. Teleneurology allows providers to expedite the diagnosis of acute ischemic stroke and reduce loss of brain cells due to delayed intervention. Additional needed therapy services can also be facilitated by quickly accessing teleneurologists for evaluation and diagnosis. As of November 2019, four patients with ischemic stroke have been successfully evaluated and treated using the new teleneurology program.

Deborah supported seven specialty physician practices in the community, four of which opened during the 2017-2019 implementation cycle. The practices are listed in the following table.

Deborah Specialty Physician Practices and Appointments by Year

Practice Location	2017	2018	2019 (Jan. 1 – Nov. 22)
Burlington (opened Feb. 2019)	NA	NA	1,119
Diabetes Center, Browns Mills	6,509	6,912	5,770
Galloway (opened Apr. 2017)	2,641	4,000	3,773
Manahawkin	5,838	7,496	8,032
Mount Laurel (opened Feb. 2018)	NA	701	842
Tom's River	4,127	4,873	4,831
Whiting (opened Sept. 2018)	NA	NA	2,918
Total	19,115	23,982	27,285

Deborah designed and launched HeroCare Connect™, a program to provide priority access to medical specialty appointments for active duty and retired military, veterans, and their families. A partnership between Deborah and Cooper University Health Care, HeroCare Connect™ provides concierge navigation and patient services. Publically launched in April 2017 with the goal of providing non-routine specialty visits within 24-48 hours, HeroCare Connect™ has scheduled nearly 5,000 initial appointments and provided more than 1,500 complementary health screenings.

HeroCare Connect™ Initial Specialty Appointments by Year

	Appointments
June 1, 2017 – December 31, 2017	827
January 1, 2018 – December 31, 2018	1,595
January 1, 2019 – October 31, 2019	1,644

Deborah has established a number of successful partnerships to improve the health of community members. These partnerships have led to greater community health outreach,

membership in coalitions and alliances to collectively impact chronic disease-related needs, and distribution of Narcan to first responders. New partnerships or initiatives were forged with the following organizations during the 2017-2019 implementation cycle:

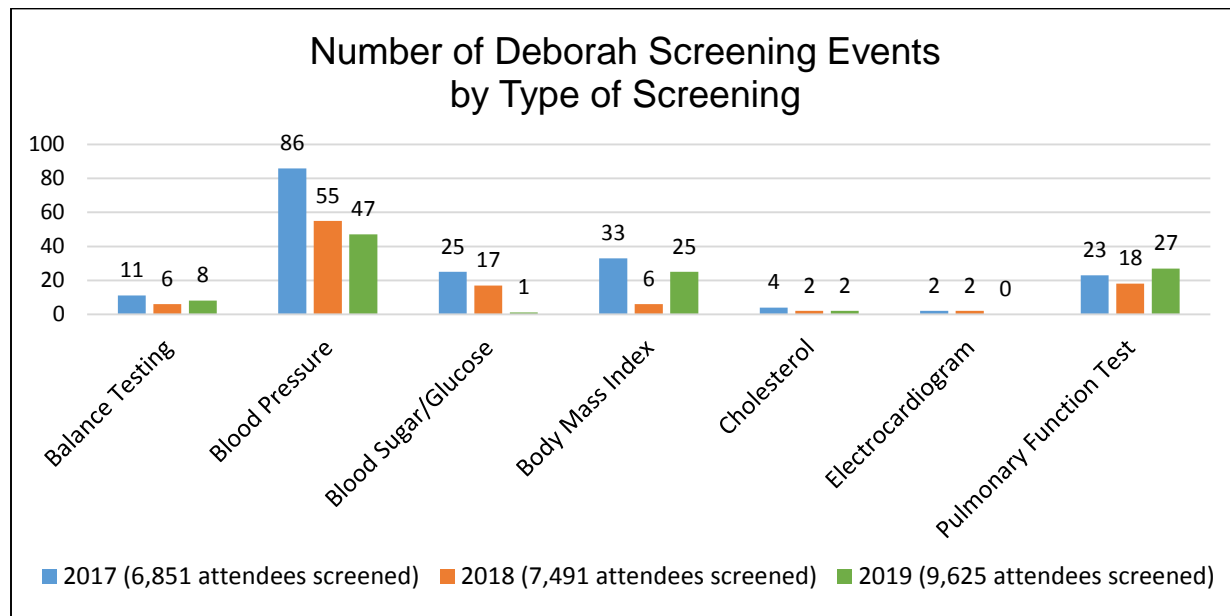
- Burlington County Health Department
- Capital Health System
- Central Jersey Urgent Care
- Cleveland Clinic Heart and Vascular Institute
- Centers for Medicare and Medicaid Services
- Cooper University Health Care
- DNV GL Healthcare
- Garden State Equality
- Georgies Family Pharmacy
- Humana Military
- Ivy Rehab Network
- Joint Base McGuire Dix Lakehurst
- Landmark Healthcare Facilities, LLC
- LeapFrog
- Ocean County Health Department
- New Lisbon Partnership
- New Jersey DOH
- New Jersey DHS
- NJHA Veteran Navigators
- Ocean County Foot and Ankle Surgical Associates
- Pemberton Community Library
- Society for Thoracic Surgeons
- Veterans Administration
- Wellness 360 Suite

CHNA Priority Area 2: Chronic Disease Management

Goal: Increase identification of and improve access to treatment for people with chronic disease.

Deborah provides complimentary screenings for residents across the age span, both at community events and in partnership with community organizations. Many of the screening events are held in partnership with Joint Base McGuire-Dix-Lakehurst and HeroCare Connect™, targeting active duty and retired military, veterans, and their families.

The following graph depicts the number and types of screenings provided by Deborah in 2017, 2018, and 2019. Additional screenings available to the community included sleep apnea, lung cancer, pulse oximetry, and peripheral artery disease (PAD), among others.



Note: Total attendees screened includes all individuals screened by Deborah, regardless of screening type. Data for 2019 includes screenings conducted from January to November.

Deborah, in partnership with community organizations, installed self-check blood pressure machines available for use by residents. The first machine was installed in the Ocean County Mall in 2017. Additional machines were installed in 2019 at the Mt. Laurel YMCA, the Katz JCC in Cherry Hill, and Matrix Fitness in Atlantic City. In addition to blood pressure screenings, the machines provide services for topics including BMI, heart health, sleep disorders, leg pain, eCookbook, women’s heart health, and physician locations.

The following is a breakdown of screenings and services by year.

Deborah Self-Check Machine Visits by Year

	2017	2018	2019 (Jan. 1 – Dec. 1)
Blood Pressure	16,640	16,123	19,215
BMI	1,944	915	2,740
Heart Assessment	1,267	891	748
Sleep Assessment	1,286	950	1,311
Leg Pain Assessment	1,046	695	1,002

Note: Data for 2017 and 2018 reflect only the Ocean County Mall location. Data for 2019 includes the Ocean County Mall, Mt. Laurel YMCA, Katz JCC, and Matrix Fitness.

Sudden Cardiac Arrest (SCA) is the number one cause of death in the nation. Sudden cardiac arrest in young athletes is most often secondary to structural and electrical causes. Deborah offers “Love Your Heart cardiac screenings” at no-charge to students between the ages of 12 and 19 to identify potential heart abnormalities that can lead to SCA.

Deborah offers two youth SCA screening events annually. The following is a breakdown of screening results from the SCA events held in 2017 and 2018.

Deborah Sudden Cardiac Arrest Screening Events (Youth 12-19 Years) by Year

	2017	2018	2019
Total Registered	378	241	127
No Shows	56	46	24
Electrocardiograms Performed	316	193	103
Echocardiograms Performed	51	29	5
Referrals to Pediatric Cardiologist/Primary Care provider	27	29	5

Deborah hosts an annual Women’s Health EXPO, attended by a variety of Deborah physicians and other health professionals. The event provides health screenings and information, and is held in conjunction with the American Heart Association’s Wear Red Day. The 2018 Women’s Health EXPO provided screenings for 1,568 women, summarized in the following table.

Deborah 2018 Women’s Health EXPO Screenings by Type

	Screenings
Blood Pressure	428
Body Mass Index	295
Cholesterol	242
Provider Consultation	200
Pulmonary Function Test	161
Lung Cancer Screening	100
Sleep Apnea Screening	100

Deborah also hosts an annual Peripheral Arterial Disease, or PAD, screening event. The event is held in September in recognition of PAD Awareness Month. Deborah’s PAD screening event includes an ankle-brachial index, a painless, noninvasive test that compares the blood pressure in the ankles with the blood pressure in the arms. Additional noninvasive testing is performed as needed. The following is a summary of total PAD screenings and follow-up by year.

Deborah PAD Screening Events by Year

	2017	2018	2019
Total Screenings	208	181	193
Follow-up Appointments	31	70	52

Deborah provides chronic disease educational materials at all community screening and outreach events. Individuals with abnormal screening results are provided information and instructions for follow-up care with the provider of their choice. Abnormal screening results of immediate concern result in a 911 emergency call. To encourage physician participation in screening events, Deborah added a requirement in all physician employment contracts, requiring participation in four community outreach events.

Deborah provides community speaking engagements on various health topics. From 2017 to 2019, Deborah hosted or participated in a combined 25 speaking engagements with total participation by 1,243 community residents. Health topics included *A Heart Healthy Diet/Lifestyle*, *Pediatric Cardiology Information and Education*, *Heart Health for Women*, and *What is a Pacemaker?*, among others.

CHNA Priority Area 3: Cancer**Goal: Increase identification of and improve access to treatment for people with cancer.**

Deborah's Multi-Disciplinary Oncology Clinic Program offers collaborative personalized outpatient appointments for case management of patients with tumors. The integrated team includes an Oncologist, Radiologist, Pulmonologist, Pathologist, Surgeon, Administrative Director, and other care team staff, allowing for an efficient approach to the evaluation of lung tumors. The team uses state-of-the-art technology such as Endobronchial Ultrasound (EBUS), offering real-time images in and around the lungs for diagnosing and staging lung cancer, as well as detecting infections and identifying inflammatory diseases.

Deborah Oncology Clinic Program offers lung cancer screening with a low-dose CT scan, targeting individuals who smoke or have a smoking history. Deborah screened 74 patients for lung cancer in 2017, 80 patients in 2018, and 52 patients in 2019 (Jan. to Nov.).

Deborah provided skin and oral cancer screenings and education in partnership with Cooper University Health Care, Joint Base McGuire-Dix-Lakehurst, and HeroCare Connect™ for military members and their families. In 2019, a total of 61 oral cancer screenings and 131 skin cancer screenings were provided.

CHNA Priority Area 4: Issues of Aging**Goal: Assist seniors in our immediate and primary services areas age successfully and maintain independence.**

Deborah partnered with the following community agencies to provide aging-related education and tools to the community and medical providers: Rowan University School of Osteopathic Medicine, New Jersey Institute for Successful Aging, Alzheimer's Association, and Delaware Valley Region. Educational materials were primarily identified from the US Preventative Services Task Force.

The Alzheimer's Association also shared their Cognitive Assessment Toolkit and patient education materials with Deborah care teams. The toolkit was employed by primary care physicians during Medicare annual wellness visits, and among specialty providers as applicable. Patient education materials were made available in both English and Spanish. Deborah further partnered with the Alzheimer's Association to bring educational programs and services to medical staff, with the goal of empowering them to conduct lifestyle and memory assessments among senior patients and promote available resources for aging at home.

Deborah's Social Services department has been proactive in identifying options for in-home, person-centered care, targeting patients with chronic illness. Deborah partners with Moorestown Visiting Nurses Association (VNA) and Holy Redeemer for home health service referrals. Both organizations have representatives onsite at Deborah Monday through Friday. A resource list of other home health providers is also made available to patients. Deborah made 205 home health service referrals in 2018 and 161 referral between January and July 2019.

CHNA Priority Area 5: Support the LGBTQ Community**Goal: Create a healthcare environment that supports the health needs of the LGBTQ Community.**

Deborah partnered with the New Jersey Hospital Association and Burlington and Ocean County Health Departments to identify available community resources for the LGBTQ population, and to create a resource network for providers. The resource network includes the following organizations and programs:

- Camden Area Health Education Center: Syringe Access Program; infectious disease screening and testing
- Cooper University Health Care: Safe Kids Program; The Addict (located in Philadelphia, this program caters to South Jersey teens);
- Garden State Equality: Statewide resources for the LGBTQ+ community
- Ocean's Harbor House: Comprehensive programs for youth in crisis
- Ours Project: Burlington County LGBTQ+ online community center
- Robert Wood Johnson University Hospital PROUD Center
- Tools for Teens and Adults: Free preventative programs promoting healthy options and positive healthy development among Ocean County teens

Deborah partnered with Garden State Equality's Health and Education Coordinator to create a live CME Grand Rounds event for providing supportive healthcare for LGBTQ individuals. Members of Deborah's patient care teams, including physicians, attended the event and earned CME credits. The objectives of the event were to recognize sex, gender, expression, gender identity, and sexual orientation; recall terminology and language that affirms LGBTQ identities; and assess individual bias towards the LGBTQ community.

Subsequent to the Grand Rounds event, Deborah continued to build its LGBTQ resource network and share LGBTQ resources with the community. Deborah recent started a partnership with the primary care medical teams at the 87th Medial group on Joint Base McGuire-Dix-Lakehurst to provide support services and other resources for patients.

Prioritization Process and Identified Priority Areas

Deborah shared findings from the CHNA research, including health status indicators and socioeconomic measures, with community partners and key stakeholders during a Partner Forum to solicit input into community health priorities. A formal presentation of data was made to Partner Forum attendees, and members were asked to discuss and develop a list of community needs based on the research and their experience within the community.

In determining community health priorities, Partner Forum attendees were asked to consider the following rationale and criteria:

- > Scope: How many people are affected?
- > Severity: How critical is the issue?
- > Ability to Impact: Can we achieve the desired outcome?
- > Community Readiness: Is the community prepared to take action?

Deborah leadership reviewed findings from the CHNA research and feedback from Partner Forum attendees, to determine priority health needs for its service area and to focus community health improvement efforts. Leadership representatives considered the 2019 CHNA research findings, as well as existing community and hospital services, programs, and areas of expertise. The following priorities will be addressed by Deborah during the next three-year cycle.

Deborah Community Health Priorities & Goals for 2020-2022

- > **Linkages to Care:** Improve access to healthcare and assist in coordination of care.
- > **Chronic Disease Management:** Increase education and awareness to identify and reduce chronic disease risk, and improve chronic disease management to reduce healthcare reliance and improve quality of life.
- > **Issues of Aging:** Assist seniors in our immediate service area age successfully, maintain independence and plan for end of life that respects each patient's wishes.

Community stakeholders identified mental health and substance use disorder as key drivers of poor resident health outcomes. While Deborah will not address these needs directly based on the specialty nature of their services and available resources, the hospital will continue to be a community partner in supporting recovery efforts. Deborah actively works with first responders to administer Narcan, provides education and programs for alternatives to pain management, and is exploring telepsychiatry options to improve access to behavioral health providers.

Deborah thanks our community partners for their commitment to the health and well-being of the regions' residents, and welcomes the opportunity to continue to strengthen our community together. To learn more about Deborah Heart and Lung Center's work to improve the health of our community, visit our [website](#) or contact [Christine Carlson-Glazer](#), Government and Community Relations Liaison at Deborah Heart and Lung Center.

Appendix A: Public Health Secondary Data References

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Appendix B: Key Informant Survey Participants

Key Informant Organization	Key Informant Title/Role
Alzheimer's Association	Program Coordinator
American Heart Association	Regional Director
Argosy Management Group, LLC	Partner
BATCK	Owner
Browns Mills Improvement Association (BMIA)	Board Member
Burlington County	Director
Burlington County Health Department	Health Officer
Burlington County Human Services	Transportation Coordinator
Burlington County Military Affairs Committee	Chair
Burlington County Regional Chamber of Commerce	President/CEO
Burlington County Veterans Services	Division Head
Cooper University Healthcare	Community Outreach Coordinator
Deborah Cardiovascular Group	Administrator
DSP	Regional Administrator
Edward J Post Company, Inc.	Owner
Investors Bank	Manager
LBI Health Department	Public Health Nurse Supervisor
New Life Christian Center	Pastor
O.C.E.A.N., Inc.	Grant Writer/Public Relations
Ocean County Department of Human Services	Coordinator, Office for Individuals with Disabilities
Ocean County Health Department	Assistant Public Health Coordinator
Ocean Monmouth Health Alliance	Regional Director
Pemberton Township Schools	Communications/Public Affairs
Prevention Plus	Coordinator
Rowan College	Dean of Health Sciences
Rowan College of Burlington County	Student Support Counselor
Samaritan	CDO
Strive Physical Therapy	Owner
The Pines	Administrator
Yoga Mandala	Owner

Appendix C: Partner Forum Attendees

Community Representative	Organization
Laurie Bowden	Pemberton Community Library
Victoria Brogan	New Jersey Hospital Association
Peter Curatolo	Ocean County Health Department
Mary Ditri	New Jersey Hospital Association
Grace Donatucci	American Heart Association
Steve Edstrom	Joint Base McGuire-Dix-Lakehurst
Kevin Eisenschink	Aspen Hills Healthcare Center
Holly Funkhouser	Burlington County Health Department
Adelina Giannetti	Pemberton Township Schools
Pamela Gray	Center for Family Services
Karen Isky	American Lung Association
Rita Jenkins	Pemberton Township Schools
Rebecca Kelly	Capital Health
Kelly LeMasney	Maryville Addiction Treatment Center
Joseph Marroli	Pemberton Township
Anastasia McKoy	Joint Base McGuire-Dix-Lakehurst
Jennifer Myers	Pinelands Family Success Center
Alexandria Nilsen	Browns Woods Apartments
Rose Richer	Joint Base McGuire-Dix-Lakehurst
Marquita Speed	Food Bank of South Jersey
Norma Trueblood	Pemberton Township

Appendix D: Federally Qualified Health Center Locations

Burlington County

Location	Operated By	Address
Burlington City Health Center	Southern Jersey Family Medical Centers, Inc.	651 High St, Burlington, NJ 08016
Buttonwood	Southern Jersey Family Medical Centers, Inc.	600 Pemberton Browns Mills Rd, Pemberton, NJ 08068
Mobile Medical Van – Dental	Southern Jersey Family Medical Centers, Inc.	Pemberton, NJ 08068

Ocean County

Location	Operated By	Address
OHI – Manchester	Ocean Health Initiatives, Inc.	686 Route 70, Lakehurst, NJ 08733
OHI at Stafford Township	Ocean Health Initiatives, Inc.	333 Haywood Rd, Manahawkin, NJ 08050
OHI – Little Egg	Ocean Health Initiatives, Inc.	798 CR-539, Tuckerton, NJ 08087
Ocean Health Toms River Site	Ocean Health Initiatives, Inc.	301 Lakehurst Rd, Toms River, NJ 08755
Westgate	Lakewood Resource and Referral Center, Inc.	108 Hillside Blvd, Lakewood, NJ 08701
OHI-Clifton Avenue School Based Health Center	Ocean Health Initiatives, Inc.	625 Clifton Ave, Lakewood, NJ 08701
Ocean Health Initiatives Mobile Medical Unit	Ocean Health Initiatives, Inc.	101 2 nd St, Lakewood, NJ 08701
Ocean Health Initiatives Lakewood Site	Ocean Health Initiatives, Inc.	101 2 nd St, Lakewood, NJ 08701
CHEMED	Lakewood Resource and Referral Center, Inc.	1771 Madison Ave, Lakewood, NJ 08701
OHI - SBHC at Lakewood High School	Ocean Health Initiatives, Inc.	855 Somerset Ave, Lakewood, NJ 08701
OHI Brick Township	Ocean Health Initiatives, Inc.	1610 Route 88, Brick, NJ 08724