Monmouth Medical Center | RWJBarnabas HEALTH

COMMUNITY HEALTH NEEDS ASSESSMENT

MONMOUTH MEDICAL CENTER

2019

ACKNOWLEDGEMENTS

The following partners led the Monmouth Medical Center (MMC) Community Health Needs Assessment.

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- Eric Carney – President and Chief Executive Officer
- Anna Burian – Vice President, Ambulatory and Community Health
- Eric Carney – President and Chief Executive Officer
- Julie Chaudhuri - Vice President, Cancer Services
- William Cook – Vice President, Ancillary Services
- Raymond Duarte – Regional Director, Information Technology & Services
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- Tanya Kenney – Regional Vice President, Operations
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MONMOUTH MEDICAL CENTER OVERSIGHT COMMITTEE

- Victor Almeida, DO, FACEP, Chairman, Department of Emergency Medicine, Monmouth Medical Center and Associate Clinical Professor of Emergency Medicine, Rutgers Robert Wood Johnson Medical School
- Anna Burian, Vice President, Ambulatory Services and Community Health
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- Michael Salvatore, Ph.D., Long Branch Public Schools Superintendent
- Marta Silverberg, Executive Director, Monmouth Family Health Center

RWJ BARNABAS HEALTH COMMUNITY HEALTH NEEDS ASSESSMENT STEERING COMMITTEE

The RWJ Barnabas Health CHNA Steering Committee oversees the 2018-2019 CNA process to update Hospitals CNAs and create new Implementation/Community Health Improvement Plans. The key tasks of the Steering Committee include:

- Oversight and guidance of CHNA implementation plan development
- Review facility implementation/health improvement plans and results
- Review of suggested priorities for facility implementation planning
- Share strategies and best practices

Members of the RWJ Barnabas Health CHNA Steering Committee include:

- Jen Velez, Executive Vice President, Community and Behavioral Health, Committee Chair
- Michellene Davis, Executive Vice President, Corporate Affairs
- Bryan Soltes, System Vice President, Network Development, Oncology Services
- Connie Greene, Behavioral Health/Preventive Care
- Joseph Jaeger, DrPH, Chief Academic Officer
- Barbara Mintz, Senior Vice President, Health and Wellness
- Jessica Israel, M.D., Corporate Chair, Geriatrics
- Michael Knecht, Corporate Vice President, Strategic Messaging and Marketing
- Ernani Sadural, M.D., Director of Global Health for Barnabas Health
- Richard Henwood, Vice President, Finance
- Tamara Cunningham, Vice President, System Development/Planning
- Hospital Representatives:
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    - Darrell K. Terry, Sr., MHA, MPH, FACHE, President and CEO, Newark Beth Israel Medical Center (Designee: Kim Cook, Director, Community Relations & Volunteer Services)
    - Frank Mazzarella, M.D., Chief Medical Officer, Clara Maass Medical Center (Designee: Fran Monteleone, Director, Physician Relations and Community Outreach)
    - Judy Colorado, Chief Nursing Officer and Vice President of Patient Care Services, Monmouth Medical Center Southern Campus (Designee: Jean McKinney, Community Education Department)
    - Anna Burian, Vice President of Ambulatory Care Services, Monmouth Medical Center (Designee: Jean McKinney, Community Education Department)
    - Teri Kubiel, DNP, Vice President, Patient Experience and Community Affairs
    - Shari Beirne, Director of Marketing and Patient Satisfaction, Barnabas Health Behavioral Health Center
    - Serena Collado, Director, Community Health, Robert Wood Johnson University Hospital Somerset
    - Mariam Merced, Director, Community Health Promotions, Robert Wood Johnson University Hospital New Brunswick
    - Donna Mancuso, Manager, Public & Community Affairs, Robert Wood Johnson University Hospital Rahway
    - Ruth Bash, Vice President & Chief Culture Officer, Children's Specialized Hospital
    - Irene Borgen, Vice President, Quality and Standards, Jersey City Medical Center

- Diane Grillo, Vice President, Health Promotion, Robert Wood Johnson University Hospital Hamilton (Designee: Lauren Stabinsky, Director Community & Corporate Health, Robert Wood Johnson University Hospital Hamilton)

MONMOUTH MEDICAL CENTER STEERING COMMITTEE CONSULTANT ADVISORS

Steering Committee Technical Advisors:

- Withum, Smith & Brown (Scott Mariani)
- New Solutions Inc. (Nancy Erickson[1])
- Bruno & Ridgway, Inc. (Joseph Ridgway)

Questions regarding the Community Needs Assessments should be directed to RWJ Barnabas Health System Development & Planning at BHPlanningDept@RWJUH.org.

1 The CHA's development consultants, New Solutions, Inc., have planned and conducted numerous community needs assessments and implementation plans with multiple organizations including individual hospitals, health systems, other health care and community organizations such as consortia comprised of a wide range of participant organizations. The NSI team, of which two are Ph.D. prepared, includes: planning consultants, market researchers, epidemiologists, computer programmers and data analysts. NSI has extensive regional and local community knowledge of health issues, community services and provider resources for the community reviewed by this assessment. This expertise, as well as the methodological and technical skills of the entire staff, was brought to bear in conducting this Community Health Needs Assessment.

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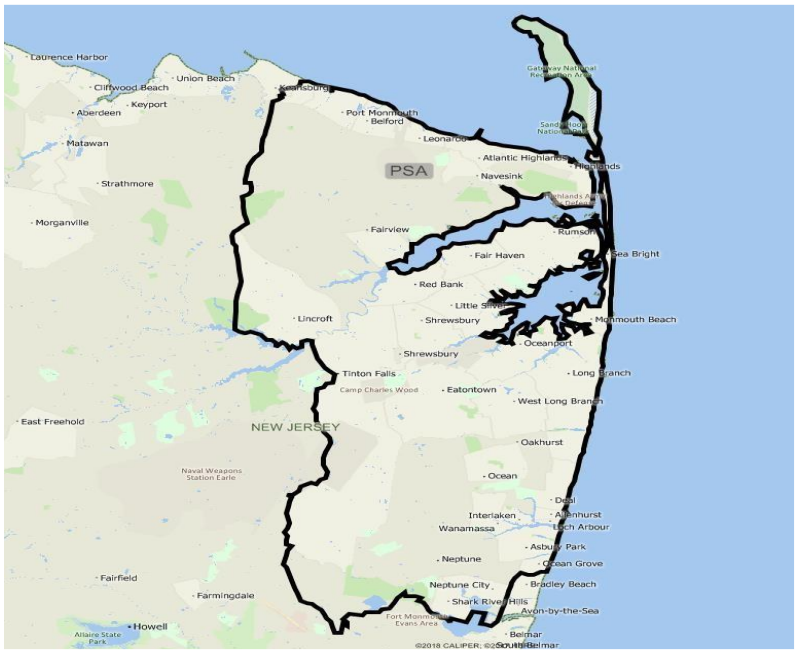
EXECUTIVE SUMMARY

Background

The Monmouth Medical Center (MMC) Community Health Needs Assessment (CHNA) is designed to ensure that the Medical Center continues to effectively and efficiently serve the health needs of its service area. The CHNA was developed in accordance with all federal rules and statues, specifically, PL 111-148 (the Affordable Care Act) which added Section 501(r) to the Internal Revenue Code. The MMC Needs Assessment was undertaken in this context and developed for the purpose of enhancing health and quality of life throughout the community. This assessment builds upon the CHNA completed in 2016. The 2016 Implementation Plan results are reviewed in **Appendix A**.

MMC Service Area



The CHNA uses detailed secondary public health data at state, county, and community levels; a community health survey; a survey of the MMC Oversight Committee; focus group with other community stakeholders and interviews with physicians. MMC is a member of RWJ Barnabas Health, which convenes a multi-disciplinary, multi-facility Steering Committee that provides additional support and leadership. Also, insight and expertise from the Monmouth Medical Center CHNA Oversight Committee helps to identify health assets, gaps, disparities, trends, and priorities. The Methodology section details the data collection process and analysis.

Service Area

The service area is determined by considering three factors: patient origin, market reliance on the Hospital (market share), and geographic continuity and proximity. Zip codes representing approximately 50% of the MMC patient origin form the initial primary service area (PSA); any zip code in which the Hospital has a high market share presence is also included. Zip codes with lower market share are deleted from the PSA definition and included in the secondary service area (SSA). Geographic proximity is used to create a contiguous area and completes the service area determination. MMC's PSA is predominantly located in the eastern section of Monmouth County. The SSA is comprised of other sections of Monmouth County zip codes, and small sections of Ocean and Middlesex Counties. For purposes of this assessment, Monmouth County, MMC's home county, was selected

MMC Primary Service Area	
ZIP Code	**ZIP Name**
07701	Red Bank
07702	Shrewsbury
07703	Fort Monmouth
07704	Fair Haven
07711	Allenhurst
07712	Asbury Park
07716	Atlantic Highlands
07718	Belford
07723	Deal
07724	Eatontown

to best represent the communities served by the Medical Center in reviewing data sources presented at the county level.

MMC Primary Service Area	
ZIP Code	ZIP Name
07732	Highlands
07737	Leonardo
07738	Lincroft
07739	Little Silver
07740	Long Branch
07748	Middletown
07750	Monmouth Beach
07752	Navesink
07753	Neptune
07754	Neptune
07755	Oakhurst
07756	Ocean Grove
07757	Oceanport
07758	Port Monmouth
07760	Rumson
07764	West Long Branch

TOP THREE HEALTH ISSUES

The MMC Oversight Committee considered primary and secondary data to determine Three top health issues based on capacity, resources, competencies, and needs specific to the populations it serves. These issues are within the hospital's purview, competency and resources to impact in a meaningful manner: Obesity and associated chronic diseases, mental health concerns and substance abuse.

1. ***Obesity and Associated Chronic Diseases***

Obesity and overweight are abnormal or excessive fat accumulation that presents a health risk. A crude population measure of obesity is body mass index (BMI), a person's weight (in kilograms) divided by the square of his or her height (in meters). A person with a BMI of 30 or more is considered obese; a person with a BMI equal to or more than 25 is overweight. Once considered a problem only in high income countries, overweight and obesity are now increasing in low and middle-income countries, particularly in urban settings.

Being overweight or obese can have a serious impact on health. Overweight and obesity are risk factors for a number of chronic diseases, including cardiovascular disease (mainly heart disease and stroke), type 2 diabetes, musculoskeletal disorders like osteoarthritis, and some cancers (endometrial, breast and colon). These conditions cause premature death and disability. Onset of increased risk begins when someone is only slightly overweight, and the risk increases as weight rises. Many conditions cause long-term consequences for individuals and families. In addition, the costs of care are high. Prevention and wellness programs are necessary to address the insidious effects of excess weight.

Genetics affect the amount of body fat stored, where fat is distributed, and how efficiently the body converts food into energy. Family eating and physical activity habits play a role in the development of obesity. Prolonged inactivity results in calorie imbalance, the intake of calories is higher than the burning of calories. Often, inactivity is a result of other medical problems like arthritis or injuries. An unhealthy diet, high in calories and lacking in fruits and vegetables, is a significant contributor to weight gain. Research has linked social and economic factors to obesity. Socioeconomic factors include not having safe areas to exercise, cultural traditions of eating unhealthy and obese family members.

Obesity can occur at any age, even among young children. Hormonal changes and physical inactivity in older individuals also increase risk. The amount of body muscle decreases with age, leading to a decrease in metabolism. Quitting smoking is also associated with weight gain, sometimes resulting in obesity. Structured smoking cessation programs can help mitigate the effects of weight gain associated with quitting. Not getting enough sleep or conversely getting too much sleep can cause changes in the hormones that increase appetite and contribute to weight gain.

- In 2016, 29.4% of Monmouth County adults reported no physical exercise within the past month, slightly lower than New Jersey (29.8%) but higher CHR national benchmark (23%). [2]
- In 2016, 25.4% of Monmouth County residents were obese.
- Diabetes is the seventh leading cause of death in Monmouth County.[3]
- Heart Disease deaths decreased from (165.0/100,100) to (161.4/100,000).[4]
- The 2016 Monmouth County AAMR for stroke was (28.7/100,000), slightly lower than New Jersey 30.0/100,000.
- Obesity was the top health concern among area residents service in the 2019 community needs survey.

MMC offers a variety of health screenings and educational programs to community residents and employees (blood pressure, cardiac risk, foot disorders and comprehensive blood screenings). Health education presentations are available to community groups, organizations and clubs through a speaker's bureau. Additional programs are available through collaborative efforts with local health departments and community agencies.

MMC's Bariatric and Metabolic Institute provides a comprehensive approach to weight loss and bariatric surgery. In addition to doctors and surgeons, the weight loss team includes nutritionists, exercise physiologists, clinical psychologists, bariatric coordinator and support groups designed to help patients through the weight loss journey. MMC provides nutritional counseling by registered dietitians who specialize in weight management, diabetes, cardiac disease, hypertension, kidney disorders, liver disorders, GI disorders, and pregnancy.

2. Mental Health Concerns

Mental Health problems in the United States are very common with an estimated 50% of all Americans suffering from a mental illness or disorder at some point in their lifetime. Mental illness, such as depression, are the third most common cause of hospitalization among Americans 18-24 and adults living with serious mental illness die an average 25 years earlier than others.

Mental disorders are health conditions characterized by alterations in thinking, mood, and/or behavior associated with distress and or impaired functioning. Risk factors fort mental illness include family history, stressful like situations, chronic medical conditions, brain damage, and substance abuse.

Serious mental illnesses include schizophrenia, major depression, and bi-polar disorder among others. Patients with serious mental illness are more likely to be unemployed, involved with law enforcement, and have housing insufficiency. According to the 2015 National Survey of Drug Use & Health, an estimated 98 million adults 18 or older in the U.S. had a serious mental illness, including 2.5 million living below the poverty level. The relationship between poverty and serious mental illness is complex. Poverty may heighten the experience of mental illness as well as increase one's changes of living below poverty level.

- In 2016, Monmouth County had a higher rate of residents with an inpatient hospitalization (7.10/1,000) for Mental Health Conditions than the State (4.81/1,000).

2 Behavioral Risk Factor Surveillance System 2012
3 New Jersey Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health; Population Estimates: New Jersey Department of Labor and Workforce Development, State Data Center
4 Health Care Decision Analyst Internal Data 2014

- Monmouth County's ED visit rate for Mental Health Conditions increased between 2012 (8.90/1,000) and 2016 (9.33/1,000).
- Monmouth County's suicide rate (8.2/100,000) was higher than the State (7.7/100,000).
- Mental Health was among the top 3 health concerns of respondents of the community needs survey.

Monmouth Medical Center provides inpatient behavioral health services for voluntary and involuntary children, adolescents, adults, and geriatric patients who are diagnosed with psychiatric and dual disorders. All programs are led by a multidisciplinary staff of experienced professionals who have advanced training and certification in all facets of behavioral health.

Outpatient, partial hospital, and intensive outpatient services are also available and provided by licensed professionals and counsellors with extensive clinical experience. These specialists include psychiatrists, psychologists, licensed clinical social workers, addiction counsellors, and child and adolescent psychiatrists.

3. Substance Abuse

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Risk factors for substance abuse are similar to mental health conditions and include poverty and drug availability. Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems.

Approximately 10% of American's suffer from a drug abuse problem. Despite a steady decline of drug addiction in the early 2000's substance abuse has increased dramatically in over the past decade. The pervasive use of drugs stems from a variety of factors including the increase availability of drugs. Alterations in brain chemistry caused by prescription and street drugs, as well as untreated emotional and psychological conditions that lead to drug experimentation.

Behavioral health disparities impact diverse groups in the U.S., including racial and ethnic groups, young adults, women, and the LGBTQIA community. There is stigma associated with mental health diagnosis and treatment, particularly among African-Americans and Latinos. Behavioral health plays a major role in one's ability to maintain good physical health. Problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

Of late, the issue of opioid misuse and addiction has captured the attention of federal and state governments, leading to the U.S. President declaring the opioid crisis a public health emergency. To help clarify some of the reasons for this decision, the National Institute on Drug Abuse has estimated that 115 people a day die as a result of an opioid overdose. In 2014 alone, AHQR reported New Jersey had the 6th highest rate of emergency room visits for opioids (265.4/100,000 population). Between 2014 and 2016, there was a 40% rise in the number of deaths as a result of drug overdoses in the State. Many of the victims had heroin or fentanyl in their systems.

To help combat this issue, New Jersey announced a statewide initiative to help combat the opioid crisis. One of the initiatives will include a 24-hour response team which will include first responders, mental health advocates, substance abuse counselors specially trained in dealing with addiction, and a beefed-up prescription monitoring program funded by more than a million dollars in federal grants.

- In 2016, there was a higher percentage of smokers in Monmouth County (19.6%) than in New Jersey (14.0%).
- Binge drinking increased from 17.5% in 2014, to 22.7% in 2016 in Monmouth County, placing the County is in the worst performing quartile statewide.
- County-wide, heavy drinkers remained stable at 7%, placing Monmouth County in the worst performing quartile.
- Between 2008-2012, and 2012-2016, alcohol impaired driving increased from 24.5% to 26.6%.
- Naloxone administrations increased from 453 in 2015, to 714 in 2016.
- Inpatient hospitalizations for substance abuse was higher in MMC's Service Area (2.25/1,000) than the county rate (1.79/1,000).
- Emergency Department utilization rates in MMC's Service Area were higher (9.0/1,000) than the county rate (6.85/1,000) and the State rate (7.84/1,000).

1. INTRODUCTION

MMC Service Area

The Monmouth Medical Center (MMC) Community Health Needs Assessment (CHNA) is designed to ensure that the Medical Center continues to effectively and efficiently serve the health needs of its service area. The CHNA was developed in accordance with all federal rules and statues, specifically, PL 111-148 (the Affordable Care Act) which added Section 501(r) to the Internal Revenue Code. The MMC Needs Assessment was undertaken in this context and developed for the purpose of enhancing health and quality of life throughout the community. This assessment builds upon the CHNA completed in 2016. The 2016 Implementation Plan results are reviewed in **Appendix A**.

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Monmouth Medical Center, located in Long Branch, New Jersey, is one of five acute care hospitals operating in Monmouth County. MMC, one of New Jersey's largest academic medical centers, is an affiliate of RWJ Barnabas Health. It is accredited with commendations by the Joint Commission on Accreditation of Health Care Organizations and is a member of the Council of Teaching Hospitals of the Association of American Medical Colleges. Residency programs are offered in Dental Medicine, Internal medicine, Obstetrics and Gynecology, Orthopedic Surgery, Pathology, Pediatrics, Pharmacy, Radiology, and General Surgery. The Hospital acts as a safety net to its service area residents by providing a wide scope of outstanding healthcare services. The Medical Center's Primary Service Area encompasses 25 zip codes that run along the eastern end of the county. MMC has been and continues to be a leader in surgical advancement introducing many technological firsts to the region, including robotic surgery and other minimally invasive techniques.

The MMC Oversight Committee determined three issues to be within the Hospital's purview, competency and resources to impact in a meaningful manner: obesity and associated chronic diseases, mental health and substance abuse.

The CHNA uses detailed secondary public health data at state, county, and community levels, from various sources including Department of Health and Human Services, Centers for Disease Control and Prevention, Census Bureau, *Healthy People 2020,* the County Health Rankings, and hospital discharge data, to name a few.

- *Healthy People 2020* is a 10-year agenda to improve the nation's health that encompasses the entire continuum of prevention and care. For over three decades Healthy People has established benchmarks and monitored progress over time to measure the impact of prevention activities. *Healthy People 2020* benchmarks are used throughout the report to assess the health status of residents.
- The County Health Rankings, published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, rank the health of nearly all counties in the United States. The rankings look at a variety of measures that affect health such as high school graduation rates, air pollution levels, income, rates of obesity and smoking, etc. These rankings are also used throughout the report to measure the overall health of Monmouth County residents. County rates are also compared to statewide rates.

The MMC needs assessment was developed for the purpose of enhancing the health and quality of life throughout the community. To this end, both internal and external data were used to understand recent health indicators and opportunities to provide a positive impact on health and wellness. Other significant needs determined by this CHNA include:

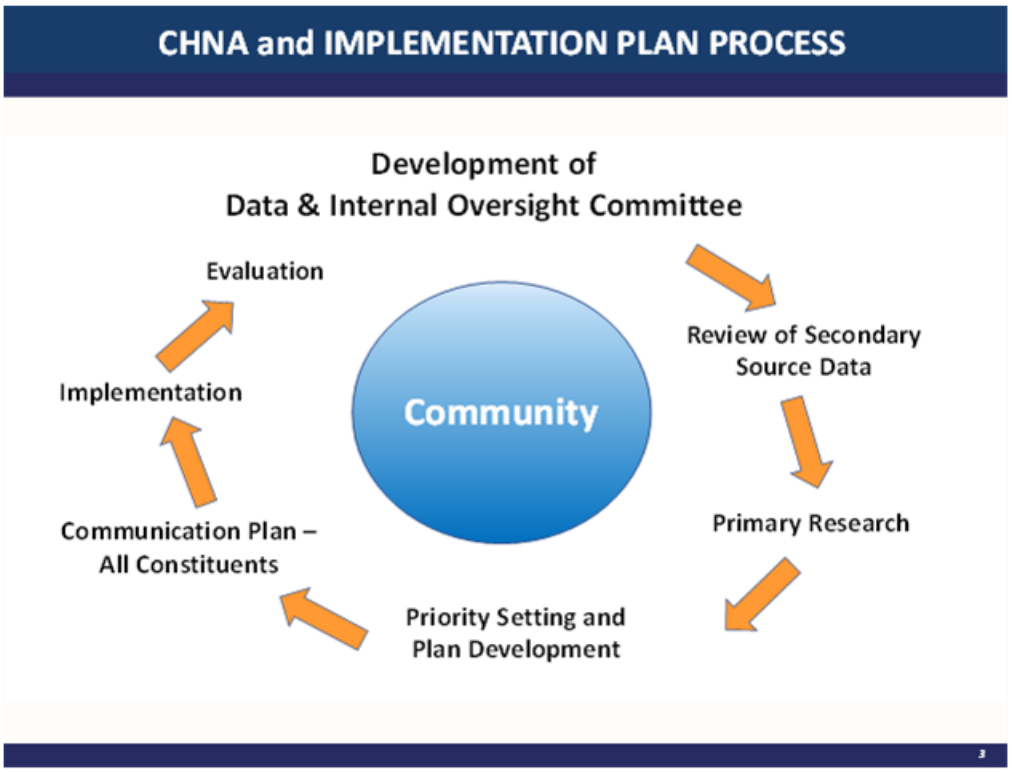
- Access to care and Services
- Smoking/Vaping
- Cancer
- Language/Cultural Barriers
- Cardiac Care/Heart Disease
- Preventive Health Service
- Diabetes
- Access to Primary Care

2. METHODOLOGY/SERVICE AREA

A. METHODOLOGY

Monmouth Medical Center (MMC) developed an evidenced-based process to determine the health needs of Monmouth County residents. CHNA data sources include both primary and secondary data to provide qualitative and quantitative information about the communities. Data from these sources were reviewed with the Steering Committee to identify and prioritize the top issues facing residents in the service area (see Top Health Issues section).

The flow chart below identifies the CHNA and implementation planning process employed.



Prioritization Process

Following the Steering Committee's review of quantitative and qualitative data on 3/11/19**,** a list of 9 issues were identified by consultants as common themes of the research. These included:

- Mental Health and Substance Abuse
- Cancer
- Overweight and Obesity, Nutrition
- Language and Cultural Barriers
- Cardiac Care/Heat Disease
- Preventive Health Services (Vaccines and Screenings)
- Access to Care and Services for the Uninsured, Underinsured, Unaware

- Smoking/Vaping
- Access to Primary Care

A ballot was developed, and a survey sent in June 2019 to the MMC Oversight Committee membership asking them to rank each issue based on the following criteria.

- Number of people impacted
- Risk of mortality and morbidity associated with the problem
- Impact of the problem on vulnerable populations
- Meaningful progress can be made within a three-year timeframe
- Community's capability and competency to impact

A tally of the ballots cast resulted in the following five issues to be ranked highest overall.

- Mental Health
- Substance Abuse
- Obesity
- Access to Care and Services
- Smoking/Vaping

On October 8th members of the Hospital's Executive Council reviewed the top five priority areas and agreed that for the next three years they would work on the following priority issues: obesity and related chronic diseases, mental health and substance abuse.

Primary Data Sources

Community Health Needs Surveys

In order to obtain a service area-specific analysis for the MMC service area, on-line survey was conducted among 852 residents of the Hospital's PSA by Bruno & Ridgway, Inc. Survey interviews were conducted online and by telephone. A link to the online survey was displayed on hospital web pages and social media sites. Additionally, postcards were handed out at area businesses and libraries, directing residents to the online survey link. Survey results are incorporated into this CHNA. (See Section 3)

Focus Group Discussions/Interviews

A focus group with participants representing individuals and organizations dealing with youth was undertaken to examine more information about issues facing teens and adolescents including substance use/vaping and mental health issues.

An interview process was used to gain insight into physician's perception of the major health issues and challenges facing the community. The focus group and interviews were conducted in July 2018 by New Solutions, Inc.

Secondary Data Sources

Over 100 secondary data sources are compiled in this CHNA, presenting data by indicator by county and state. Sources include: The United States Census Bureau, Centers for Disease Control and Prevention (CDC), New Jersey Department of Health (NJDOH), and Behavioral Risk Factor Surveillance System (BRFSS). See **Appendix B** for a detailed list of sources.

Appendix C contains a detailed report of cancer incidence and mortality by cancer site for Monmouth County for the years 2010-2017. In addition, hospital tumor registry data is utilized to understand stage of cancer at time of diagnosis.

Health Profile

Section 5 provides a comprehensive presentation of health outcomes as well as the social determinants of health and other health factors that contribute to the health and well-being of Monmouth County residents.

Color Indicator Tables

Throughout the Health Profile Section of this CHNA, the color indicator tables compare county level data to *Healthy People 2020* targets, County Health Rankings benchmarks, and New Jersey State data. Data by race/ethnicity are compared to data for all races in the county, unless otherwise indicated. Monmouth County was the midpoint value compared to a range 20% higher than the value for New Jersey, *Healthy People 2020*, or County Health Rankings Benchmarks, or 20% lower than the value for New Jersey, *Healthy People 2020*, or County Health Rankings Benchmarks. If the county value was within the range 20% lower or 20% higher than the comparison indicator, or considered within reasonable range, the indicator will be yellow. The table will be red if the Monmouth County value is more than 20% worse or lower than the indicator value. If the Monmouth County value is 20% better or higher than the indicator value, the table will be green. Comparative counties are also presented providing additional context for select health indicators.

Assets and Gaps

Section 6, Assets and Gaps, summarizes the preceding components of the CHNA. Assets highlight county information indicating improvement over time, in comparison to other counties and the State, or in comparison to other races or genders. Gaps focus on disparities in Monmouth County or the MMC Service Area that have a negative trend, in comparison to other counties in the State or to other races or genders.

Resource Inventory

A service area-specific resource inventory is included as **Appendix D,** which details health and social service resources available to residents in Monmouth County. Providers' names, addresses, and phone numbers and type of services provided are contained in the inventory.

B. SERVICE AREA

Monmouth Medical Center is in Long Branch, New Jersey. It is one of five hospitals serving residents in Monmouth County. The Medical Center's primary service area (PSA) consists of the following zip codes:

MMC Primary Service Area	
ZIP Code	ZIP Name
07701	Red Bank
07702	Shrewsbury
07703	Fort Monmouth
07704	Fair Haven
07711	Allenhurst
07712	Asbury Park
07716	Atlantic Highlands
07718	Belford
07723	Deal
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07754	Neptune
07755	Oakhurst
07756	Ocean Grove
07757	Oceanport
07758	Port Monmouth
07760	Rumson
07764	West Long Branch

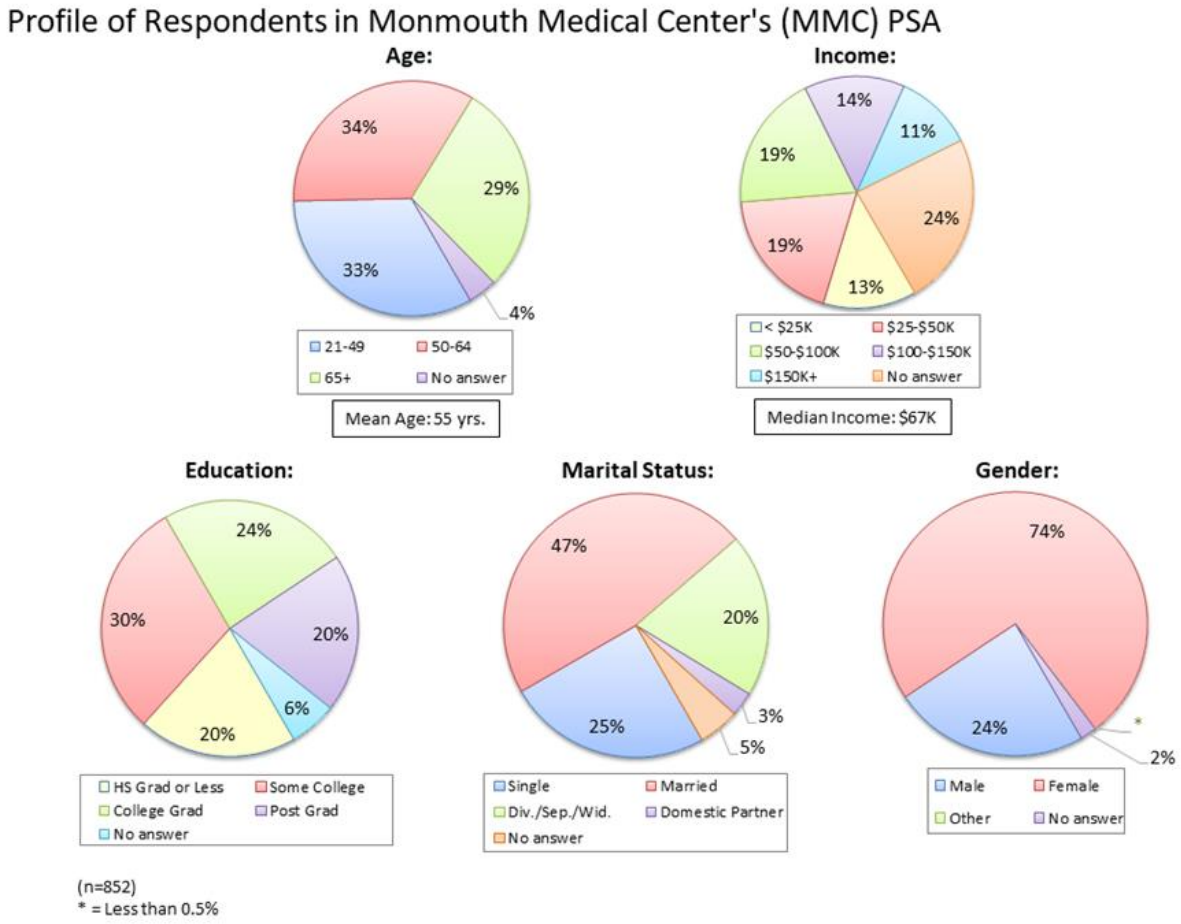
MMC Service Area Map

The service area is determined by taking into consideration three factors: patient origin, market reliance on the Hospital (market share), and geographic continuity/proximity. Typically, the combined service area represents 75-80% of the Medical Center's patients. Zips codes representing approximately 50% of the MMC patient origin form the initial PSA. Added to this list is any zip code in which the Medical Center has a high market share presence, any zip code with lower market share is deleted from the PSA definition and becomes part of the secondary service area (SSA). The next range of zip codes comprise the SSA. Geographic proximity is used to create a contiguous area completes the service area determination. MMC's PSA is predominantly located in the eastern portion of Monmouth County. The SSA is comprised of other sections of Monmouth County and small sections of Ocean and Middlesex Counties. For purposes of this assessment, Monmouth County, MMC's home county, was selected to best represent communities served by the Medical Center in reviewing data sources presented at the county level.

Most of the secondary data in this report is based on county level data. City or zip code level data is provided wherever possible to enhance the understanding of the specific needs of service area residents. Data obtained from the survey, focus group and interviews provide further insight into health issues facing the communities served by the Medical Center.

3. COMMUNITY HEALTH NEEDS SURVEY

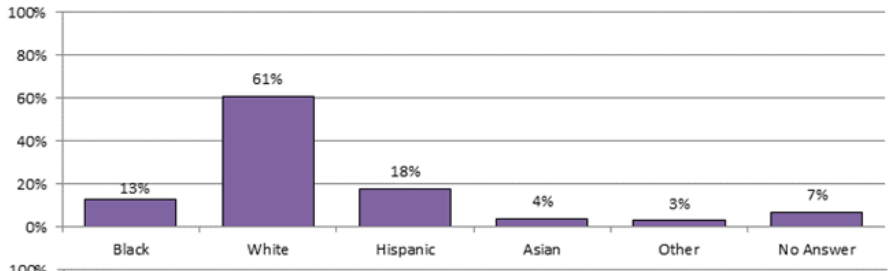
A. SURVEY RESPONDENTS' PROFILE



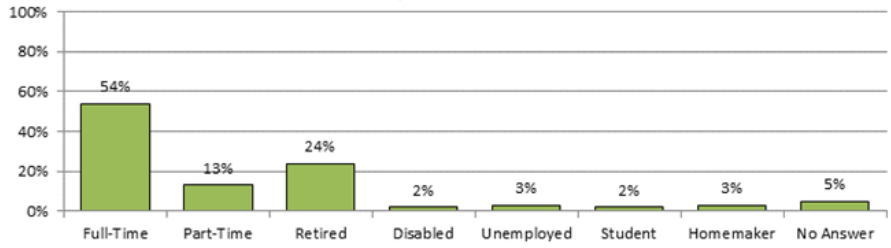
(n=852)
* = Less than 0.5%

Profile of Respondents in Monmouth Medical Center's (MMC) PSA – (continued)

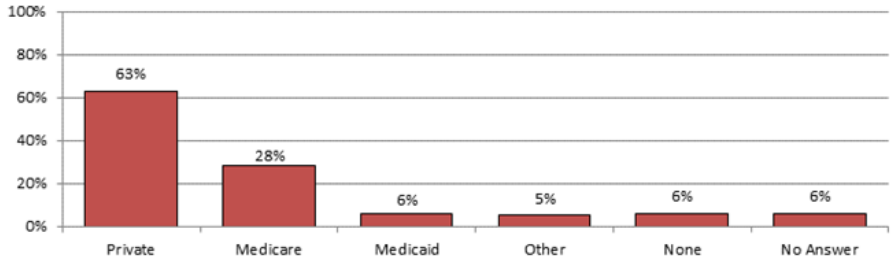
Ethnicity*^:



Employment^:



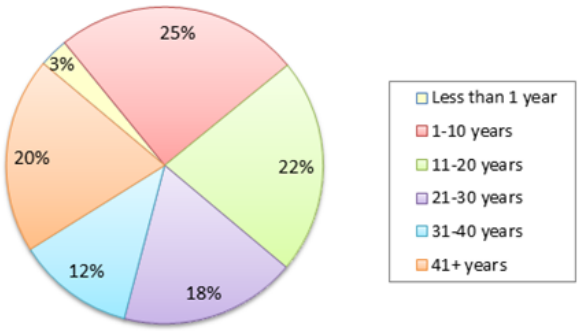
Health Insurance^:



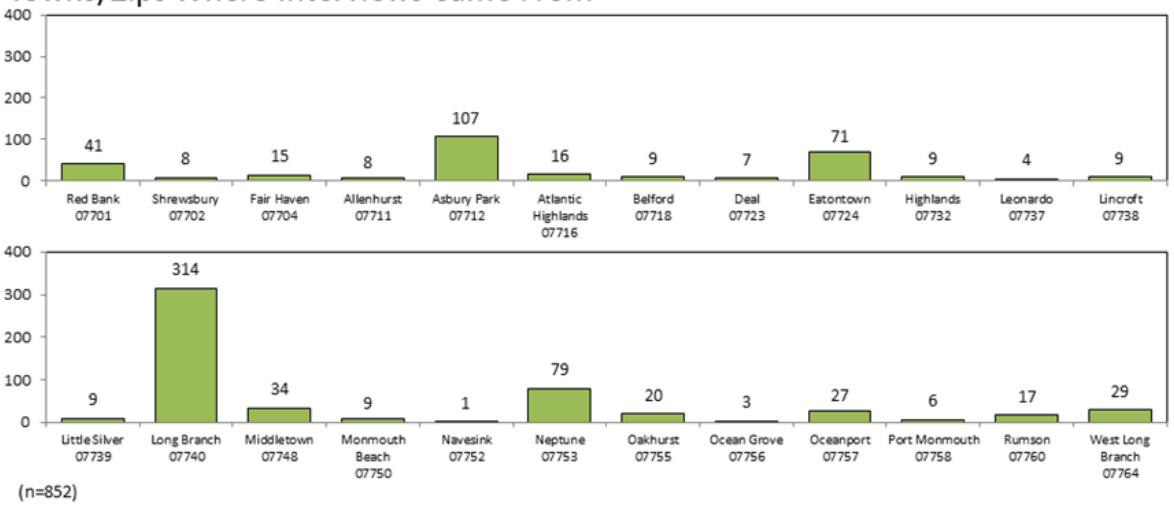
(n=852)
*Quotas were established to align closely with census data.
^ = Multiple mentions.

Length of Time in Area

Average # Years: 25.3



Towns/Zips Where Interviews Came From

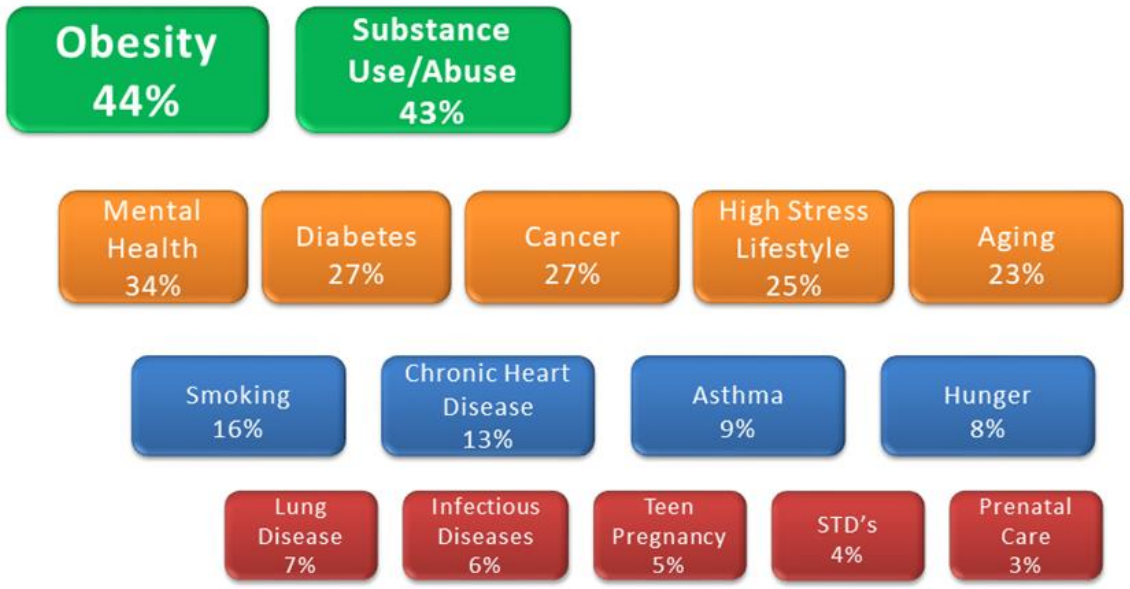


(n=852)

B. HEALTH-RELATED CONCERNS OF AREA RESIDENTS

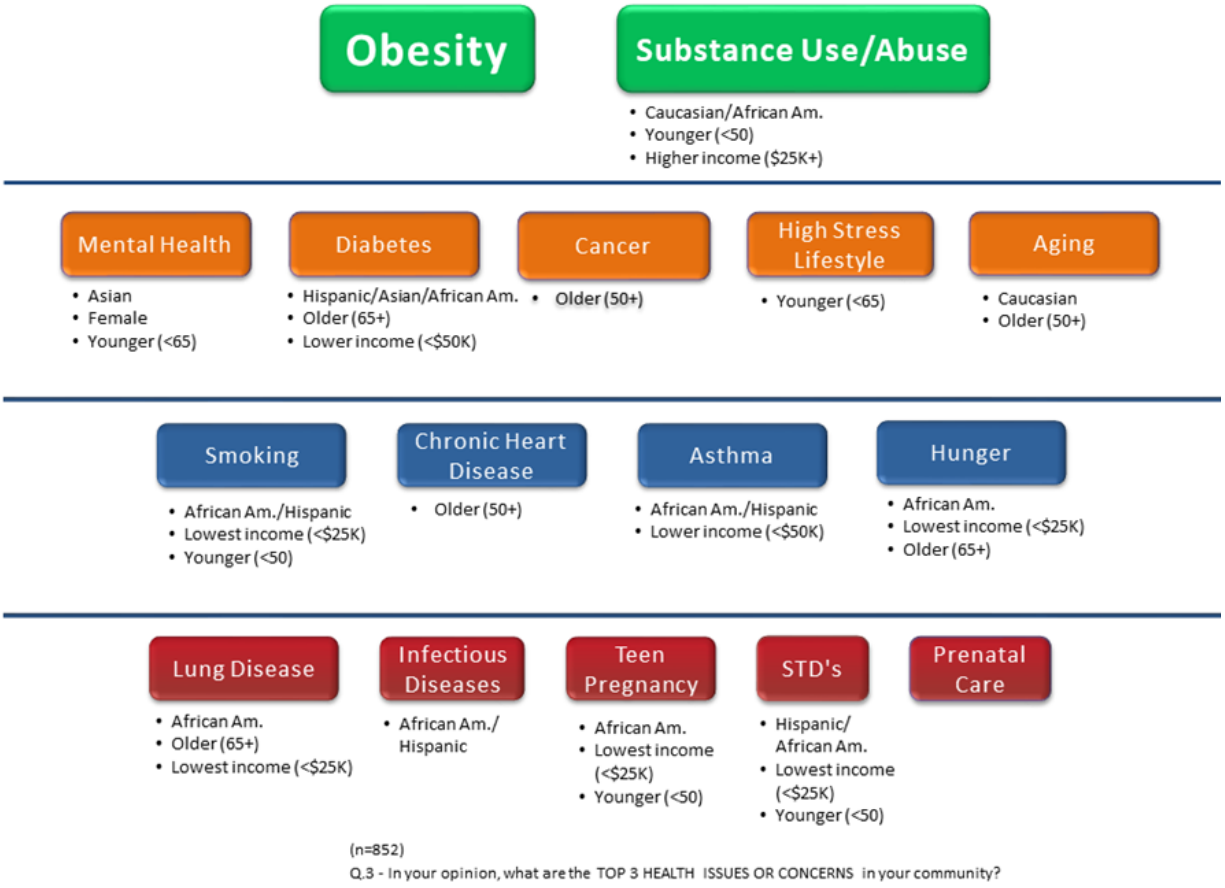
Major Health Concerns Among Respondents in MMC's PSA Community

- Obesity and substance abuse are the top health concerns among area residents surveyed, followed by concerns about mental health issues, diabetes, cancer, high stress and aging.



(n=852)
Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?

Summary of Health Concerns by Subgroups



(n=852)

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?

Community Health-Related Issues of Concern – by Ethnicity

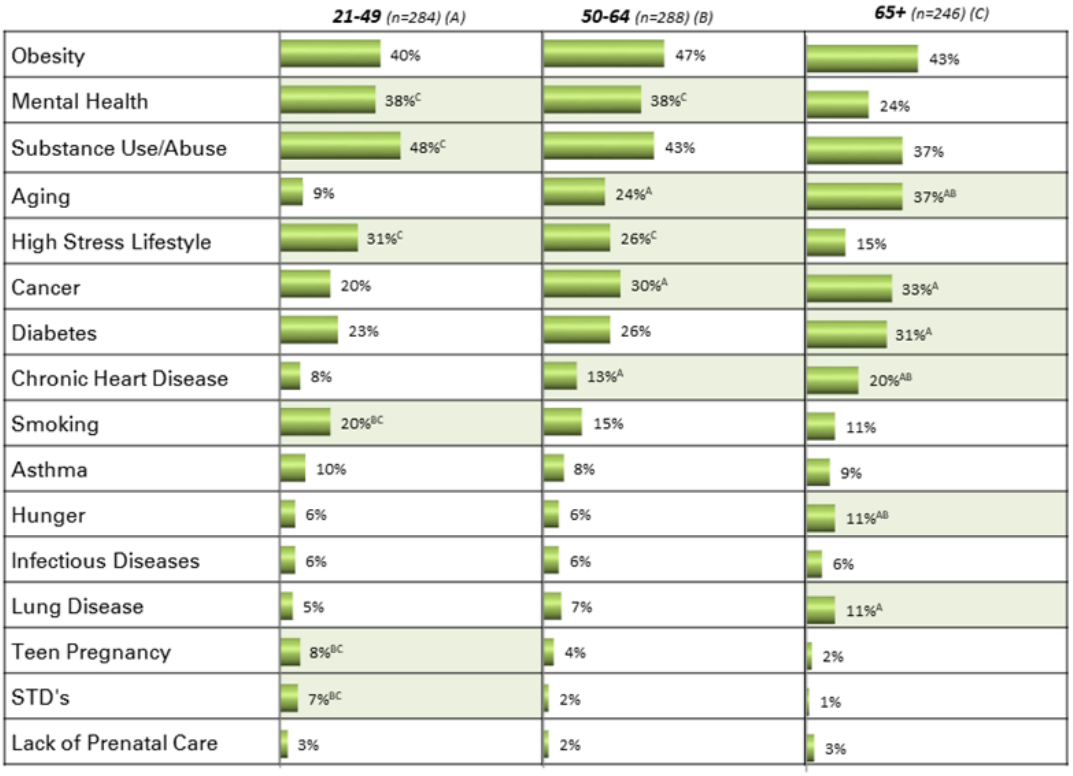
- **African Americans express the most health-related concerns.**

	Caucasian (n=520) (A)	*African American* (n=109) (B)	*Hispanic* (n=155) (C)	*Asian* (n=32) (D)
Obesity	44%	41%	41%	34%
Mental Health	35%^{C}	35%	26%	44%^{C}
Substance Use/Abuse	47%^{C}	46%^{C}	30%	44%
Aging	26%^{CD}	20%	16%	13%
High Stress Lifestyle	25%	22%	27%	31%
Cancer	28%	29%	27%	19%
Diabetes	18%	40%^{A}	43%^{A}	38%^{A}
Chronic Heart Disease	12%	15%	13%	9%
Smoking	12%	28%^{A}	21%^{A}	19%
Asthma	5%	18%^{AD}	16%^{AD}	6%
Hunger	7%	16%^{ACD}	8%	3%
Infectious Diseases	5%^{D}	9%^{D}	9%^{D}	-
Lung Disease	6%	14%^{A}	8%	6%
Teen Pregnancy	4%	9%^{A}	6%	6%
STD's	2%	7%^{A}	6%^{A}	3%
Lack of Prenatal Care	2%	5%	3%	3%

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?
(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Community Health-Related Issues of Concern – by Age

- **Mental health, substance abuse, high stress lifestyle, smoking, teen pregnancy and STDs are of more concern to younger residents surveyed, while aging, cancer, diabetes, heart disease, lung disease and hunger are of more concern to older residents surveyed.**



Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?
(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Community Health-Related Issues of Concern – by Gender

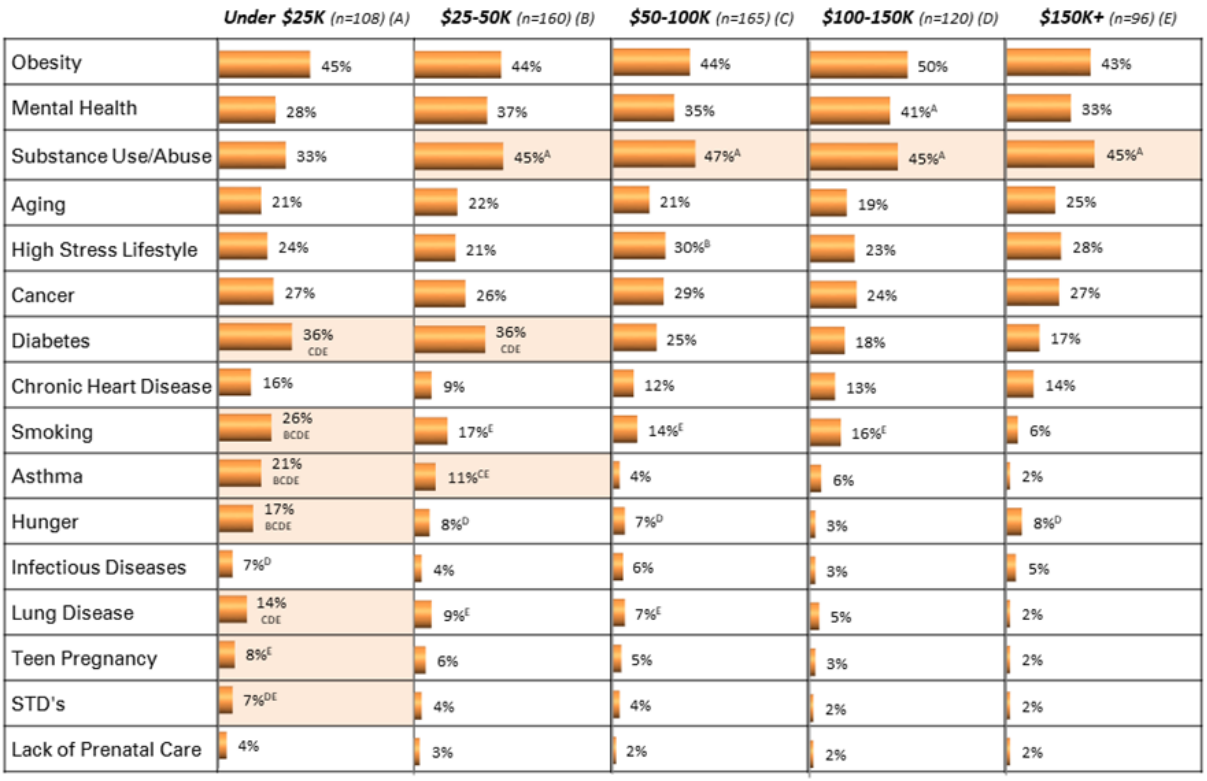
- **Females indicate more concern about mental health issues versus males.**

	Male (n=201) (A)	*Female* (n=628) (B)
Obesity	43%	44%
Mental Health	29%	35%[A]
Substance Use/Abuse	39%	44%
Aging	22%	23%
High Stress Lifestyle	24%	24%
Cancer	25%	28%
Diabetes	28%	26%
Chronic Heart Disease	15%	12%
Smoking	17%	15%
Asthma	8%	9%
Hunger	7%	8%
Infectious Diseases	7%	6%
Lung Disease	8%	7%
Teen Pregnancy	4%	5%
STD's	3%	4%
Lack of Prenatal Care	2%	3%

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?
(A/B) = Significantly greater than indicated cell at the 90% confidence level.

Community Health-Related Issues of Concern – by Income

- **Respondents in the lowest income level (<$25K) cite many health-related concerns.**

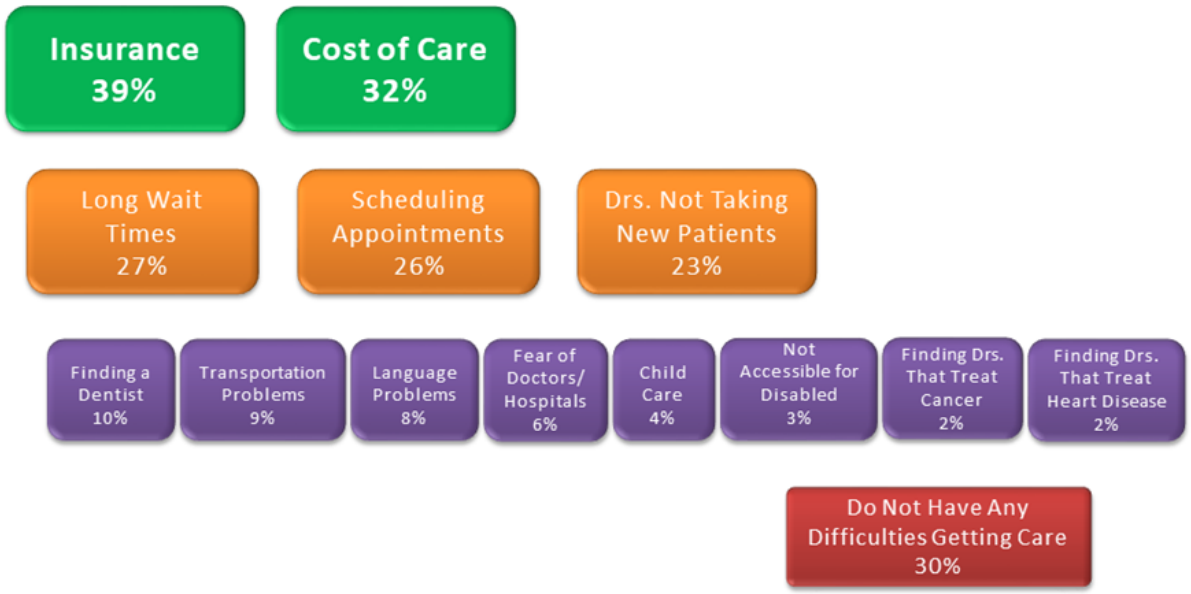


Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?
(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

C. BARRIERS TO ACCESSING HEALTH CARE SERVICES

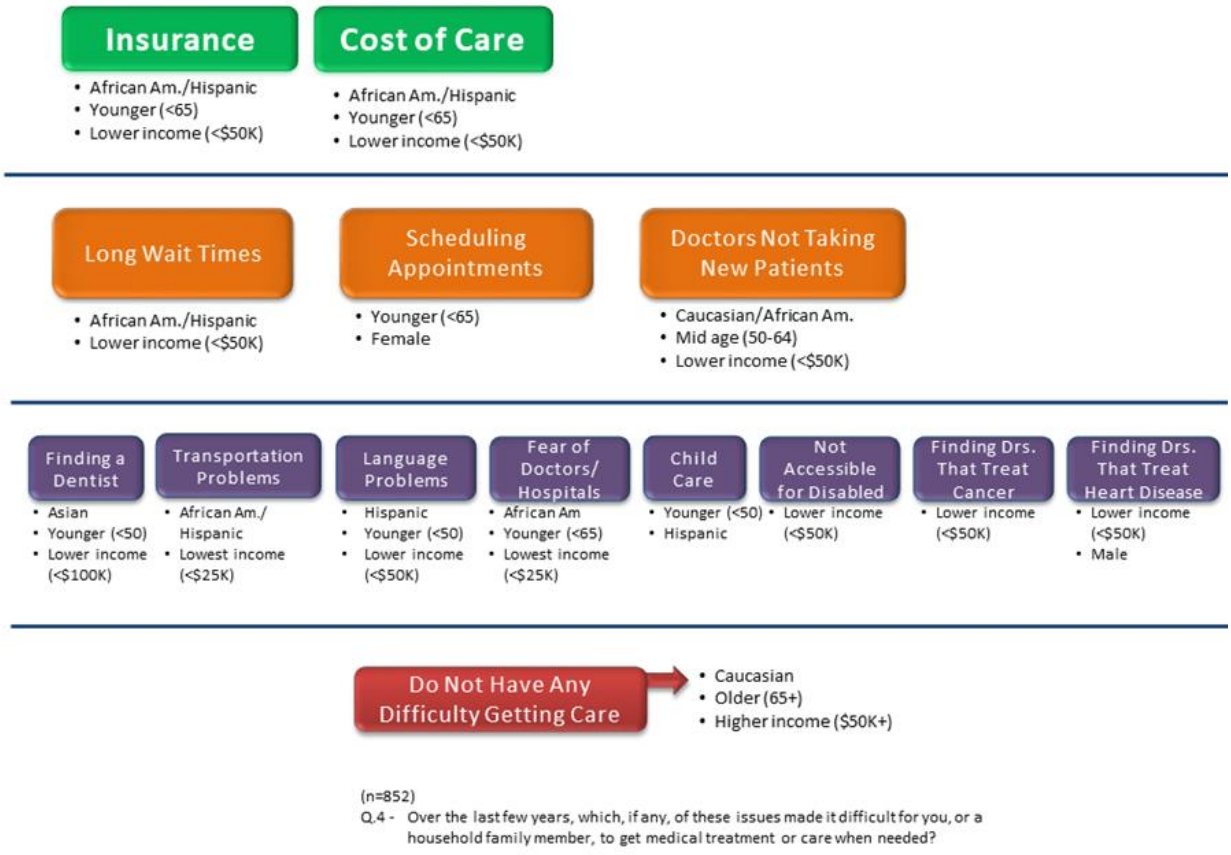
Major Barriers to Accessing Health Care in MMC's PSA

- Insurance and cost of care are the key barriers cited by area residents surveyed followed by long wait times, scheduling appointments and doctors not taking new patients.
- Almost one-third of respondents claim they do not experience any difficulty accessing the care they need.



(n=852)
Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

Summary of Health Care Barriers by Subgroups



(n=852)
Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

Barriers to Accessing Health Care Services – by Ethnicity

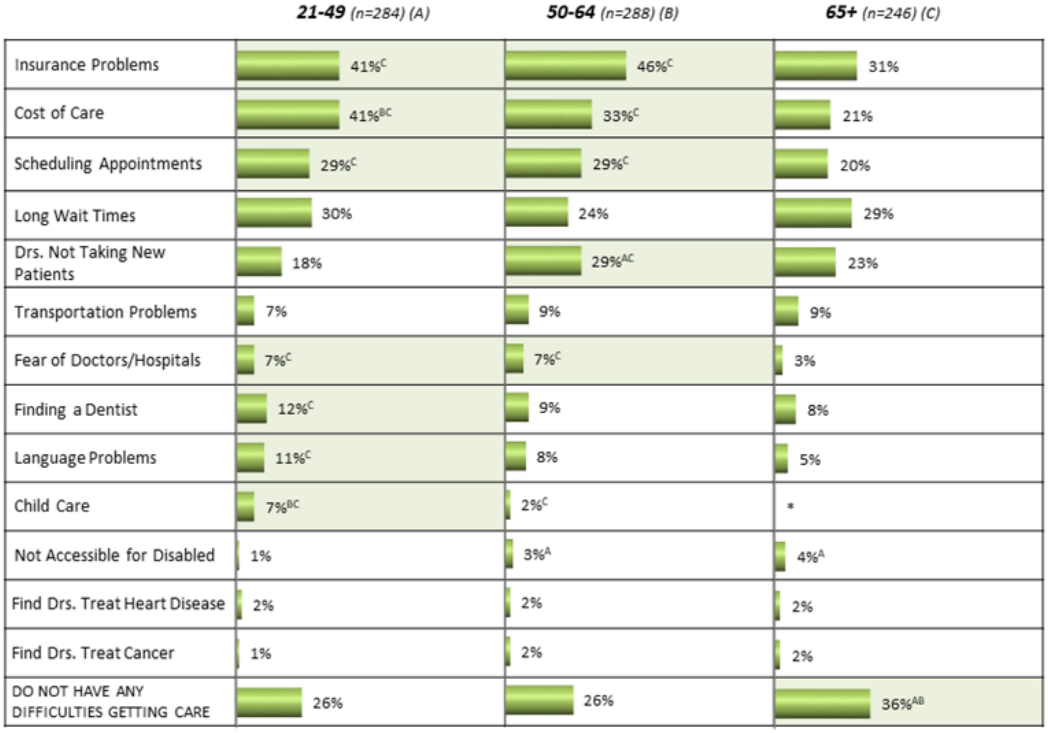
- **African Americans and Hispanics cite quite a few barriers to getting health care services, while Caucasians cite the least difficulty getting the services they need.**
- **Asians cite more difficulty finding a dentist vs. other groups.**

	Caucasian *(n=520) (A)*	***African American*** *(n=109) (B)*	***Hispanic*** *(n=155) (C)*	***Asian*** *(n=32) (D)*
Insurance Problems	37%	47%[A]	46%[A]	41%
Cost of Care	26%	44%[A]	41%[A]	34%
Scheduling Appointments	27%[B]	20%	24%	31%
Long Wait Times	23%	36%[A]	37%[A]	28%
Drs. Not Taking New Patients	23%[D]	28%[D]	19%[D]	6%
Transportation Problems	5%	19%[A]	15%[A]	13%
Fear of Doctors/Hospitals	4%	14%[AC]	7%	13%
Finding a Dentist	7%	17%[A]	13%[A]	22%[A]
Language Problems	2%	6%[A]	27% ABD	3%
Child Care	3%	5%	7%[A]	6%
Not Accessible for Disabled	2%	6%[A]	3%	6%
Find Drs. Treat Heart Disease	1%	4%	3%	3%
Find Drs. Treat Cancer	1%	4%	3%	3%
DO NOT HAVE ANY DIFFICULTIES GETTING CARE	35%[BCD]	21%	16%	22%

Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?
(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Barriers to Accessing Health Care Services – by Age

- **In general, younger respondents cite more barriers than older respondents.**



	21-49 *(n=284) (A)*	***50-64*** *(n=288) (B)*	***65+*** *(n=246) (C)*
Insurance Problems	41%[C]	46%[C]	31%
Cost of Care	41%[BC]	33%[C]	21%
Scheduling Appointments	29%[C]	29%[C]	20%
Long Wait Times	30%	24%	29%
Drs. Not Taking New Patients	18%	29%[AC]	23%
Transportation Problems	7%	9%	9%
Fear of Doctors/Hospitals	7%[C]	7%[C]	3%
Finding a Dentist	12%[C]	9%	8%
Language Problems	11%[C]	8%	5%
Child Care	7%[BC]	2%[C]	*
Not Accessible for Disabled	1%	3%[A]	4%[A]
Find Drs. Treat Heart Disease	2%	2%	2%
Find Drs. Treat Cancer	1%	2%	2%
DO NOT HAVE ANY DIFFICULTIES GETTING CARE	26%	26%	36%[AB]

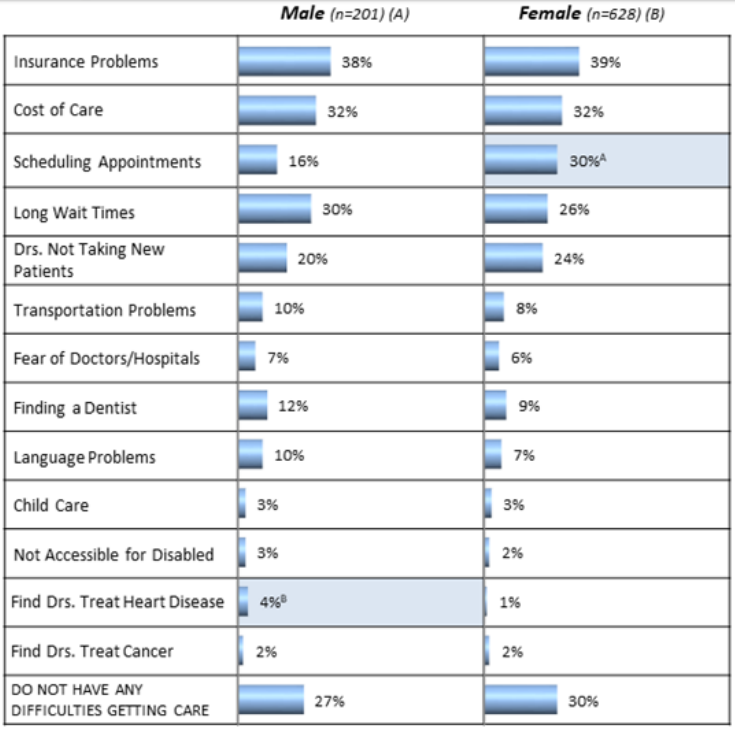
* = Less than 0.5%.

Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Barriers to Accessing Health Care Services – by Gender

- **Females say they have more difficulty scheduling appointments versus males, while males have somewhat more difficulty with finding doctors that treat heart disease.**



Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?
(A/B) = Significantly greater than indicated cell at the 90% confidence level.

Barriers to Accessing Health Care Services – by Income

- **Lower income groups, particularly those in the <$25K income group are the most likely to encounter problems when seeking care.**

	Under $25K *(n=108) (A)*	***$25-50K*** *(n=160) (B)*	***$50-100K*** *(n=165) (C)*	***$100-150K*** *(n=120) (D)*	***$150K+*** *(n=96) (E)*
Insurance Problems	53% CDE	51% CDE	42%E	33%	24%
Cost of Care	46% CDE	44% CDE	35%E	27%E	15%
Scheduling Appointments	20%	32%A	33%A	25%	30%
Long Wait Times	36% CDE	38% CDE	26%	19%	19%
Drs Not Taking New Patients	30%D	27%D	22%	18%	23%
Transportation Problems	28% BCDE	10%DE	6%E	3%	1%
Fear of Doctors/Hospitals	10%DE	8%	6%	3%	4%
Finding a Dentist	18%DE	12%DE	13%DE	3%	3%
Language Problems	19% CDE	16% CDE	4%DE	-	-
Child Care	2%	6%AE	4%E	3%	1%
Not Accessible for Disabled	7% CDE	4% CDE	1%	1%	-
Finding Dr. Treats Heart Disease	6% CDE	3%C	1%	1%	1%
Finding Dr. Treats Cancer	3%DE	3%DE	1%	-	-
DO NOT HAVE ANY DIFFICULTIES GETTING CARE	15%	21%	28%A	37%AB	42% ABC

Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?
(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

D. COMMUNITY STRENGTHS/OPPORTUNITIES

Community Strengths/Opportunities

- A large majority of residents surveyed feel it is easy to find fresh foods, there are ample places to socialize, there are safe places to walk/play and their community is a good place to raise a family.
- Most also feel it's easy to live a healthy lifestyle, the level of violence is low and there are educational opportunities available.
- Opportunities exist with regard to safe/affordable housing, transportation services, lowering the level of interpersonal violence and offering healthy food choices in schools.

(n=852) **Top 2 Box Agreement**
Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

Community Strengths/Opportunities by Subgroups

Easy to Find Fresh Fruits/Veggies
- Caucasian
- Older (50+)
- Skews higher income

Places to Socialize
- Caucasian/Asian
- Older (50+)
- Skews higher income

Good Place to Raise a Family
- Caucasian
- Skews higher income
- Older (50+)

Safe Outdoor Places to Walk/Play
- Caucasian
- Skews higher income

Easy to Live a Healthy Lifestyle
- Caucasian
- Skews higher income
- Older (50+)

Low Level of Violence
- Caucasian
- Skews higher income
- Older (50+)

Educational Opportunities
- Caucasian
- Older (50+)
- Male
- Highest income ($150K+)

Affordable Basic Needs
- Caucasian/Hispanic/Asian
- Higher income ($50K+)

Job Opportunities
- Asian/Caucasian
- Skews higher income

Transportation Services for Disabled/Seniors
- African Am.

Schools Offer Healthy Food Choices
- Asian/Hispanic
- Younger (<65)

Low Interpersonal Violence
- Male
- Higher income ($100K+)

Transportation Services to Assist Residents
- African Am.
- Lower income (<$50K)

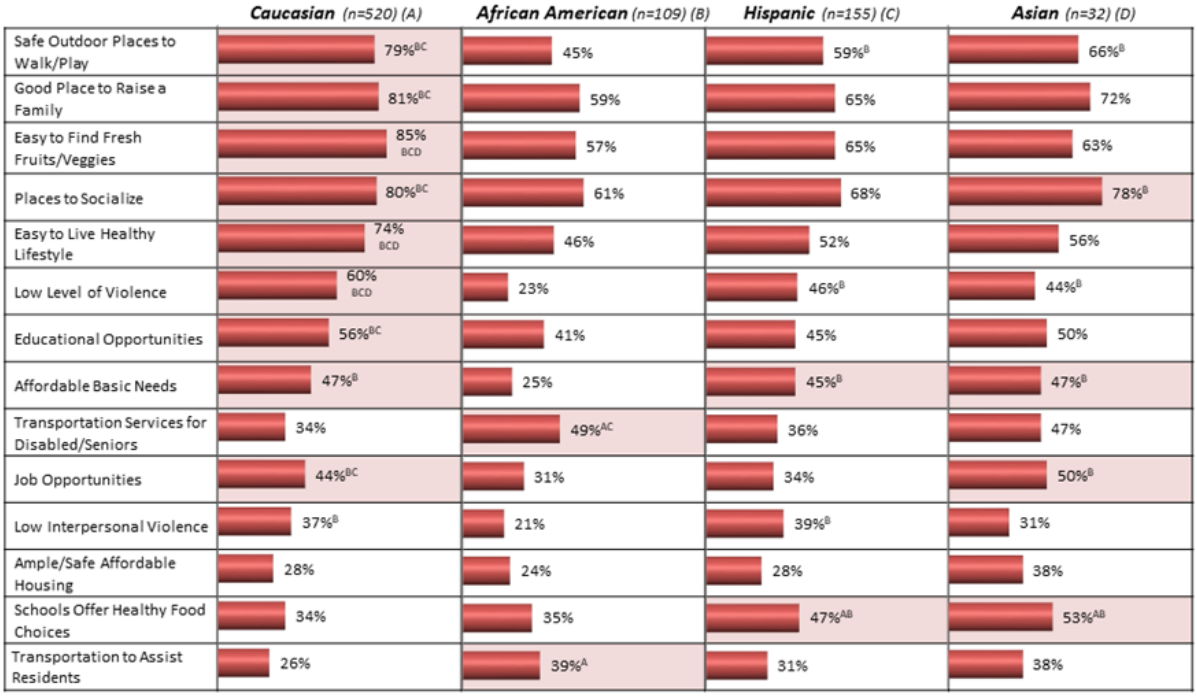
Ample/Safe Affordable Housing
- Skews higher income

(n=852) **Top 2 Box Agreement**

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

Community Strengths/Opportunities – by Ethnicity

- **In general, Caucasians tend to rate community services very positively, while African Americans and Hispanics rate services significantly lower.**
- **African Americans, however, are the most positive toward transportation services.**
- **Asians give most community services moderate to high ratings overall.**



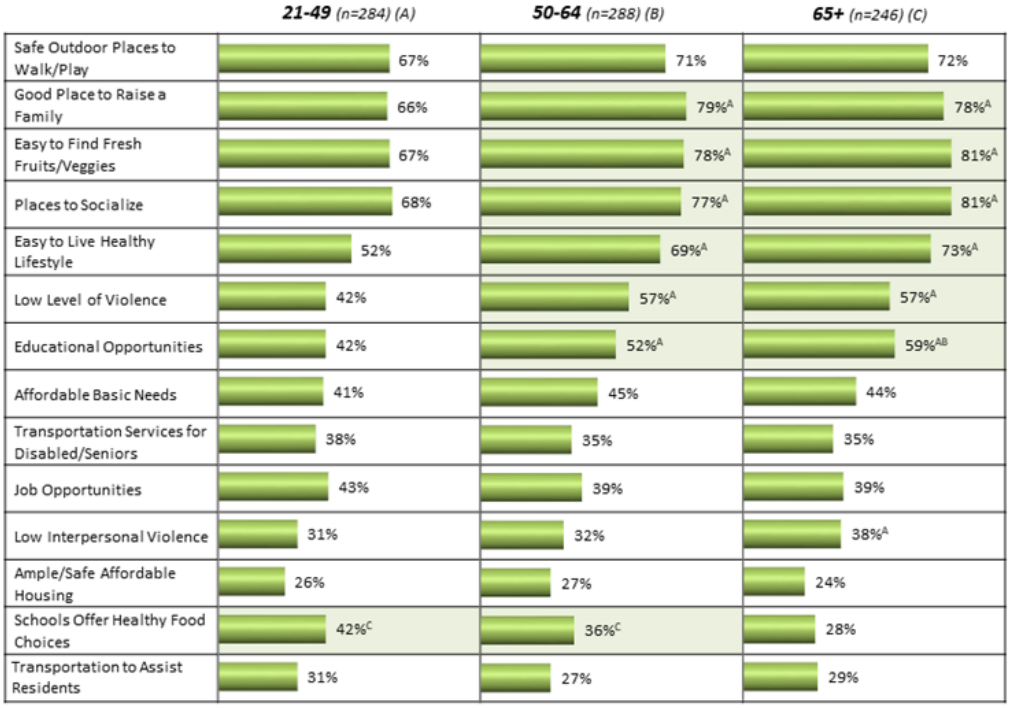
Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Community Strengths/Opportunities – by Age

- **Older residents surveyed (50+) are more positive towards most community services vs. younger respondents, although younger respondents are more likely to feel schools offer healthy food choices.**



	21-49 *(n=284) (A)*	***50-64*** *(n=288) (B)*	***65+*** *(n=246) (C)*
Safe Outdoor Places to Walk/Play	67%	71%	72%
Good Place to Raise a Family	66%	79%[A]	78%[A]
Easy to Find Fresh Fruits/Veggies	67%	78%[A]	81%[A]
Places to Socialize	68%	77%[A]	81%[A]
Easy to Live Healthy Lifestyle	52%	69%[A]	73%[A]
Low Level of Violence	42%	57%[A]	57%[A]
Educational Opportunities	42%	52%[A]	59%[AB]
Affordable Basic Needs	41%	45%	44%
Transportation Services for Disabled/Seniors	38%	35%	35%
Job Opportunities	43%	39%	39%
Low Interpersonal Violence	31%	32%	38%[A]
Ample/Safe Affordable Housing	26%	27%	24%
Schools Offer Healthy Food Choices	42%[C]	36%[C]	28%
Transportation to Assist Residents	31%	27%	29%

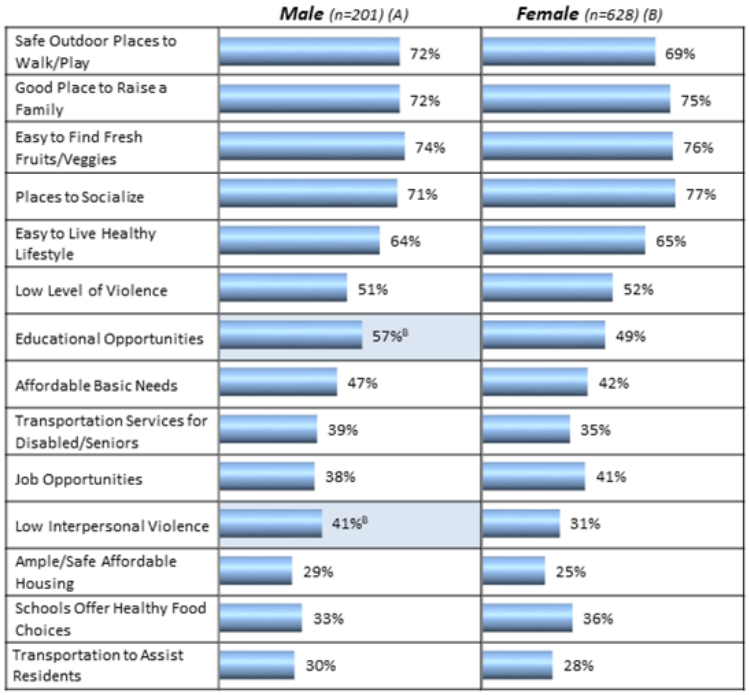
Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Community Strengths/Opportunities – by Gender

- **Few differences exist in community services between males and females. Males are more positive towards educational opportunities and the level of interpersonal violence versus females.**



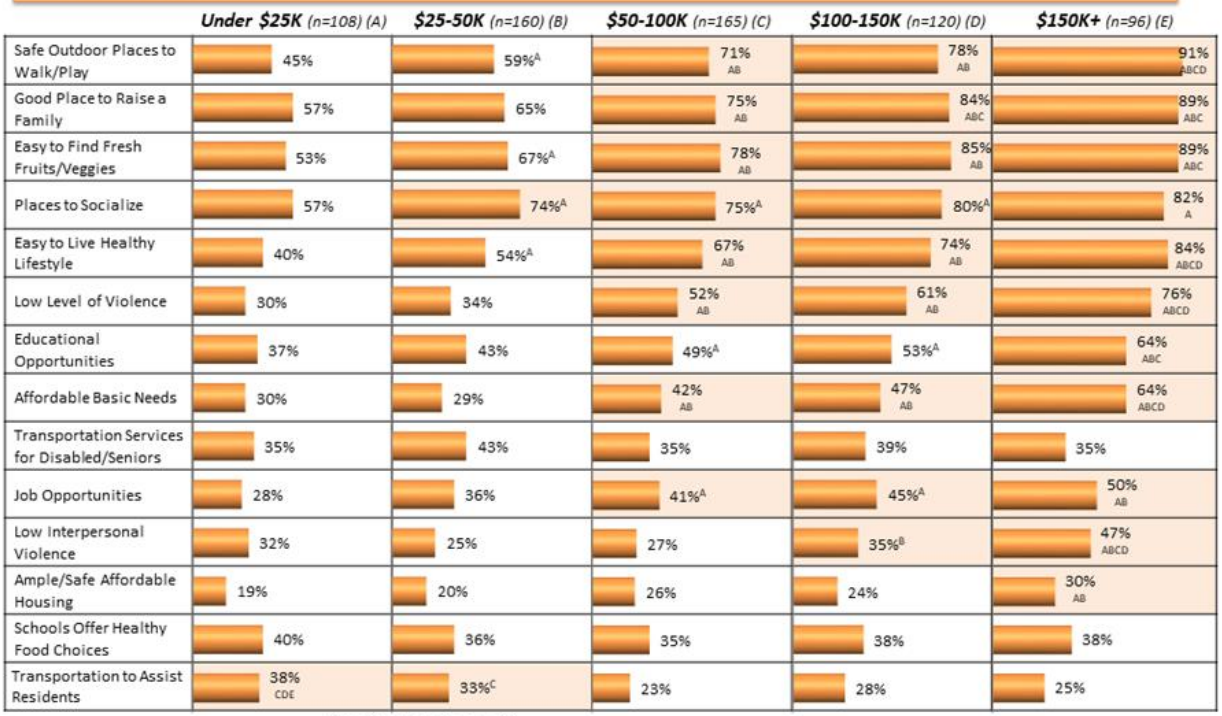
Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B) = Significantly greater than indicated cell at the 90% confidence level.

Community Strengths/Opportunities – by Income

- **Respondents in higher income brackets ($50K+) are more positive to their community services versus those in lower income groups. The only area where lower income respondents are more favorable is transportation services to assist residents.**



Top 2 Box Agreement

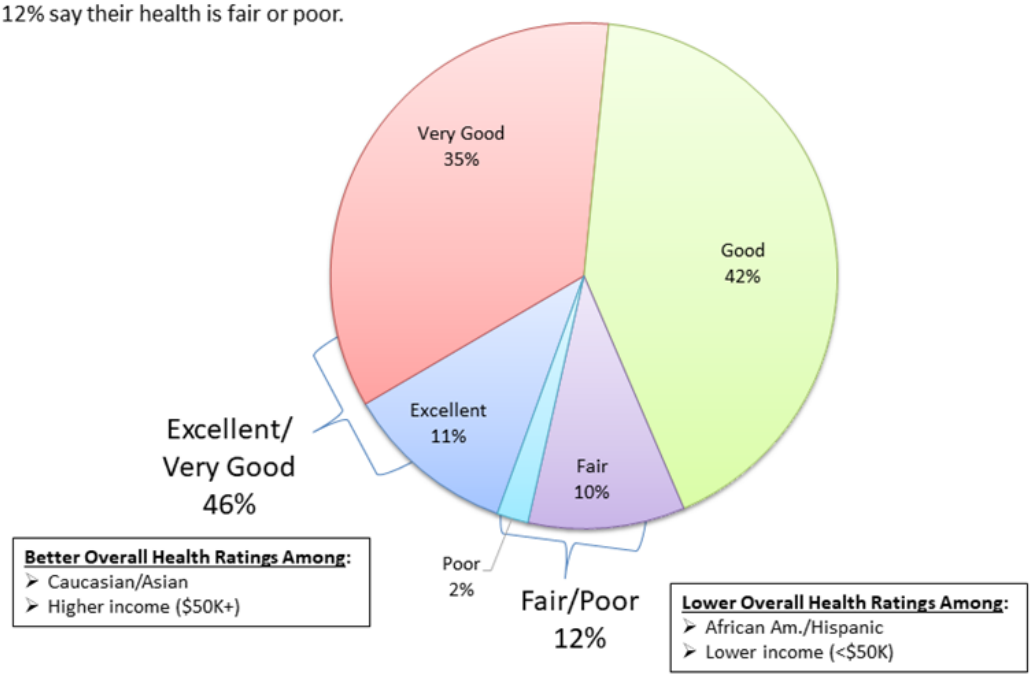
Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

E. PERSONAL HEALTH HABITS AND PRACTICES

Self-Description of Overall Health

- Only one of ten respondents describe their health as "Excellent," although almost one-half (46%) of residents surveyed describe their health as being excellent or very good, 42% describe it as good, while 12% say their health is fair or poor.

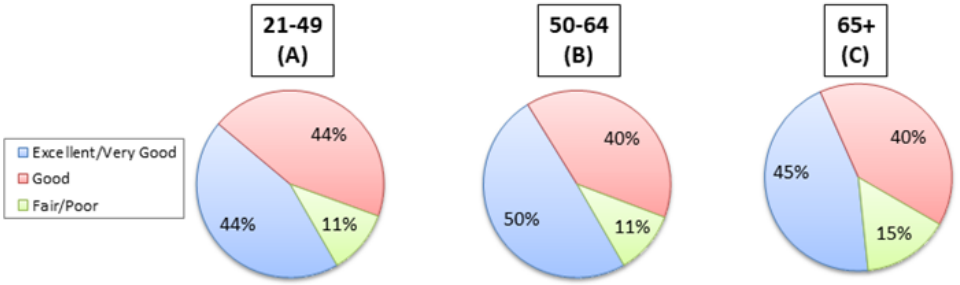


(n=852)
Q.6 - How would you describe your overall health?

Self-Description of Overall Health – by Subgroups

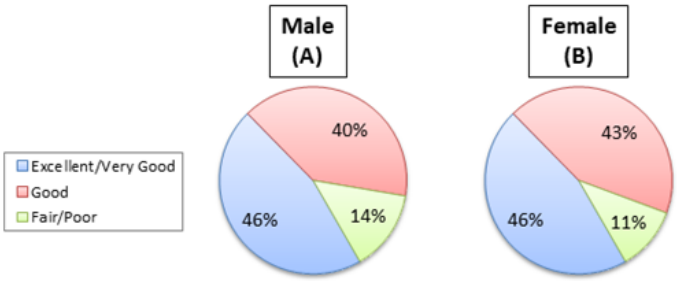
Age:

No differences are observed between younger/older respondents with regard to describing their health.



Gender:

Males and females describe their overall health about the same.

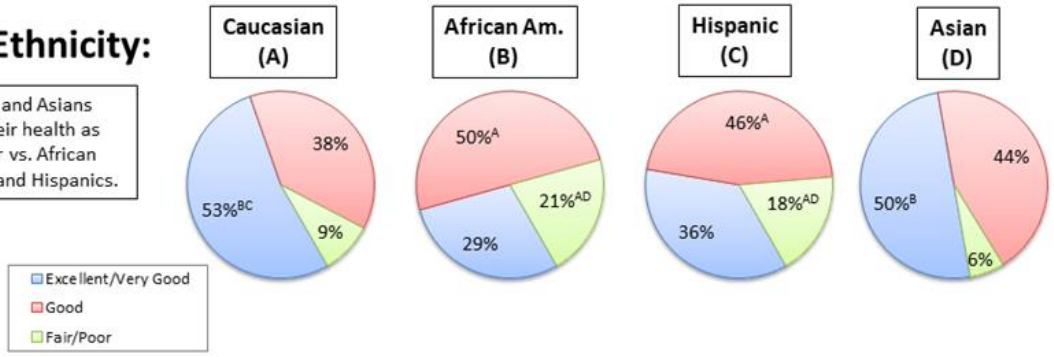


Q.6 - How would you describe your overall health?
(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Self-Description of Overall Health – by Subgroups – (continued)

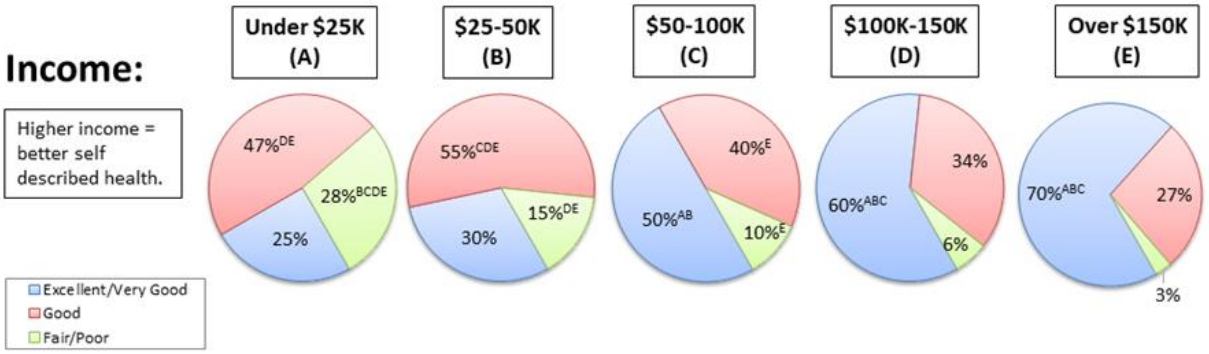
Race/Ethnicity:

Caucasians and Asians describe their health as being better vs. African Americans and Hispanics.



Income:

Higher income = better self described health.

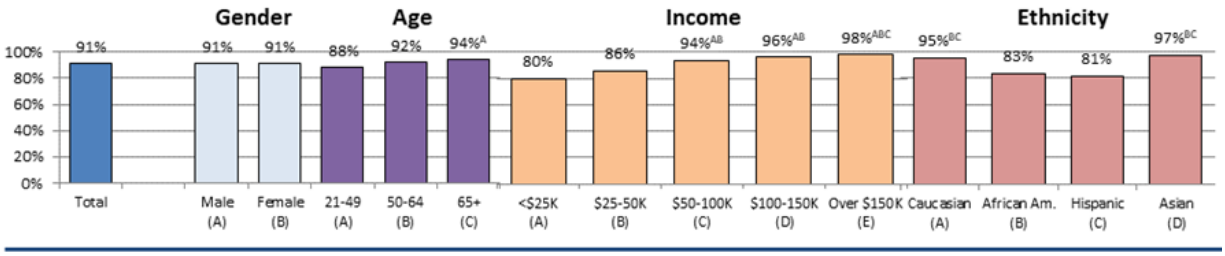


Q.6 - How would you describe your overall health?
(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

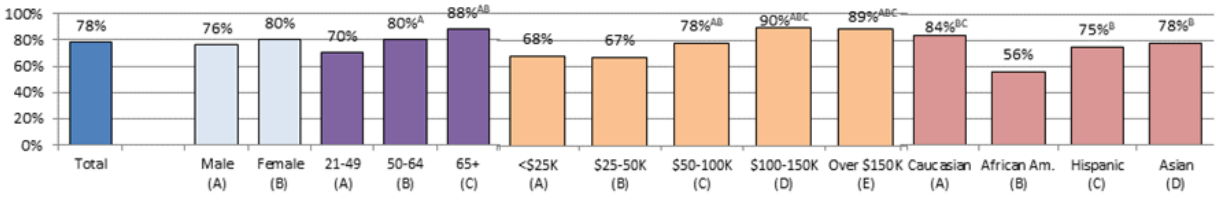
Self-Description of Understanding and Eating Healthy

- The large majority of residents surveyed feel they understand what food is healthy (91%), with many saying they eat healthy food on a regular basis (78%).
- Older respondents and those with higher incomes are more likely to eat healthy on a regular basis.
- While African Americans claim to understand what healthy food is, they are the least likely to eat healthy regularly.

Have enough information to understand what food is healthy



Eat healthy foods on a regular basis

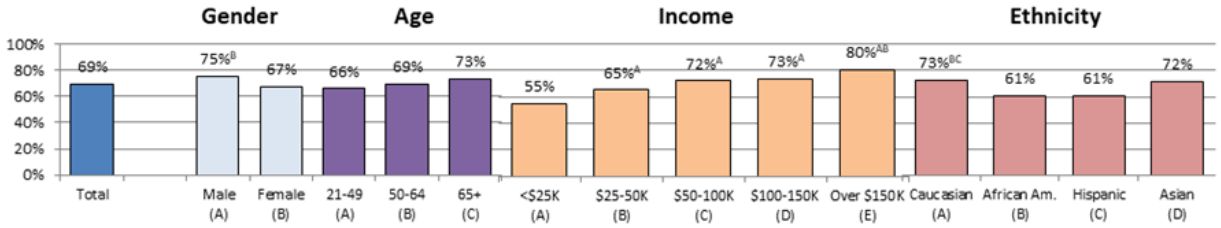


(n=852)
Q.11 - Do you feel that you...
(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

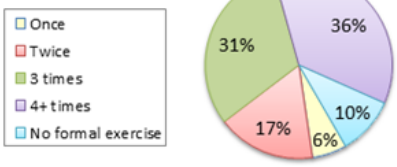
Self-Description of Physical Activity

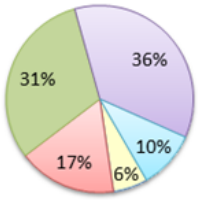
- Nearly seven-of-ten residents surveyed claim to be physically active, with many saying they exercise more than three times per week.
- Physical activity is higher among males and the higher income groups.

Are physically active



 # Times Exercise per Week
(Among those who are physically active)
(n=584)

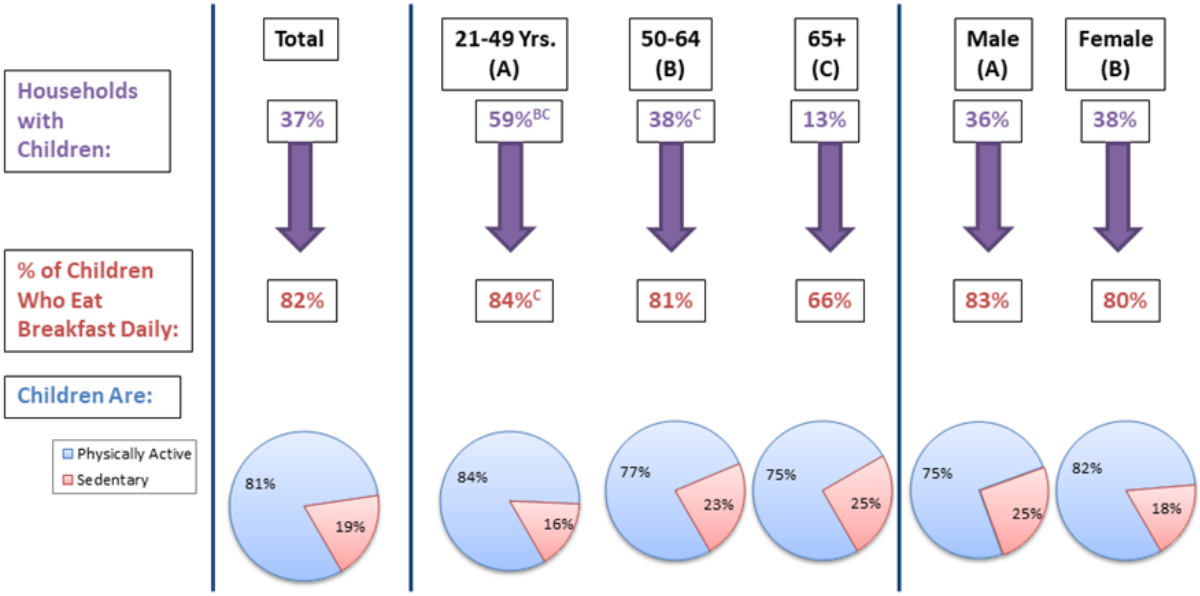




(n=852)
Q.11 - Do you feel that you...
Q.11 - How often do you exercise each week?
(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

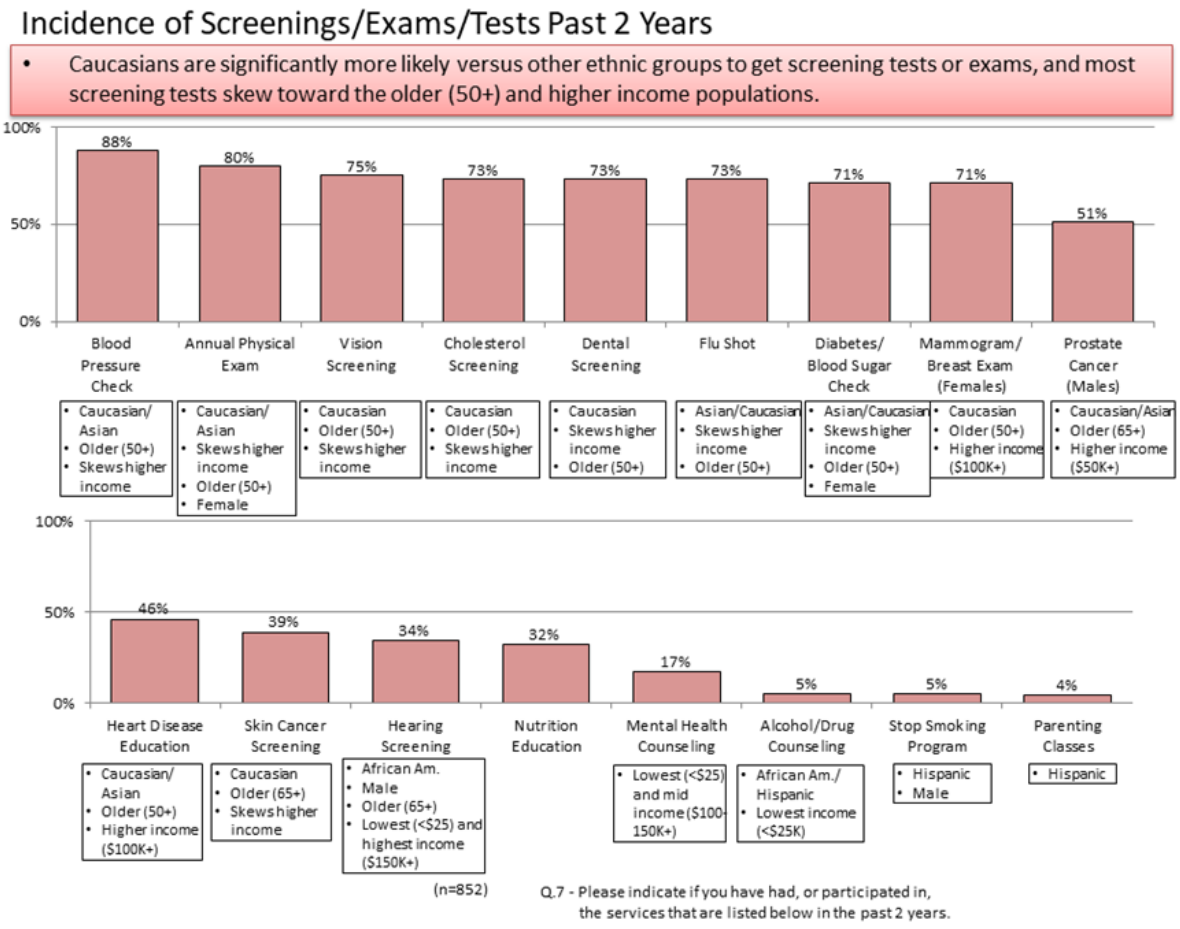
Activity Level of Children in Household

- In households with children, the large majority are eating breakfast daily and are physically active, particularly in younger households.



(n=852)
Q.11a - Do you have any children that live with you?
Q.11b - Do they eat breakfast before the start of the school day?
Q.11c - Would you describe your child(ren) as physically active or sedentary during after school hours and weekends?
(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

F. INCIDENCE OF SCREENING TESTS AND CONDITIONS DIAGNOSED



Incidence of Screenings/Exams/Tests – by Ethnicity

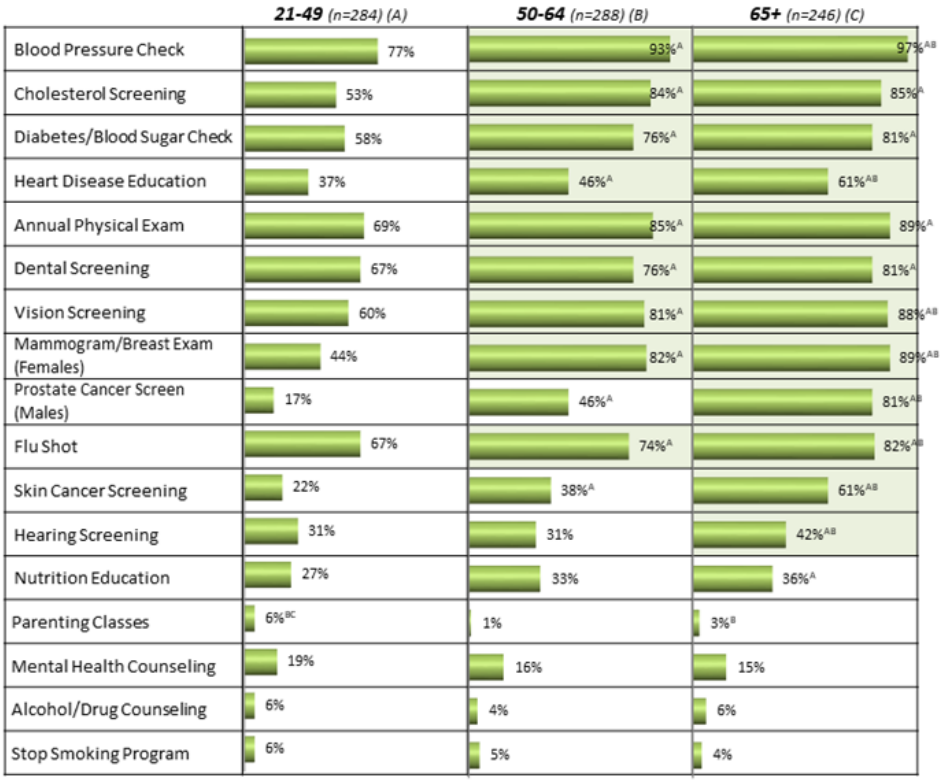
- Caucasians are the most likely to get preventative screening exams overall. African Americans report a high use of hearing screenings, while Hispanics report more stop smoking programs and parenting classes vs. other ethnic groups.
- Asians indicate the highest incidence of getting flu shots.

	Caucasian *(n=520) (A)*	***African American*** *(n=109) (B)*	***Hispanic*** *(n=155) (C)*	***Asian*** *(n=32) (D)*
Blood Pressure Check	93% BC	86%C	70%	91%C
Cholesterol Screening	80% BC	64%	57%	69%
Diabetes/Blood Sugar Check	76% BC	62%	58%	78% BC
Heart Disease Education	51%C	48%C	30%	53%C
Annual Physical Exam	86% BC	73%C	62%	84%C
Dental Screening	82% BC	58%	57%	69%
Vision Screening	81% BC	72%C	60%	75%C
Mammogram/Breast Exam (Females)	75% CD	65%	57%	56%
Prostate Cancer Screen (Males)	60% BC	33%	43%	60%
Flu Shot	79% BC	65%	61%	88% BC
Skin Cancer Screening	51% BCD	14%	21%	19%
Hearing Screening	33%D	48% ACD	29%	19%
Nutrition Education	30%	36%	28%	31%
Parenting Classes	3%D	5%D	8% AD	-
Mental Health Counseling	19%	13%	14%	16%
Alcohol/Drug Counseling	4%D	7%D	8% AD	-
Stop Smoking Program	4%	5%	9%A	3%

Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.
(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Incidence of Screenings/Exams/Tests – by Age

- **Most screening exams skew towards the older population (50+).**

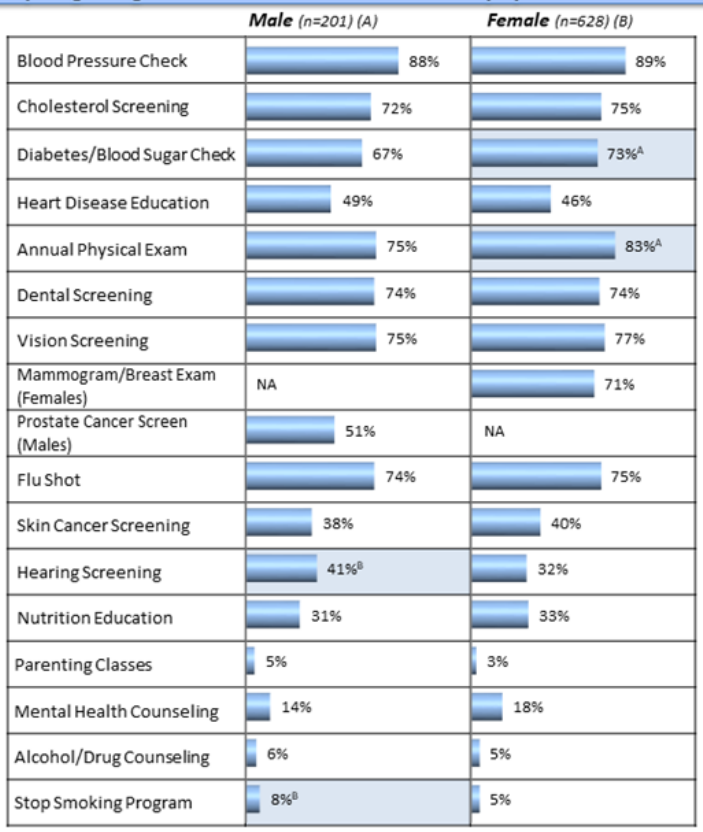


Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.

(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Incidence of Screenings/Exams/Tests – by Gender

- **Males tend to have a higher incidence than females with regard to hearing screens and stop smoking programs, while females report getting more diabetes checks and annual physical exams.**



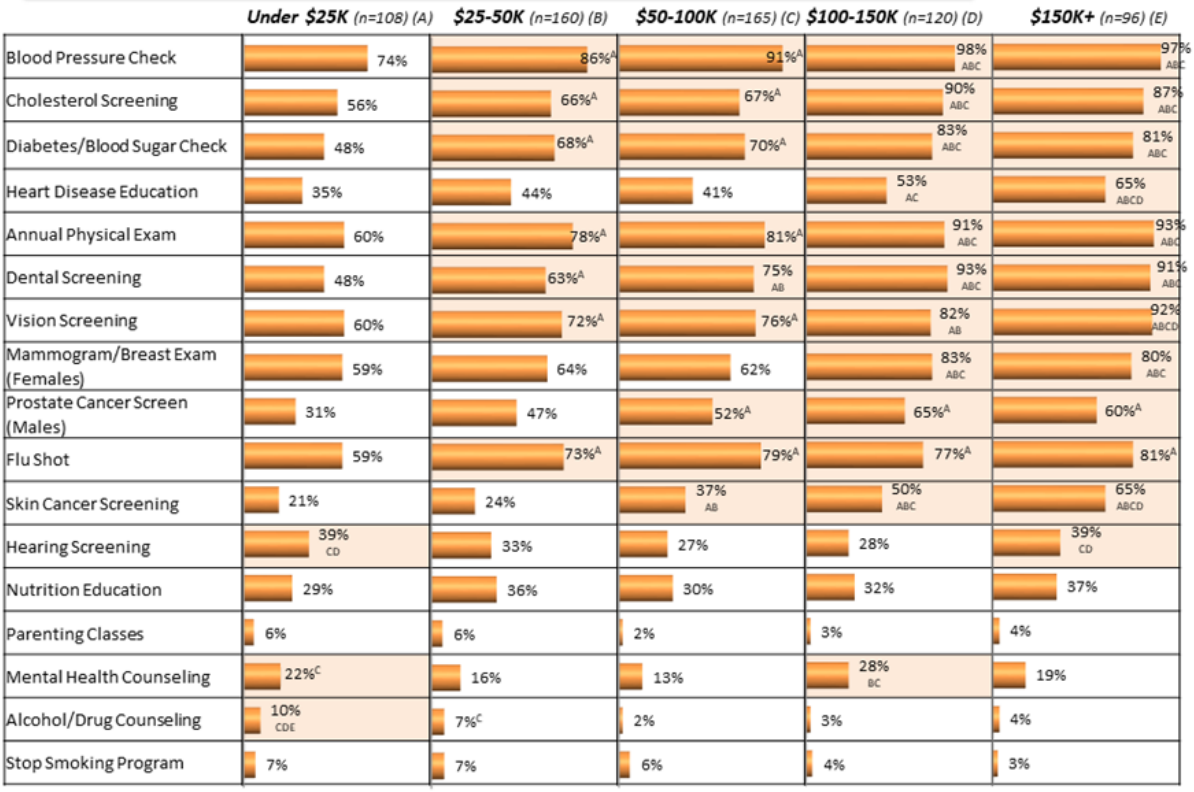
Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.

(A/B) = Significantly greater than indicated cell at the 90% confidence level.

NA = Not applicable.

Incidence of Screenings/Exams/Tests – by Income

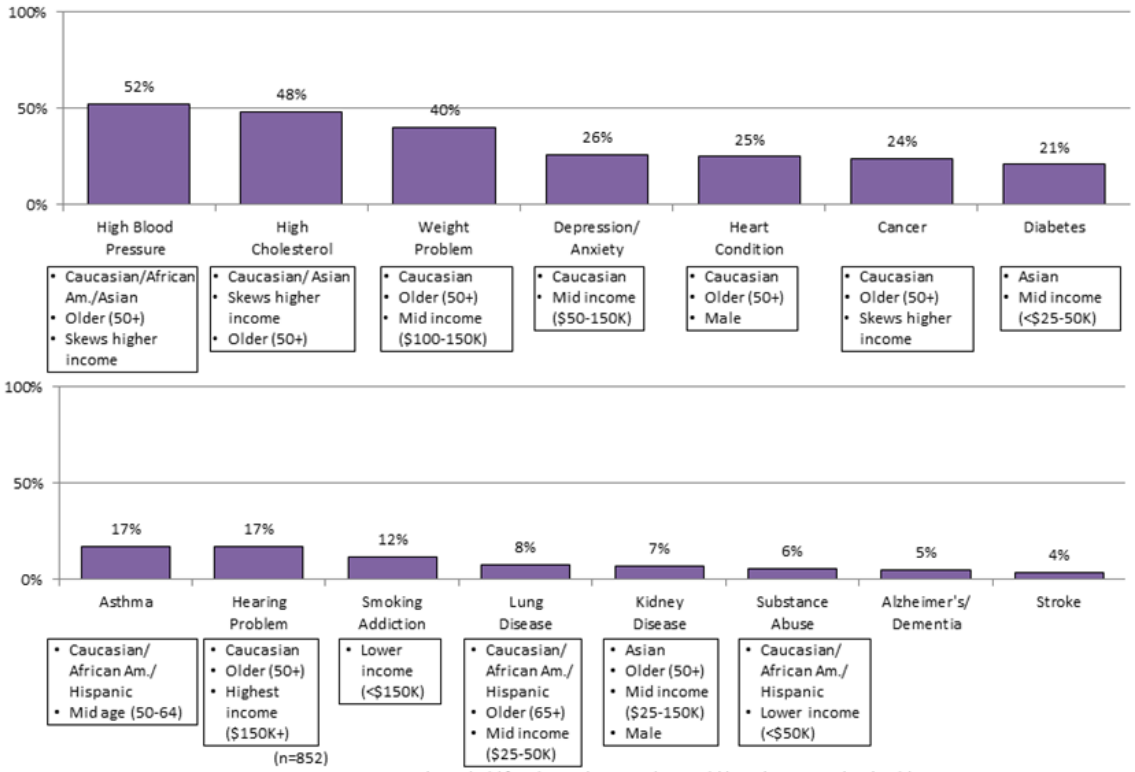
- **Higher income respondents have more screening tests versus lower income respondents.**



Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.
(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

Conditions Diagnosed by Physician (Self or Family Member)

- **Older respondents (50+) report being diagnosed with more conditions versus their younger counterparts.**

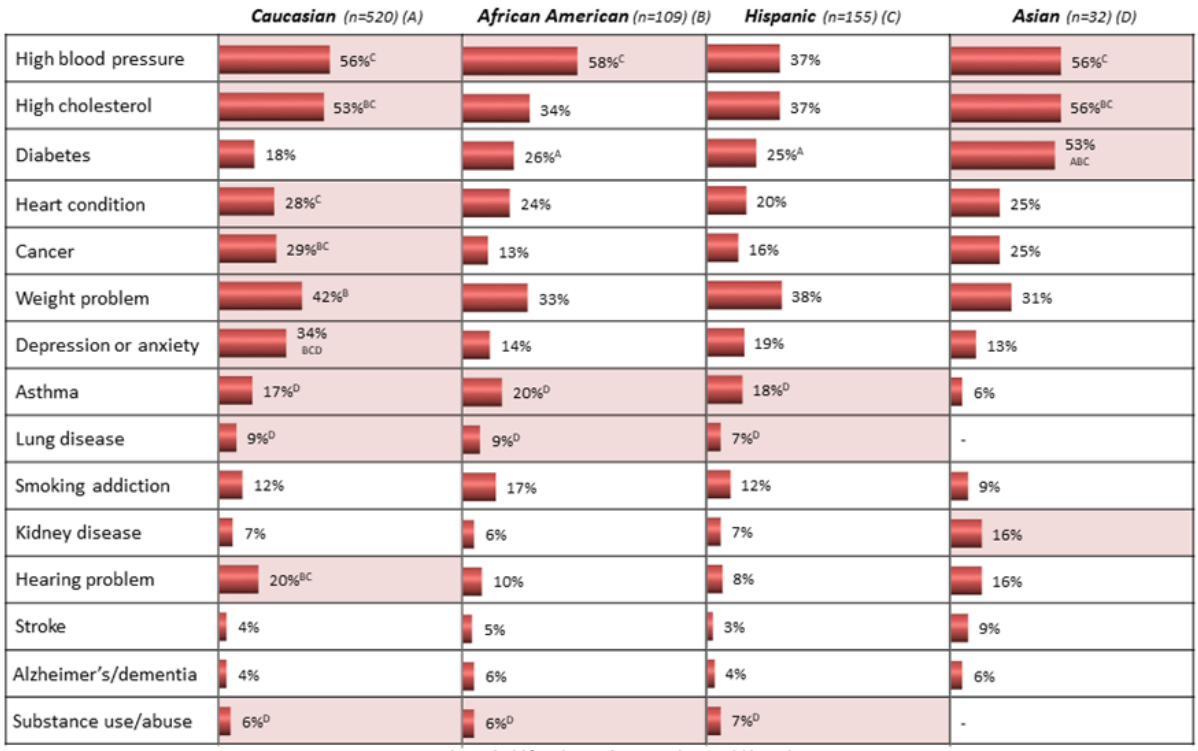


(n=852)

Q.8 - Have you, or a household family member, ever been told by a doctor or other health professional that you have had any of the following?

Conditions Diagnosed by Physician – by Ethnicity

- **Caucasians report the highest incidence of cancer, weight issues, depression and hearing problems, while Asians report high levels of diabetes.**
- **Hispanics report the lowest incidence of high blood pressure and along with African Americans, the lowest incident of high cholesterol.**

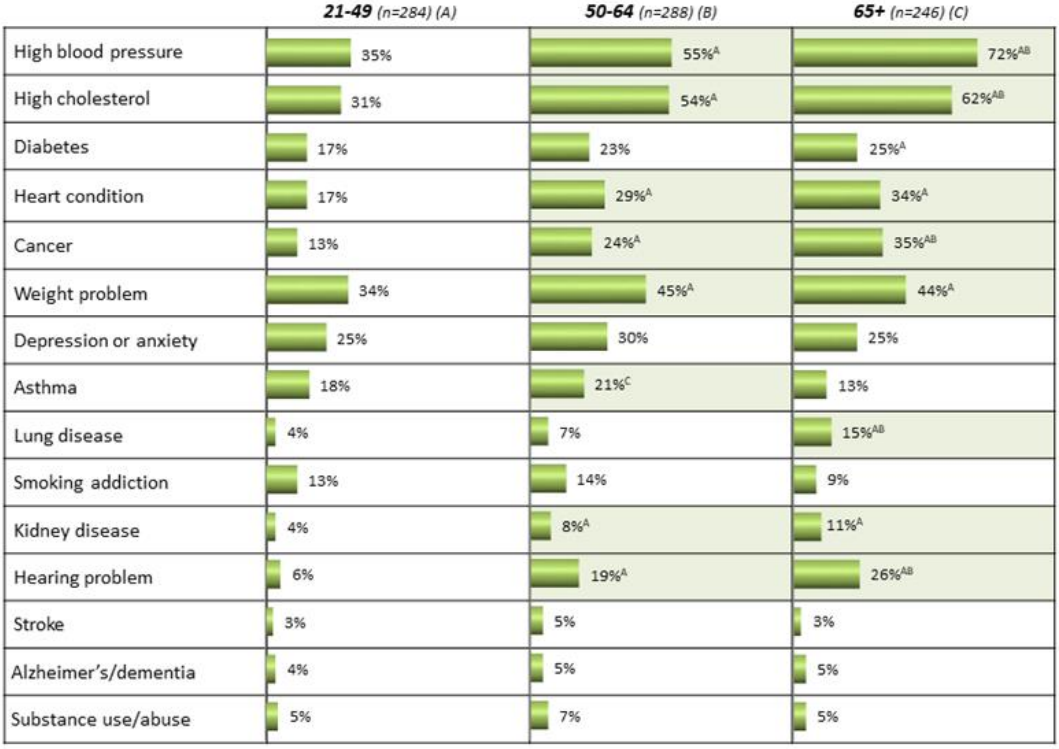


Q.8 - Have you, or a household family member, ever been told by a doctor or other health professional that you have had any of the following?
(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Top 2 Box Agreement

Conditions Diagnosed by Physician – by Age

- **Not surprisingly, older respondents (50+) report being diagnosed with more conditions than younger respondents.**



	21-49 *(n=284) (A)*	***50-64*** *(n=288) (B)*	***65+*** *(n=246) (C)*
High blood pressure	35%	55%[A]	72%[AB]
High cholesterol	31%	54%[A]	62%[AB]
Diabetes	17%	23%	25%[A]
Heart condition	17%	29%[A]	34%[A]
Cancer	13%	24%[A]	35%[AB]
Weight problem	34%	45%[A]	44%[A]
Depression or anxiety	25%	30%	25%
Asthma	18%	21%[C]	13%
Lung disease	4%	7%	15%[AB]
Smoking addiction	13%	14%	9%
Kidney disease	4%	8%[A]	11%[A]
Hearing problem	6%	19%[A]	26%[AB]
Stroke	3%	5%	3%
Alzheimer's/dementia	4%	5%	5%
Substance use/abuse	5%	7%	5%

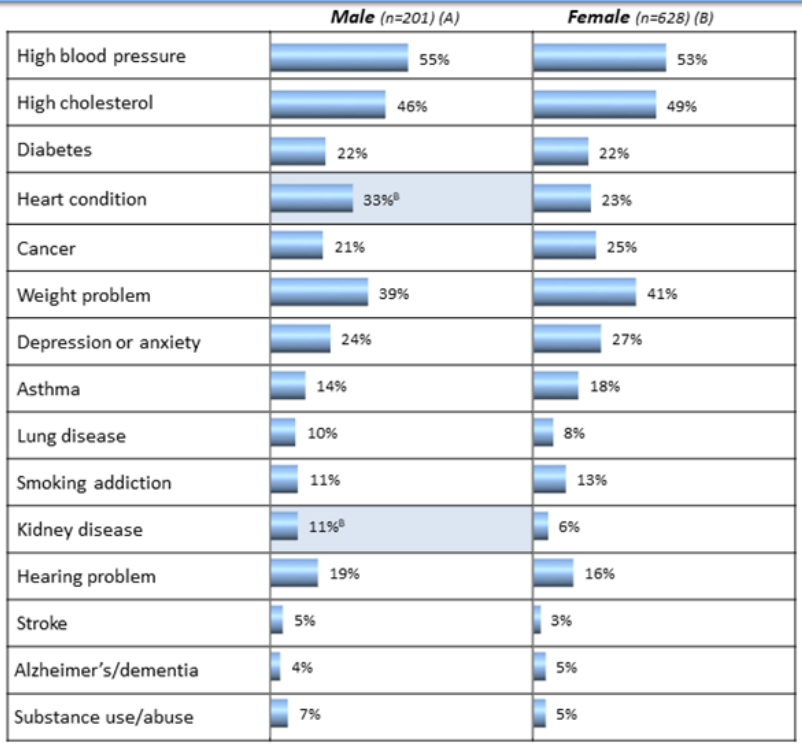
Top 2 Box Agreement

Q.8 - Have you, or a household family member, ever been told by a doctor or other health professional that you have had any of the following?

(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Conditions Diagnosed by Physician – by Gender

- **Few differences observed between males and females. Males report higher diagnosis of heart conditions and kidney disease versus females.**



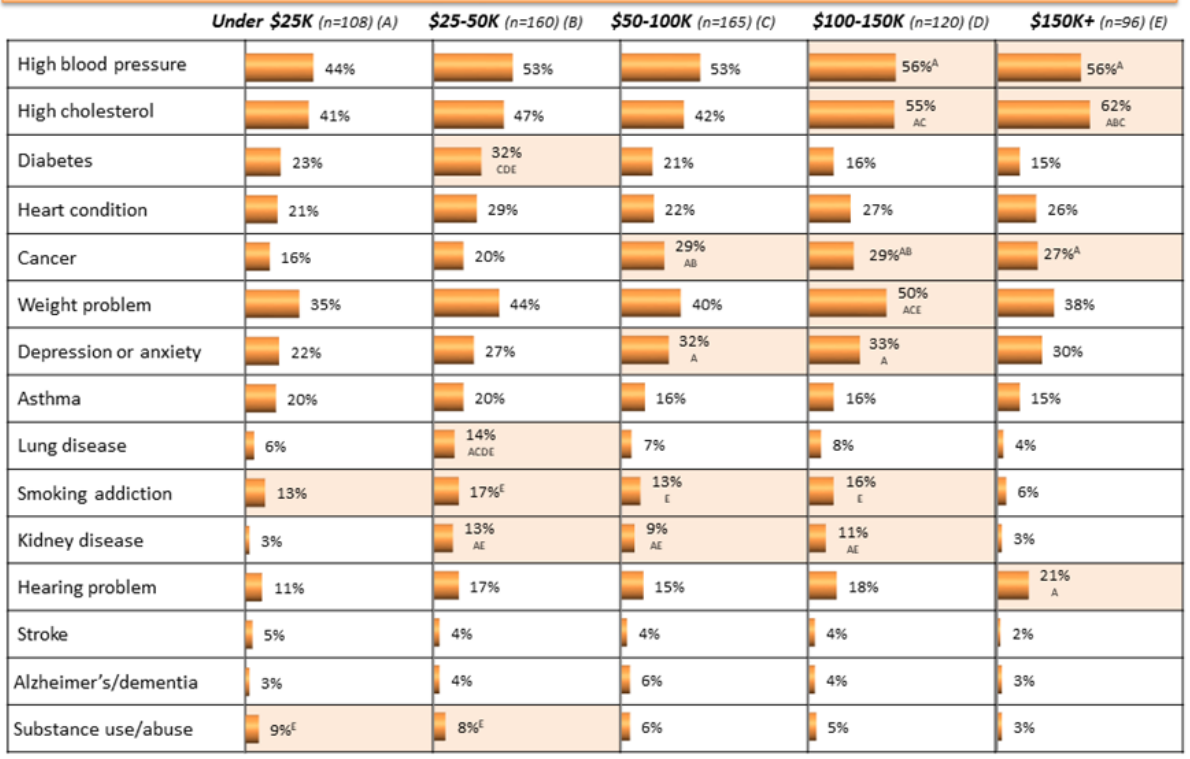
Top 2 Box Agreement

Q.8 - Have you, or a household family member, ever been told by a doctor or other health professional that you have had any of the following?

(A/B) = Significantly greater than indicated cell at the 90% confidence level.

Conditions Diagnosed by Physician – by Income

- **Highest income respondents report more high blood pressure, high cholesterol and cancer, while substance use/abuse skews to the lower income groups.**



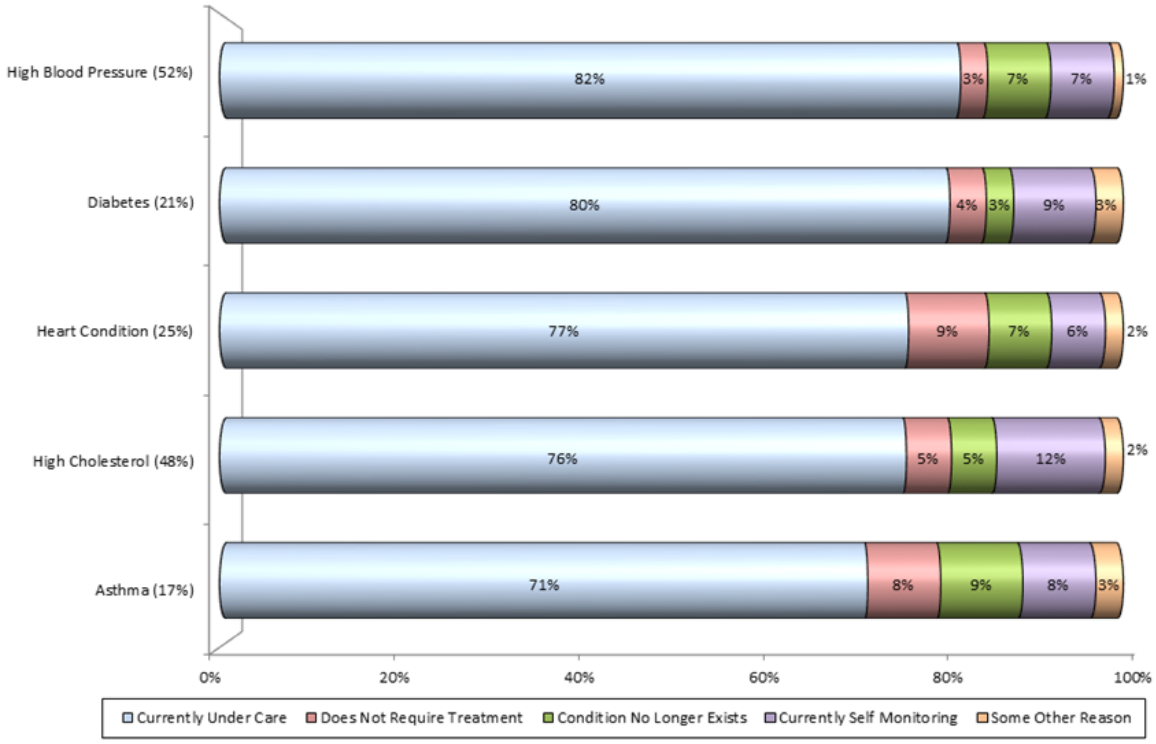
Q.8 - Have you, or a household family member, ever been told by a doctor or other health professional that you have had any of the following?

Top 2 Box Agreement

(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

How Conditions Are Being Managed

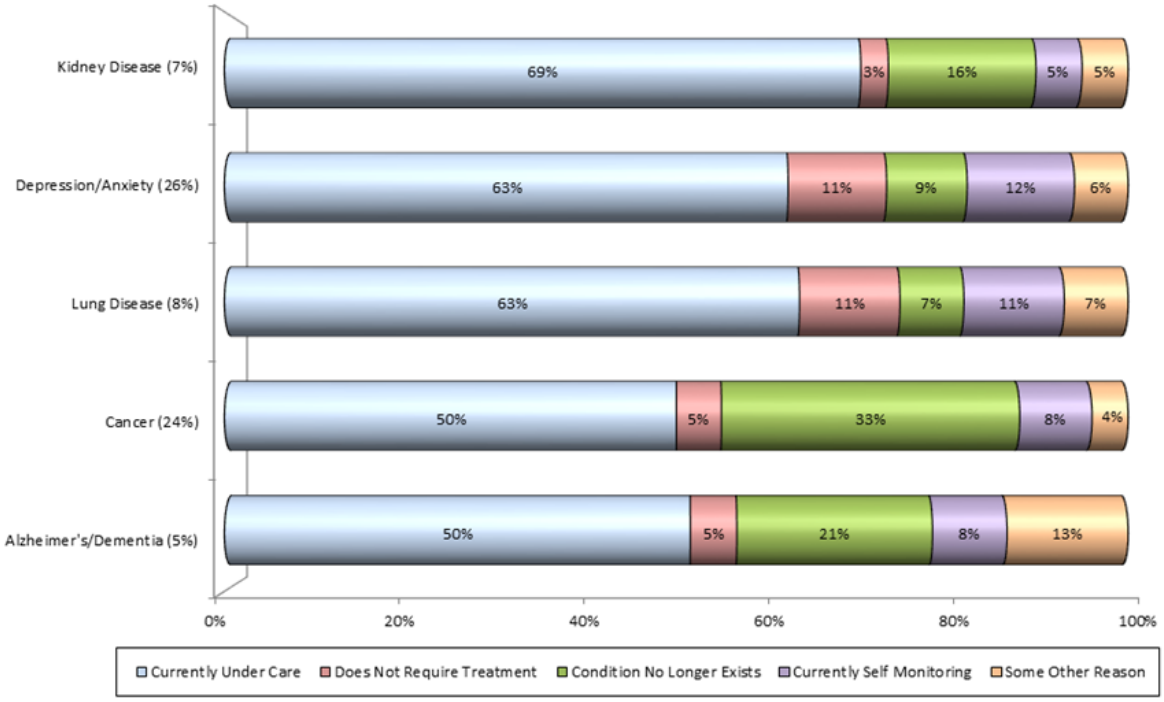
- Diagnosed conditions most likely to be under a physician's care include: high blood pressure, diabetes, heart conditions, high cholesterol and asthma.



NOTE: Multiple mentions.
Q.9 - Are you/household family member currently under care for this [CONDITION]?
Q.10 - Why are you/household family member not under current care for the [CONDITION]? Would you say it is because...

How Conditions Are Being Managed – (continued)

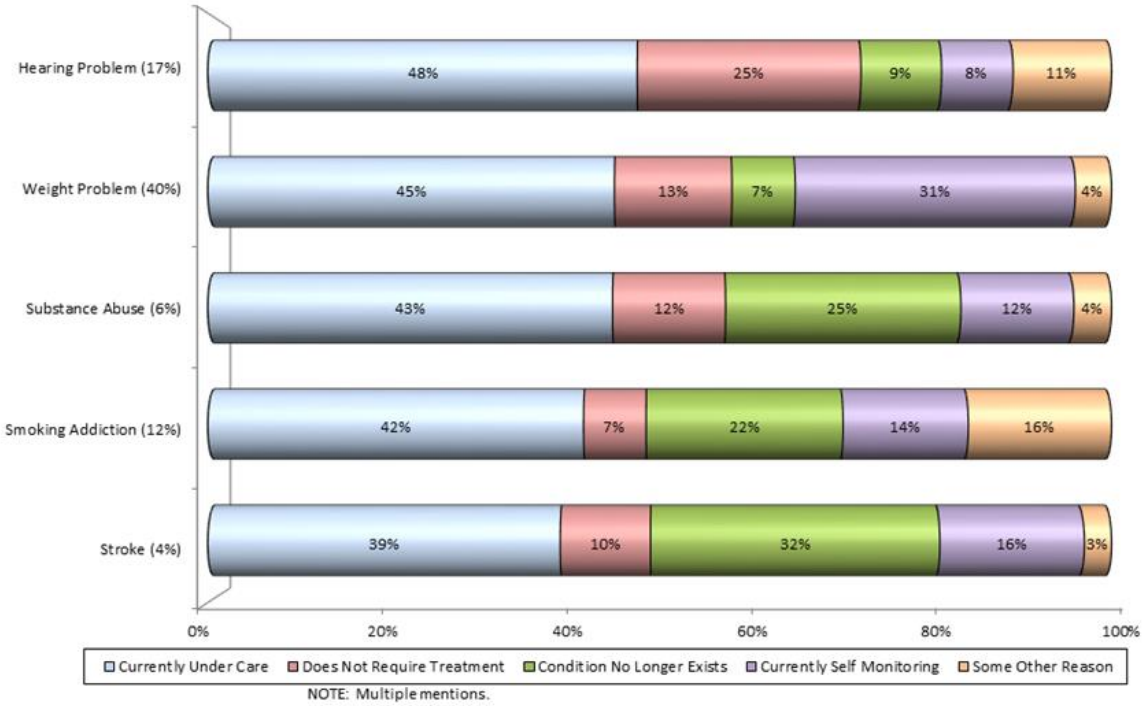
- Many are also under a physician's care for kidney disease, depression/anxiety, lung disease, cancer and Alzheimer's. For cancer, Alzheimer's and kidney disease, many say the condition no longer exists.



NOTE: Multiple mentions.
Q.9 - Are you/household family member currently under care for this [CONDITION]?
Q.10 - Why are you/household family member not under current care for the [CONDITION]? Would you say it is because…

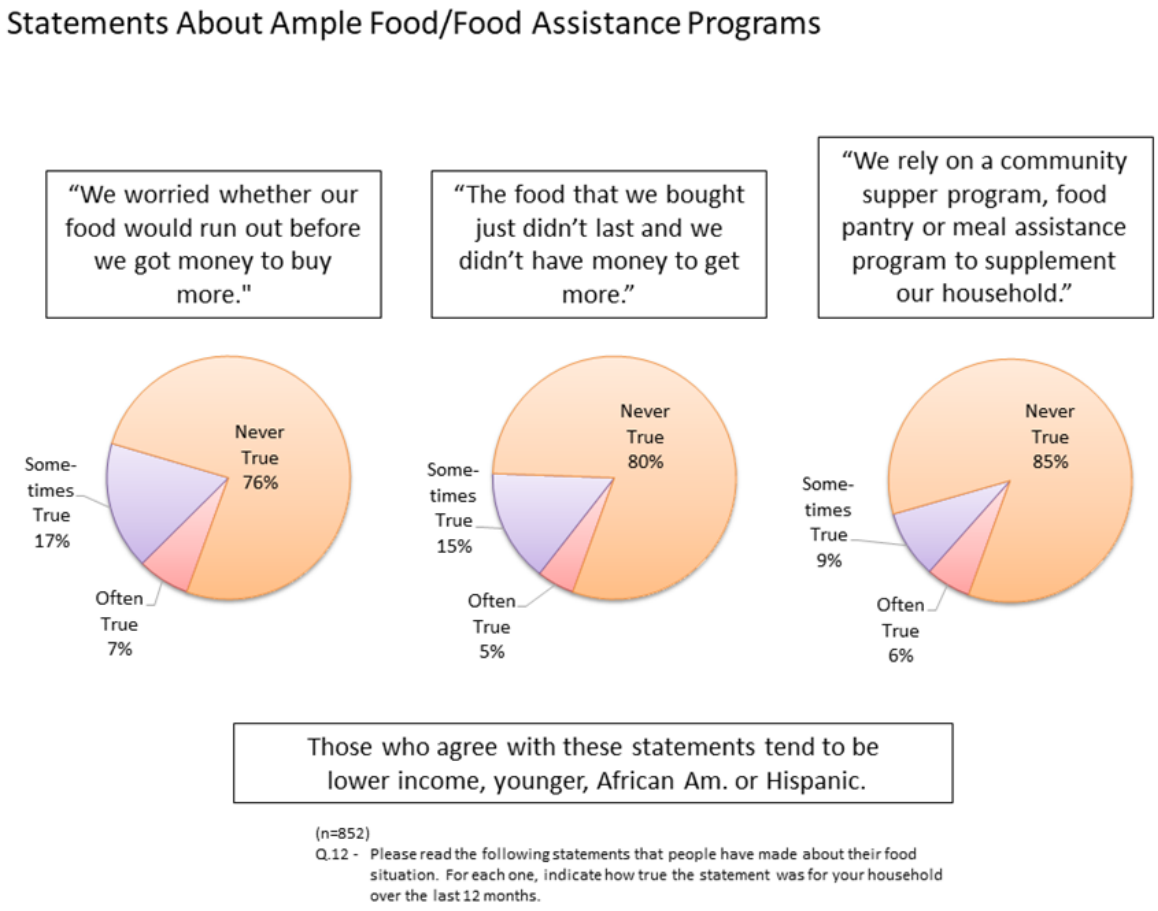
How Conditions Are Being Managed – (continued)

- For hearing problems, most of those not under a doctor's care say their condition does not require treatment.
- For respondents with weight issues, fewer than half are under a physician's care, while almost a third say they are self-monitoring their condition.
- For substance abuse, smoking addiction and stroke, a large percentage say the condition no longer exists with some who say they are self monitoring or their conditions do not require treatment.



NOTE: Multiple mentions.
Q.9 - Are you/household family member currently under care for this [CONDITION]?
Q.10 - Why are you/household family member not under current care for the [CONDITION]? Would you say it is because...

G. ADDITIONAL DATA



Physician Habits

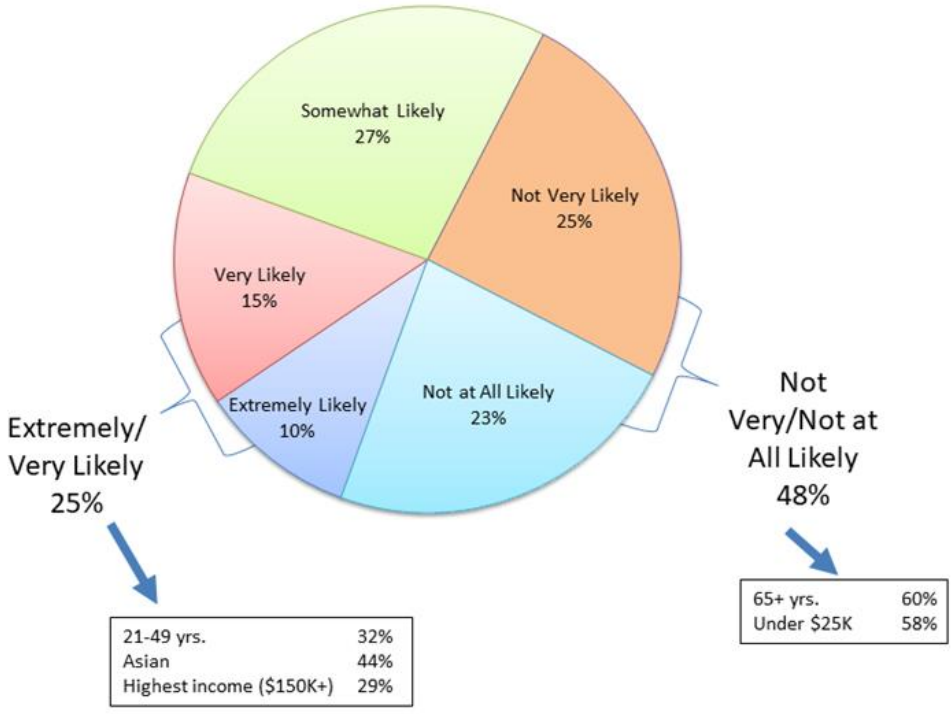
- Younger respondents are more likely to visit the doctor only when sick or need medical care.
- Hispanics and African Americans are the most likely to visit an urgent care center when medical care is needed.

		Age			Ethnicity			
	Total	21-49 (A)	50-64 (B)	65+ (C)	Caucasian (A)	AA (B)	Hispanic (C)	Asian (D)
	%	%	%	%	%	%	%	%
Go to Dr/group every year or two for check-up	73	60	77[A]	86[AB]	80[BC]	63[C]	53	78[BC]
Go to Dr/group only when sick/hurt	24	31[BC]	23[C]	17	20	26	38[ABD]	22
Only go to urgent care center or ER when need medical care	14	23[BC]	9	6	9	22[A]	27[AD]	13

(n=852)
NOTE: Multiple mentions.
Q.13 - When you need medical care, which of the statements below best describes you?
(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Likelihood of Accessing Medical Care Virtually

- Only one-fourth of respondents indicated a strong likelihood of accessing medical care virtually, highest among younger, Asian and higher income respondents.



(n=852)
Q.14 - If you were able to access medical care virtually, for example, through FaceTime or Skype, how likely would you be to use this type of technology?

Sampling of Additional Comments - (Reference Data File for Complete List)

Q.15 - Use the space below to expand on a topic previously mentioned or an important health-related topic that was not mentioned in this survey.

4. FOCUS GROUP AND PHYSICIAN QUESTIONNAIRE

A. MENTAL HEALTH AND SUBSTANCE ABUSE ISSUES AMONG ADOLESCENTS (INCLUDING SMOKING AND VAPING)

Background

In order to gain additional information regarding young adults and adolescents, a focus group was organized with help from the local Oversight Committee. The focus group included representatives from the schools, emergency department, behavioral health services, and local community providers of services to young people in Monmouth County. The focus group was conducted in April of 2019.

MOST PRESSING MENTAL HEALTH ISSUES AMONG YOUNG PEOPLE

Participants agreed that suicide and suicidal ideation among young people was the most pressing issue in their community. Participants see the problem as one that's increasing in intensity and that age of onset of suicidal thoughts was moving toward younger age cohorts.

- *"There was an article in the Asbury Park Press two days ago that talked about the number of youths coming to the ERs presenting with suicidal thoughts."*
- *"Girls make more attempts, but boys have greater rates of completion – a couple of years ago we saw a dramatic increase among Latina females. Now we are seeing a much younger onset of suicidal thoughts than we've had previously . . . I think the latest statistic I saw was that in middle school there was an increase of like 200%."*
- *"Working in the ED we've seen a huge increase in suicidal children and . . . the ages are shocking . . . some of these kids are 7 or 8 years old coming up with pretty well thought out plans . . . and ERs throughout the county are holding these suicidal kids trying to keep them safe."*
- *"Youth services to keep kids out of the hospital are in urgent need, there is a lack of child psychiatrists."*

Participants from the schools indicated they were seeing much of the same increases in students experiencing stress and suicidal thoughts. Some even indicated that the problem sometimes rippled through families with parents who were overwhelmed and experiencing many of the same problems. The dramatic increases were also overwhelming the school system's resources.

- *"We know that the kids need services, so we spend money on making sure counselors are available."*
- *"I think an unrecorded statistic that should be considered is the fact that there is a lot of suicidal behavior that occurs that is not recorded as suicide . . . We have young men involved in very ruthless behavior. That is a sign of mental health. When you are involved in gang activity or just behavior that's completely reckless of your own body, whether it be through drugs or through crime, and you don't care about what's happening. . . ."*
- *"I see a lack of coping skills among children and the families . . . I feel like it's a huge loss when we try so hard to implement coping skills and teach them things but at the end of the day, they must practice them and utilize them. . . . I guess like they think they can regulate themselves; they don't know how to handle things and then they explode whether it's through alcohol or drugs or through mental health symptoms; they just don't know how to deal."*

Others spoke about parents' lack of knowledge about where to seek help, particularly among non-English speakers and the fact that low income families have difficulty getting transportation to out-of-area providers.

- *"We are bilingual (provider organization) so we get the Spanish or Portuguese speaking parents calling. And that's another major issue, the lack of bilingual or tri-lingual counselors. Some of the children don't have insurance, so they are looking to see where they can go that's affordable. But transportation is not always available."*

AVAILABILITY OF SERVICES IN THE COMMUNITY

Many indicated there are long waits for specialty care, like child psychiatrists and neurologists, and that there is a lack of partial care programs that accept Medicaid. Others mentioned the lack of services for undocumented clients in need of mental health or substance abuse services.

- *"There are many who are undocumented and it's a struggle getting them services, whether it's for mental health or partial day. And, for the younger ages, it's even more difficult.*
- *"And just considering the process they go through just to get here . . . once they're here in the school district, we see if they need service and attempt to provide them what they need. But there is also a need outside of school as well. So, whether it be that they suffered the trauma of sexual abuse, physical abuse or lack of food . . . they need services."*
- *"I think when you talk about lack of resources it's not just having people who are native speakers and understand a Latino culture, but the culture they are coming from . . . there are cultural differences for kids coming from Honduras and Guatemala, and those who are coming from Costa Rica and El Salvador."*
- *"Many undocumented students and their parents are worried about getting into any system that could get them deported."*
- *It's a big concern for kids . . . they worry that they're going to go home, and their parents are not going to be there because they're going to be pulled and sent somewhere."*

BARRIERS TO SEEKING CARE

Among the barriers parents face in seeking care for children were issues of money, loss of pay for working families and childcare responsibilities for those with small children at home. Stigma was cited as another barrier to obtaining assistance for mental health and substance abuse issues. A lack of information with regard to risk or where services are available were other barriers mentioned.

- *"It's usually kept in the house like a dirty little secret."*
- *"Sometimes it's an uneducated perception like vaping is safer than cigarettes or its OK if they drink in the house."*
- *"I think sometimes parents don't know where to begin. Parents don't know where to go."*
- *"If they have a positive experience with a counselor, whether it's in school or an agency, they are more prone to reach out and seek assistance."*
- *"The more we know about resources the more comfortable parents feel . . . If I can identify the name of the referral source and text them on my phone . . . I see the comfort level for the family increase."*

PREVENTION EFFORT FOR SUBSTANCE USE

Most felt that prevention efforts needed to be directed toward awareness, education and perception of harm.

- *"For substance abuse it's the perception of harm . . . so like its ok to drink alcohol because they are doing it in my house...or like vaping its safer than cigarettes. We've done several things to alert kids to the potential harm. But we are dealing with middle school or high school age kids…they are very skeptical of what adults are telling them because they feel like they can Goggle another answer that supports their side."*
- *"We have so many parent nights, but parents just don't come. We do everything we can so having a group like this to promote these things together, and working with parents and the schools, and having the kids see that effort would be very beneficial."*
- *"We need to keep reinforcing the message together. . . . Everyone in the community is concerned and knows it's harmful (vaping)."*
- *"So, everybody understands that you can die from opioids and heroin. But when you see your grandmother vaping, how harmful is it?"*
- *"And, it tastes like watermelon."*
- *"How many kids living in a marginalized group seek therapy, help or rehab for vaping or smoking marijuana? . . . If you live in an affluent home, marijuana might be something a kid would go to rehab for – in a middle- to low-income home you are never going to see a kid do that."*
- *"Smoking is actually frowned on by the under 21 crowd. So, they would have never picked up a cigarette in their life. They would have never become addicted to nicotine if it wasn't for vaping."*
- *"A lot of parents I've talked to, they're seeing the vape devices in plain sight and they're like, 'Oh, no, that's just a tool my son uses for his homework (USB device)' . . . So, any effort to partner with parents and school administration could be a huge part of a prevention effort."*

In addition to working together to reinforce prevention, participants discussed holding informal gatherings at libraries, laundromats, hair salons and barbershops to meet people in their natural surroundings to educate them about behavioral health issues facing children.

STRESS AND TRAUMA AS UNDERLYING CAUSES

- *"Kids have anxiety at earlier and earlier ages…they have no social skills, they can text each other but they can't come to the table and have a conversation. So, they get social anxiety and then they get school anxiety and school phobia and they can't function and then you see them in the emergency room. I would think that prevention wise you would need healthy activities for kids. Like something where they are being social or where they are going outside."*
- *"It starts all the way down to 3 years, they don't call it stress yet, but you see kids with anxiety that are 5, it's insane. But we are teaching kids about self-regulatory practices, kind of how to pause and not blurt out something. And then there's social norms and social awareness and the last piece is building meaningful relationships."*
- *"Some people think that trauma is getting hurt, they don't realize maybe screaming in the house all the time is traumatic too, they may not even realize screaming and the environment someone is living in can have an impact on decision making. I do think that putting that information out collectively is really important because maybe it changes the way a mother or a father interacts with their child."*

- *There is an adverse effect on the body and learning when cortisol is pumped through your body through trauma…the impact is on the part of the brain that deals with decision marking and impulsivity early on."*

MARIJUANA AND VAPING VS. OTHER DRUGS

Most agreed that when it came to substance use marijuana and vaping were the most prevalent among high school and middle school-aged children. While pills and alcohol were sometimes issues, most of the substance use occurred with marijuana and vaping.

- *"Vaping is the kids who never even smoked cigarettes right? Now I have athletes that are vaping because it's a fad, it's a trend. And I also think it's very easy to disguise cannabis through vaping."*
- *Yes (vaping) overwhelms our days sometimes and not just speaking for our community but all over the State."*
- *A few weeks ago, Safe Kids New Jersey had a meeting and their concern is the increased numbers of infants and toddlers ingesting chemicals. They now want to consider the impact of vaping and marijuana edibles."*
- *"Public health data for Monmouth County shows a heavy use of alcohol among adults – and I'm wondering what are the social and community consequences of high alcohol use . . . that's a coping mechanism, right? Even for someone who's using it in not an abusive way, but that's being modeled."*

B. INTERVIEWS

BACKGROUND

The Oversight Committee believed it was important to hear what physicians thought about the major health issues and challenges facing community residents. Approximately 14 Monmouth Medical Center physicians were approached and asked to participate in a focus group. Due to time limitations and scheduling difficulties, physicians decided instead to provide individual responses to the Focus Group Guide. Responses from six physicians are summarized below.

MOST PRESSING HEALTH ISSUES

Physician comments on the health status of their patients were largely dependent on the patient population that they treat. Some felt their elderly patients were generally in good health but suffered from chronic health issues. Others who cared for patients in lower socioeconomic groups indicated their patients were in poor or fair health due to poor diet, lack of exercise and access to health care. Others indicated there was insufficient navigation for patients through a complicated health system and that their patients lacked basic medical care knowledge.

- *"There are many social determinants of health that are problematic such as family distress/family violence, food insecurity, substance use/abuse, lack of social supports, undocumented status, language barriers."*

With regard to the most pressing health and behavioral health issues facing patients in the service area were a long list of conditions including asthma; developmental delays; obesity; sickle cell anemia; and behavioral health and substance use issues including ADHD; anxiety/family discord; post-partum depression; and care for medically complex children (home health services, feeding therapy, etc.). Other

health issues included the need for disease management and pain management services, substance abuse, heart disease and diabetes. Other issues mentioned were vaccine hesitancy, patient compliance with medications, physician adherence to guidelines, and a lack of emphasis on preventive health.

ACCESS AND AVAILABILITY

When asked if services were sufficient to deal with the problems they mentioned as being most pressing some indicated that while there was some improvement more needed to be done. Others believed that significant gaps remained.

- *"There are certainly gaps in care due to limited access to subspecialists (development pediatrics, neurology, and speech, PT and OT services). Our clinic social worker and nutritionist work hard to help but there are a limited number of providers and a limited time to provide services."*
- *"No, there is insufficient disease management education and training . . . We need a substance abuse trained psychiatrist."*
- *"Some physicians promote alternative vaccine schedules or no vaccines. Many physicians do not follow antibiotic prescribing recommendations. Overuse of antibiotics is still rampant and that is a physician problem."*
- *"There are long wait times for the clinic."*

Physicians who responded to the questionnaire expressed concerns over patients' access to pulmonary specialists, pain specialists, endocrinologists, ophthalmologists and dermatologists. There was also a concern raised about cardiac services with a comment that these services were improving. Another respondent saw the situation as being unrelated to availability in general but more in terms of financial barriers or choice.

- *"This varies by population. Some children in Long Branch are uninsured or underinsured and some families don't access the care their children require."*

Another mentioned the difficulty patients have in getting post-operative physical and occupational therapy appointments.

SUGGESTED STRATEGIES

Physicians offered the following ideas or strategies to improve access and other service issues.

- Better navigation.
- Broaden education in the community.
- Improve upon coordination between social workers in the Hospital and those in the community.
- Identify gaps and work together to bridge these gaps.

Suggestions for improving vaccine and antimicrobial safety included:

- *"Media campaigns."*
- *"Research to determine if some people, because of genetics are immune naturally, and if so, could the vaccine schedule be different for different groups – this is likely, but there is no basis for a different schedule at this time."*
- *"With regard to antimicrobial stewardship, physicians need to be part of the solution . . . or someone else (government or insurers) will decide."*

BARRIERS AND CHALLENGES

Physicians who responded to the questionnaire believed that patients generally trusted them and thought that their patients believed they received the same level of care regardless of their income level.

Barriers or challenges patients faced in getting care included insurance, wait times, transportation, level of understanding and health literacy, not knowing how the process works, and the risk of an undocumented person being reported.

- *"Wait times mean a loss of income to them."*

Opinions varied as to the availability of specialty care to patients with some believing it was strong or sufficient and others believing it was insufficient. Of those viewing access to subspecialty care as insufficient most felt this was specialty-specific, and/or dependent upon the patient's insurance status.

While most physicians stated the level of preventive care and health screening patients received was low or needed improvement, it was indicated that both the pediatric division and the Monmouth Family Health Center follow screening practices of the American Academy of Pediatrics.

Several health behaviors were mentioned as being damaging to the community's health. These issues included substance use/experimentation, early sexual activity, smoking/vaping, nutrition, alcohol use, and sedentary lifestyles.

- *"Culturally based diets and lack of exercise and gym access."*

AWARENESS OF HEALTHY LIFESTYLE PRACTICES

Physicians generally believe that patients are aware of the importance of diet, exercise, screening and other preventive health measures. However, some believe that a lack of education may be a barrier in understanding how harmful some behaviors can be. Others said that diet choices were sometimes based on limited resources or that time was often a reason people gave for not being more physically active.

SUGGESTED APPROACHES TO IMPROVING COMMUNITY HEALTH

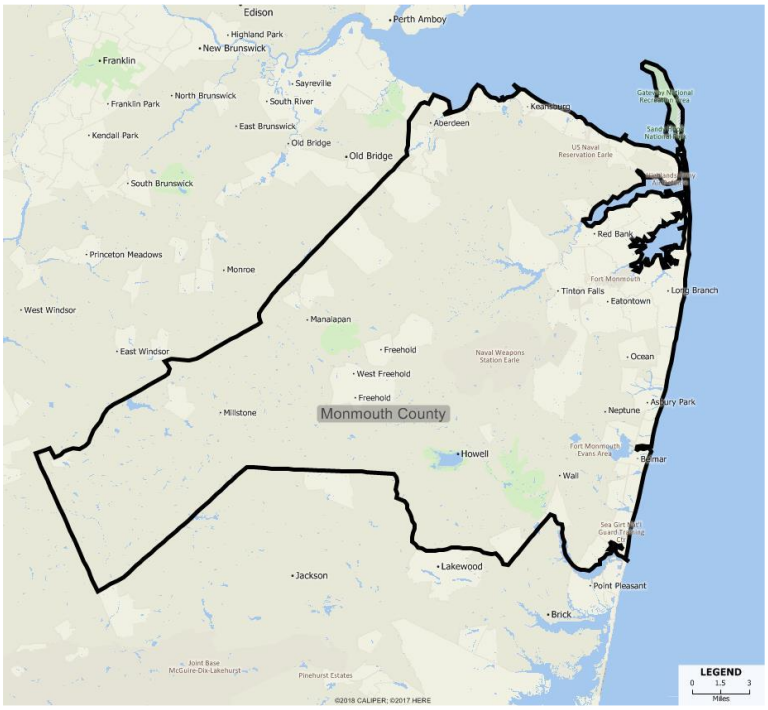
Two suggestions or strategies were offered to improve the health of area residents; (1) making screenings more available in the community, and (2) developing a community-based exercise facility with weekly education classes in Spanish, Portuguese (outside of the) hospital.

5. MONMOUTH COUNTY/SERVICE AREA HEALTH PROFILE

The Monmouth County Health Profile provides a discussion of health outcomes and factors, including social determinants of health, that are used in determining health status. Monmouth County data are compared to local, State and national measures.

A. MONMOUTH COUNTY OVERVIEW

Monmouth County is the sixth largest and fifth most populous county in New Jersey. The county encompasses a land mass of 469 square miles and is made up of 53 municipalities.



Previously considered one of the fastest growing counties in New Jersey, Monmouth County's population increased by 2.5% between 2000 and 2010, an increase of over 15,000 residents. According to the American Community Survey, the Monmouth County population decreased 0.92% from 2010 to 2018.

Monmouth is slightly more affluent and less diverse than New Jersey overall. However, some of the Counties' towns are very diverse and pockets of poverty exist. In 2018, Monmouth County residents were predominantly White (74.1%). The most prevalent minority population is Hispanic (11.3%) followed by Black (6.9%) and Asian (5.7%) populations.

The eastern edge of Monmouth County borders the Atlantic Ocean. Residents can access New York City via ferry, making it a bedroom community for lower Manhattan business district. Monmouth County has rivers and bays and the estuary of the Manasquan River which is a bay-like body of saltwater that serves as the starting point of the Intracoastal Waterway.

The following is an example of the community health disparities identified in this CHNA:

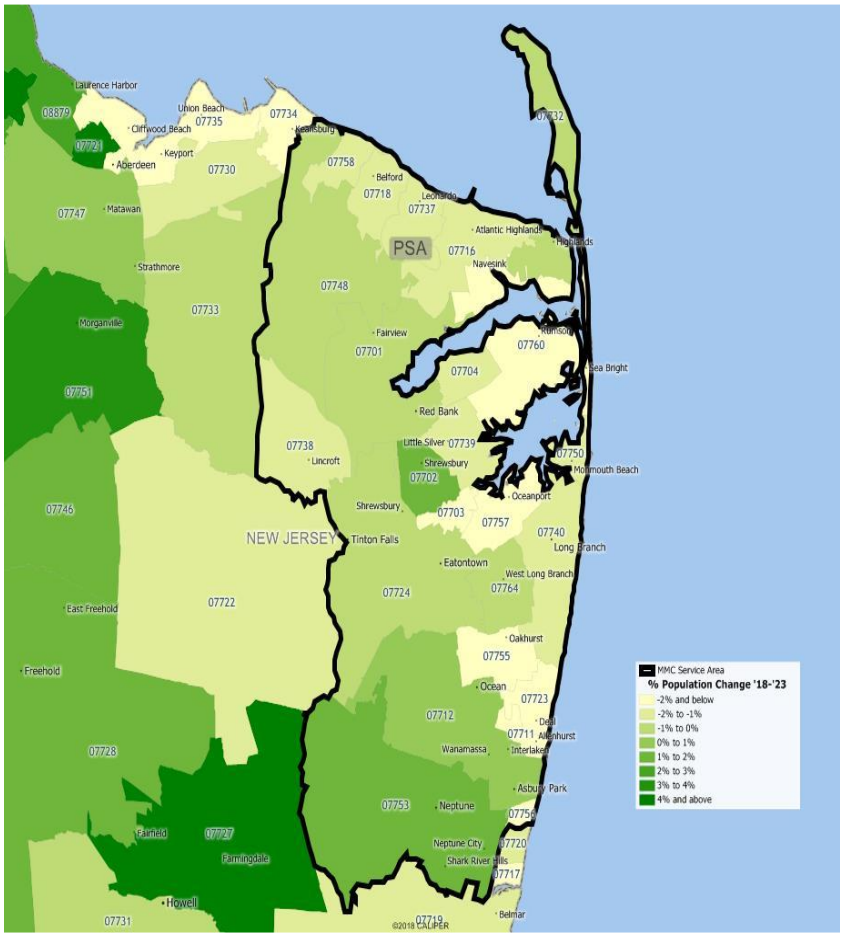
- In 2016, Asbury Park had 13.9% and Long Branch had 11.8% of families living in poverty, both higher than the New Jersey percentage (8.1%) and Monmouth County (5.3%).
- The 2016 median household income of Long Branch residents ($51,918) and Asbury Park residents ($56,355) was lower than the statewide figure ($73,702).
- In 2016, 31.8% of Asbury park children and 25.2% of Long Branch children were living in poverty, nearly double the New Jersey percentage (15.6%).
- In 2016, the Asbury Park unemployment rate was 5.7%, higher than the Monmouth County rate of 4.5% and the State rate of 5.2%.
- In 2016, the Long Branch unemployment rate was 6.4%, higher than the Monmouth County (4.5%) and the State (5.2%).

- In 2016, 16.4% of Long Branch residents did not complete high school, higher than the statewide percentage (11.1%) and more than double Monmouth County (7.3%).
- In 2016, 23.5% of Asbury Park's population was African American, more than triple Monmouth County percentage (6.9%) and nearly double New Jersey (12.8%). In Asbury Park, 19.0% of the population was Hispanic/Latino nearly double Monmouth County (11.3%).
- In 2016, 31.5% of Long Branch's population was Hispanic/Latino, more than double Monmouth County (11.3%).

B. MMC SERVICE AREA OVERVIEW

Between 2010 and 2018, the population of the MMC Service Area decreased by nearly 0.92%. In 2023, the Service Area population is expected to decrease another 0.45% to 265,505.

Population Change in MMC Service Area
2018-2023



* Source: Claritas Population Estimates 2018, 2023

MMC Service Area
Population Distribution & Projected Percent Change 2018-2023

	GEOGRAPHIC AREA						
AGE COHORT	New Jersey	Monmouth County	Monmouth Medical Center	Little Silver (07739)	Long Branch (07740)	Fair Haven (07704)	Asbury Park (07712)
0-17	1,924,893	122,489	53,430	1,269	6,771	1,685	8,134
% of Total	21.19%	19.60%	20.12%	22.78%	23.12%	28.57%	20.51%
% Change '18-'23	-1.87%	-6.65%	-4.82%	-8.38%	-2.28%	-6.91%	-2.48%
18-44	3,063,151	197,440	83,734	1,573	10,870	1,668	12,685
% of Total	33.72%	31.60%	31.54%	28.24%	37.11%	28.29%	31.99%
% Change '18-'23	-0.71%	1.43%	-1.14%	11.24%	-6.93%	8.52%	-3.05%
45-64	2,440,092	180,834	74,317	1,580	7,315	1,667	10,922
% of Total	26.86%	28.94%	27.99%	28.37%	24.98%	28.27%	27.54%
% Change '18-'23	-1.87%	-5.08%	-4.28%	-11.88%	3.23%	-11.38%	-0.21%
65+	1,656,700	124,099	54,024	1,148	4,332	877	7,914
% of Total	18.24%	19.86%	20.35%	20.61%	14.79%	14.87%	19.96%
% Change '18-'23	15.44%	14.70%	12.01%	6.99%	9.59%	18.35%	12.99%
All Ages	9,084,836	624,862	265,505	5,570	29,288	5,897	39,655
% of Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
% Change '18-'23	1.30%	0.05%	-0.45%	-1.68%	-1.21%	-1.21%	0.71%
Female 15-44	1,677,665	109,400	46,438	887	5,832	982	7,182
% of Total	18.47%	17.51%	17.49%	15.92%	19.91%	16.65%	18.11%
% Change '18-'23	-1.21%	-0.01%	-1.45%	5.85%	-5.05%	5.14%	-2.33%

Source: Claritas Population Estimates 2018, 2023

C. SOCIAL DETERMINANTS OF HEALTH

Social determinants of health include socioeconomic and environmental factors which influence health outcomes, disparities in health, equity in health care, and are important tools to assess health at the local level. *Healthy People 2020* provides a framework for assessing social determinants of health across five topic areas: economic stability; education; social and community context; health and health care; and, neighborhood and built environment. While a relatively affluent county, there are residents of Monmouth County and MMC Service Area that face many socioeconomic challenges that may have consequences for health and health care in the region.[5]

[5] https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

1. Socioeconomic Status

Socioeconomic status is the aggregate of several social, economic, and demographic measures. In this analysis, these measures include household Income and poverty, unemployment, education, ethnic and racial makeup, age, and Divinity Health's Health Need Index by service area. According to *Healthy People 2020*, socioeconomic factors contribute to disparities in disease incidence and mortality among racial, ethnic and underserved groups. Studies indicate that income and socioeconomic status (SES) is a better predictor of the likelihood of an individual's or group's access to education, health insurance, and safe and healthy living and working conditions than race or ethnicity. SES also impacts the prevalence of behavioral risk factors (tobacco smoking, physical inactivity, obesity, excessive alcohol use) and rates of preventive screenings (lower SES, fewer screenings).

Income, Poverty, and Unemployment

Income influences the way people invest in their health and provides options for healthy lifestyle choices. In low income circumstances, preventive care expenses are more often neglected in favor of immediate living expenses. The longer people live in poverty, the more abject their income disadvantage and the more likely they are to suffer from a range of health problems. Circumstances that lead to poverty also may lead to social exclusion, discrimination, racism, stigmatization, and unemployment. Thus, the following measures of income and poverty may be evidence of these problems.

Unemployment puts health at risk, starting when people first feel their jobs are threatened, before they become unemployed. Job insecurity increases mental health issues, particularly anxiety and depression. Populations with higher unemployment rates have collective increased risk of premature death.

Those who are unemployed face greater challenges to health and well-being, including lost income and health insurance. Unemployed individuals are 54% more likely to be in poor or fair health as compared to employed individuals. According to CHR, racial and ethnic minorities and those with less education, are often already at-risk for poor health outcomes, and are most likely to be unemployed. Labor statistics indicate unemployment rates peaked at the height of the recession in 2010 and began to show some improvement beginning in 2014. Most areas of the State have shown continued improvement.

Monmouth County

Although Monmouth County has affluent areas, pockets of poverty in Long Branch and Asbury Park exist.

- In 2016, the median household income in Monmouth County was $87,297, more than $13,000 above the State median of $73,702
- In 2016, Monmouth County had a lower percentage of people living below the federal poverty level than statewide, 7.6% and 10.9% respectively. [6]
- Between 2014 and 2016, unemployment throughout New Jersey declined. In 2016, the Monmouth County unemployment rate was 4.5%, a decrease of 1.2% from 2014, and lower than the New Jersey unemployment rate of 5.2%.[7]

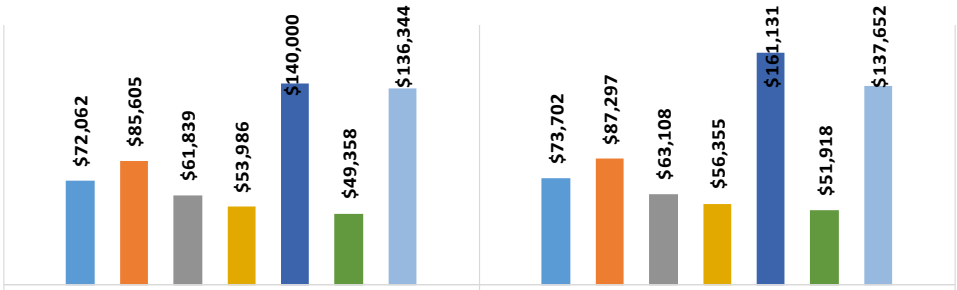
6 Ibid.

7 United States Bureau of Labor Statistics Newark, NJ-PA, Division Economic Summary 2016 http://www.bls.gov/regions/new-york-new-jersey/summary/blssummary_newark_div.pdf

MMC Service Area

- The 2016 median household income of Long Branch ($51,918) and Asbury Park ($56,355) residents was less than the statewide figure ($73,702), and lower than most of the other Service Area zip codes.
- In 2016, there were 17.1% of Long Branch residents living in poverty and 18.8% in Asbury Park compared to 7.6% county-wide.

Median Household Income
State and County Comparisons – 2014-2016

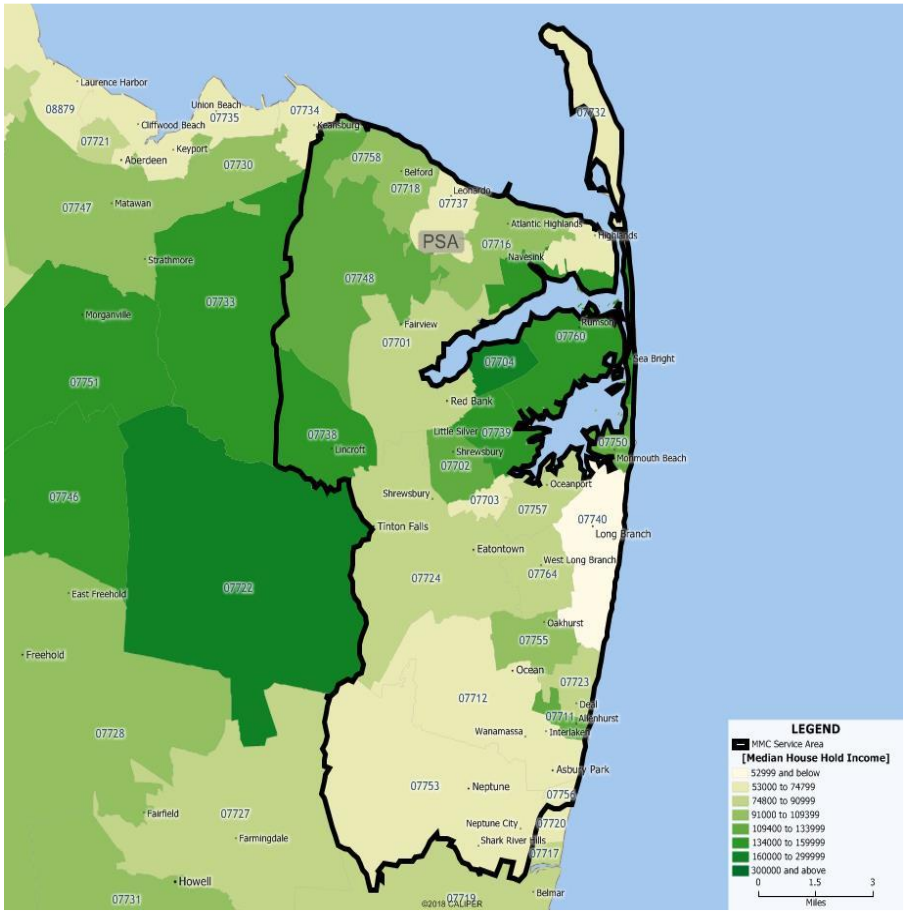


	2014	2016
New Jersey	$72,062	$73,702
Monmouth County	$85,605	$87,297
Ocean County	$61,839	$63,108
Asbury Park (07712)	$53,986	$56,355
Fair Haven (07704)	$140,000	$161,131
Long Branch(07740	$49,358	$51,918
Little Silver(07739)	$136,344	$137,652

Source: United States Census 2016 5 Year ACS Estimates

Median Household Income, 2018
Monmouth County

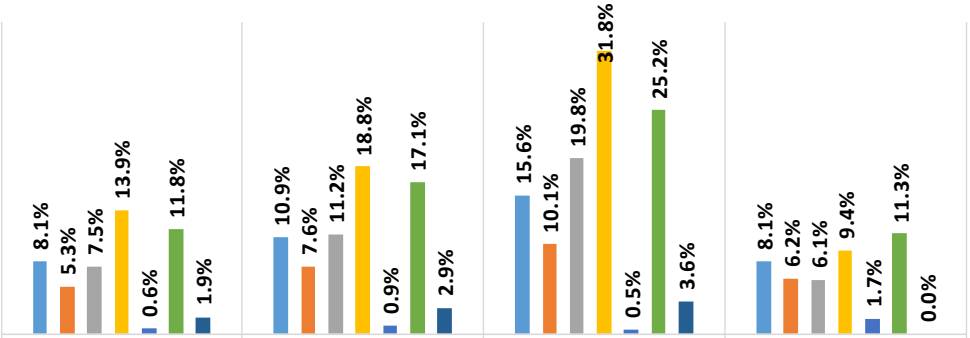
HOUSEHOLD INCOME (2018*)	
GEOGRAPHIC AREA	MEDIAN
New Jersey	$78,317
Monmouth County	$93,543
Fair Haven (07704)	$174,701
Lincroft (07738)	$152,027
Little Sliver (07739)	$148,570
Asbury Park (07712)	$59,776
Long Branch (07740)	$51,970



In 2016, the percent of families living in poverty in Monmouth County (5.3%) was lower than the State (8.1%).[8]

  - In 2016, 18.8% of people and 13.9% of families were living in poverty in Asbury Park. The percentage of Asbury Park children living in poverty was over 30%.
- In 2016, there was a wide range of percentages of families living in poverty across select MMC service area zip codes:[9]
  - Little Silver: 1.9%
  - Long Branch: 11.8%
  - Fair Haven: 0.6%
  - Asbury Park: 13.9%
- Asbury Park percent of children living in poverty (31.8%) is more than double the New Jersey percentage (15.6%).

Income Below Federal Poverty Level
State and County Comparisons, 2016



	Families	People	Children	Seniors
New Jersey	8.1%	10.9%	15.6%	8.1%
Monmouth County	5.3%	7.6%	10.1%	6.2%
Ocean County	7.5%	11.2%	19.8%	6.1%
Asbury Park (07712)	13.9%	18.8%	31.8%	9.4%
Fair Haven (07704)	0.6%	0.9%	0.5%	1.7%
Long Branch (07740)	11.8%	17.1%	25.2%	11.3%
Little Silver (07739)	1.9%	2.9%	3.6%	0.0%

Source: United States Census 2016 5 Year ACS Estimates

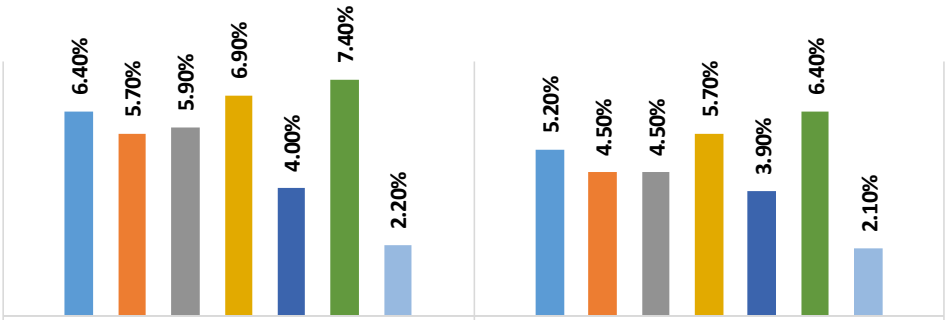
Unemployment

- In 2016, the unemployment rate for Monmouth County (4.5%) was below the rate statewide (5.2%) and for all the surrounding counties.
- The Monmouth County unemployment rate declined 1.2 percentage points between 2014-2016.
- In 2016, Long Branch's unemployment rate was 6.4%, a decrease from 7.40% in 2014, but higher than the Monmouth County rate of 4.5%, and the State rate of 5.2%.[10]

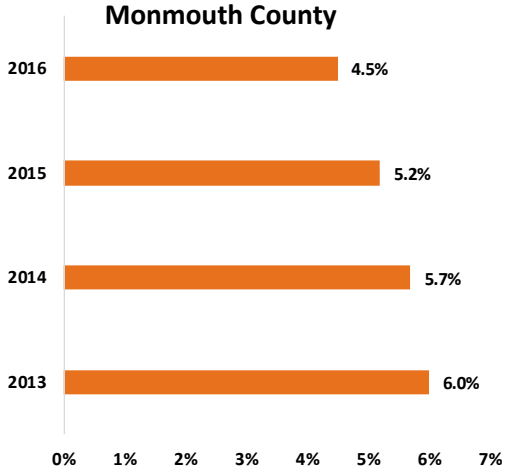
8 United States Census Bureau American Community Survey 2014
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP03&prodType=table
9 United States Census Bureau American Community Survey 2014
10 Ibid.

- In 2016, the Asbury Park unemployment rate was 5.7%, a decrease from 6.9% in 2014 but higher than the County rate of 4.5%.
- In 2016, Little Silver had the lowest unemployment rate (2.1%) of the comparative zip codes.

Unemployment
State and County Comparisons, 2014-2016



	2014	2016
New Jersey	6.40%	5.20%
Monmouth County	5.70%	4.50%
Ocean County	5.90%	4.50%
Asbury Park (07712)	6.90%	5.70%
Fair haven (07704)	4.00%	3.90%
Long Branch (07740)	7.40%	6.40%
Little Silver (07739)	2.20%	2.10%



Source: United States Census 2013, 2014, 2016 5 Year ACS Estimates

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

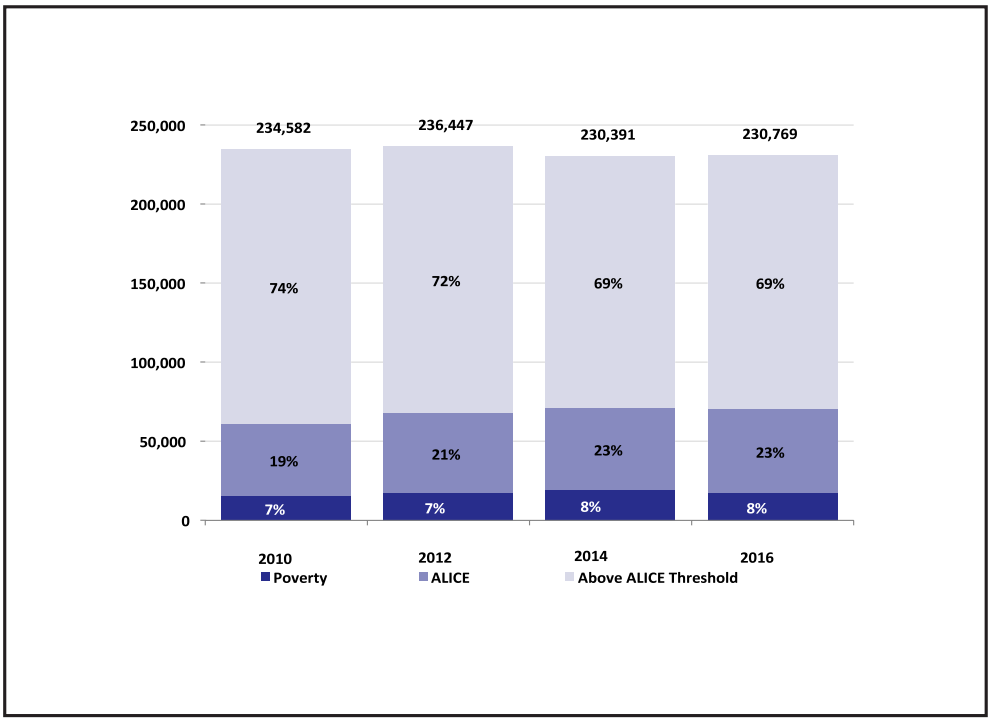
National Benchmark: 3.2%
Monmouth County 2016: 4.5%

Asset Limited Income Constrained Employed Project

Many believe that the Federal Poverty Level (FPL) understates true poverty and is prejudicial to New Jersey as it fails to adjust for differences in the cost of living across states.

To ascertain the number of households that may be struggling due to the high cost of living in New Jersey we turned to the United Way's ALICE (Asset Limited Income Constrained Employed project)[11] to get a better idea of the number of households that earn more than the Federal Poverty Level but less than the basic cost of living in Monmouth County. As shown in the chart below, the Alice Threshold (AT) combined the number of households in poverty and ALICE households equals the population struggling to afford basic needs. In Monmouth County, this percentage amounts to 31% (2016).

Households by Income, 2010 to 2016
Monmouth County



Sources: **2016 Point-in-Time Data**: American Community Survey. **ALICE Demographics:** American Community Survey; the ALICE Threshold. **Budget:** U.S. Department of Housing and Urban Development (HUD); U.S. Department of Agriculture (USDA); Bureau of Labor Statistics (BLS); Internal Revenue Service (IRS); State of New Jersey Department of the Treasury; Child Care Aware NJ (CCANJ).

The United Way's analysis shows ALICE households in Monmouth County may earn above the Federal poverty level for a single adult, $11,880, or $24,300 for a family of four, but less than the household survival budget for Monmouth County.

[11] http://www.unitedwaynj.org/ourwork/aliceatnj.php

Household Survival Budget, Monmouth County		
	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	$904	$1,417
Child Care	$–	$1,575
Food	$182	$603
Transportation	$116	$186
Health Care	$196	$727
Technology	$55	$75
Miscellaneous	$175	$530
Taxes	$299	$718
Monthly Total	$1,927	$5,831
ANNUAL TOTAL	$23,124	$69,972
Hourly Wage	*$11.56*	*$34.99*

Sources:
2016 Point-in-Time Data: American Community Survey. **ALICE Demographics:** American Community Survey; the ALICE Threshold. **Budget:** U.S. Department of Housing and Urban Development (HUD); U.S. Department of Agriculture (USDA); Bureau of Labor Statistics (BLS); Internal Revenue Service (IRS); State of New Jersey Department of the Treasury; Child Care Aware NJ (CCANJ).

There appears to be wide differences among municipalities in Monmouth County in terms of the percentage of households living in poverty or at the ALICE threshold. Fifty to 60% of residents in the PSA towns of Long Branch, Neptune, Keansburg, Keyport, Shrewsbury and Asbury Park had incomes at the Federal poverty level or at the ALICE threshold.

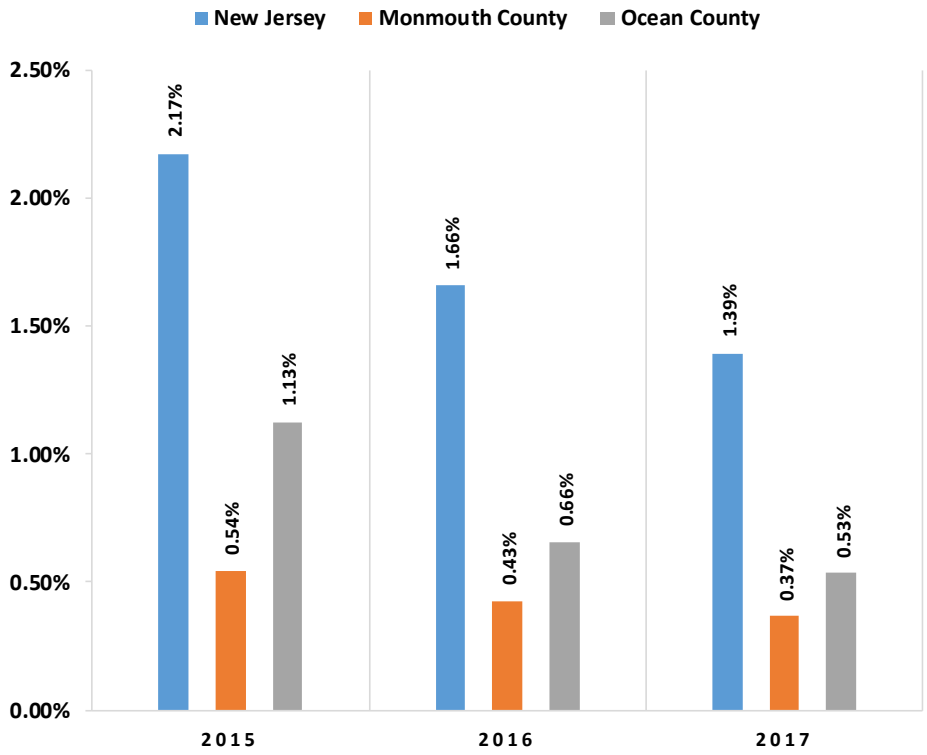
Monmouth County, 2016		
Town	Total HH	% ALICE & Poverty
Aberdeen	6,831	31%
Allenhurst	211	28%
Allentown	713	24%
Asbury Park	6,756	66%
Atlantic Highlands	1,786	31%
Avon-by-the-Sea	943	27%
Belmar	2,716	41%
Bradley Beach	2,200	47%
Brielle	1,821	19%
Colts Neck	3,278	19%
Deal	317	35%
Eatontown	5,356	47%
Englishtown	740	37%
Fair Haven	1,919	9%
Farmingdale	577	46%
Freehold	12,838	27%
Freehold	3,900	50%
Hazlet	7,068	29%
Highlands	2,479	43%
Holmdel	5,585	16%
Howell	17,526	27%
Interlaken	354	15%
Keansburg	3,988	59%
Keyport	2,973	50%
Lake Como	685	36%
Little Silver	2,090	12%
Long Branch	11,918	53%
Manalapan	13,884	22%
Manasquan	2,241	20%
Marlboro	12,765	15%
Matawan	3,398	27%
Middletown	23,728	25%
Millstone	3,437	15%
Monmouth Beach	1,411	24%
Neptune	10,924	41%
Neptune City	2,069	52%
Ocean	10,426	35%
Oceanport	2,103	30%
Red Bank	5,110	46%
Roosevelt	279	24%
Rumson	2,305	20%
Sea Bright	724	33%
Sea Girt	774	18%
Shrewsbury	480	58%
Shrewsbury	1,420	18%
Spring Lake	1,201	26%
Spring Lake Heights	2,202	37%
Tinton Falls	7,950	36%
Union Beach	1,931	37%
Upper Freehold	2,396	13%
Wall	9,643	26%
West Long Branch	2,421	30%

Temporary Assistance Needy Families (TANF)

In order to qualify for TANF in New Jersey, applicants must comply with all requirements of Work First New Jersey. This includes signing over rights of child support payments, helping to establish paternity of children, cooperating with work requirements and applying for all assistance programs for which a household may be eligible. Additionally, eligible applicants must meet income and resource guidelines.[12]

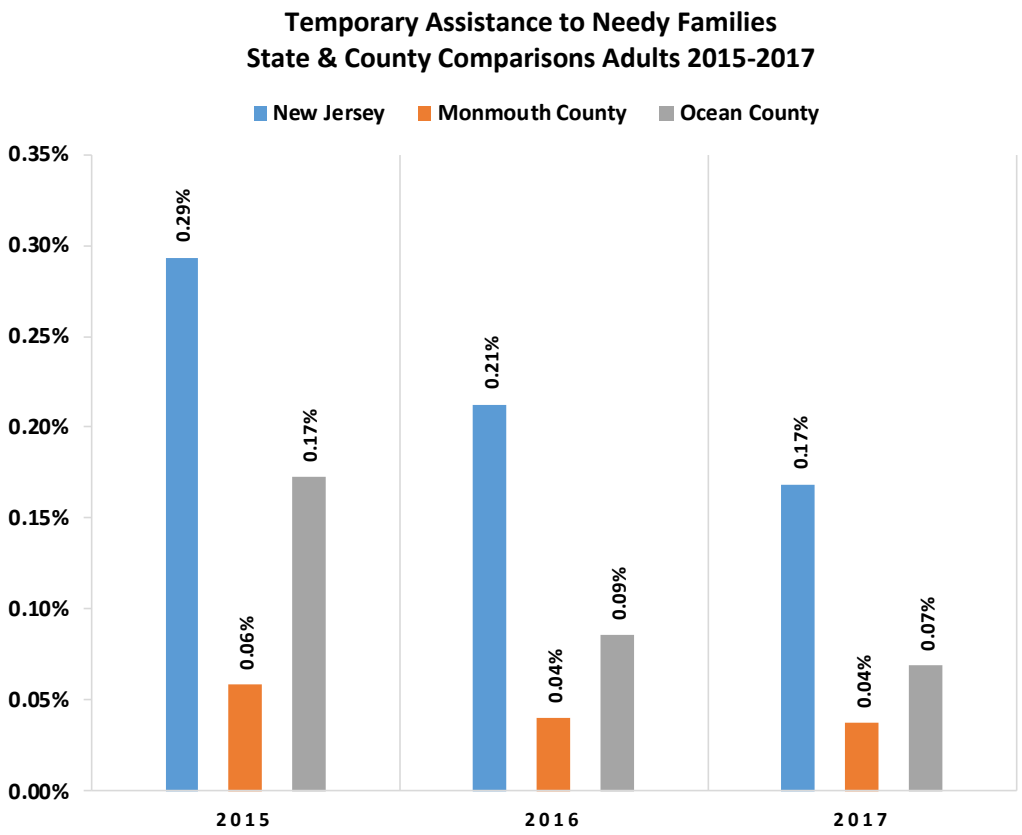
- As of December 2017, 0.37% of Monmouth County children were receiving Work First NJ/TANF benefits, far less than the statewide rate (1.39%); Monmouth County ranks in the middle performing quartile in New Jersey.
- As of December 2017, 0.04% of Monmouth County adults were receiving Work First NJ/TANF benefits, less than statewide (0.17%).
- Between 2015 and 2017, the percentage of adults and children receiving WFNJ/TANF benefits declined by 33% and 31%, respectively.

Temporary Assistance to Needy Families
State & County Comparisons Children 2015-2017



Source: http://www.nj.gov/humanservices/dfd/news/cps_dec17.pdf

[12] *http://www.tanfprogram.com/new-jersey-tanf-eligibility*



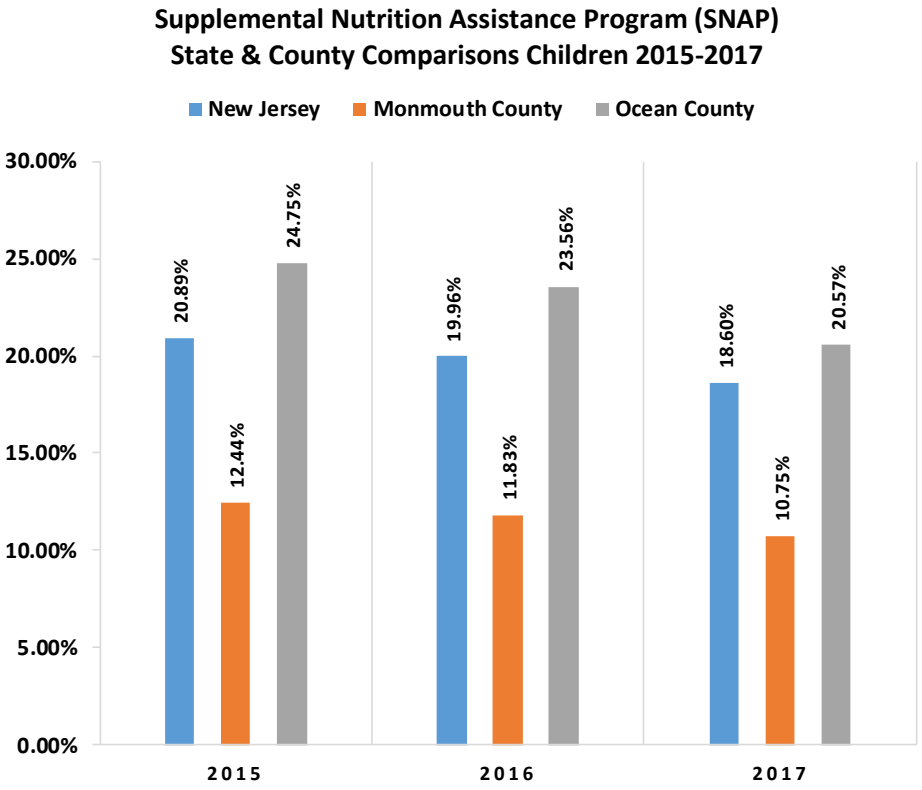
Source: http://www.nj.gov/humanservices/dfd/news/cps_dec17.pdf

Supplemental Nutrition Assistance Program (SNAP)

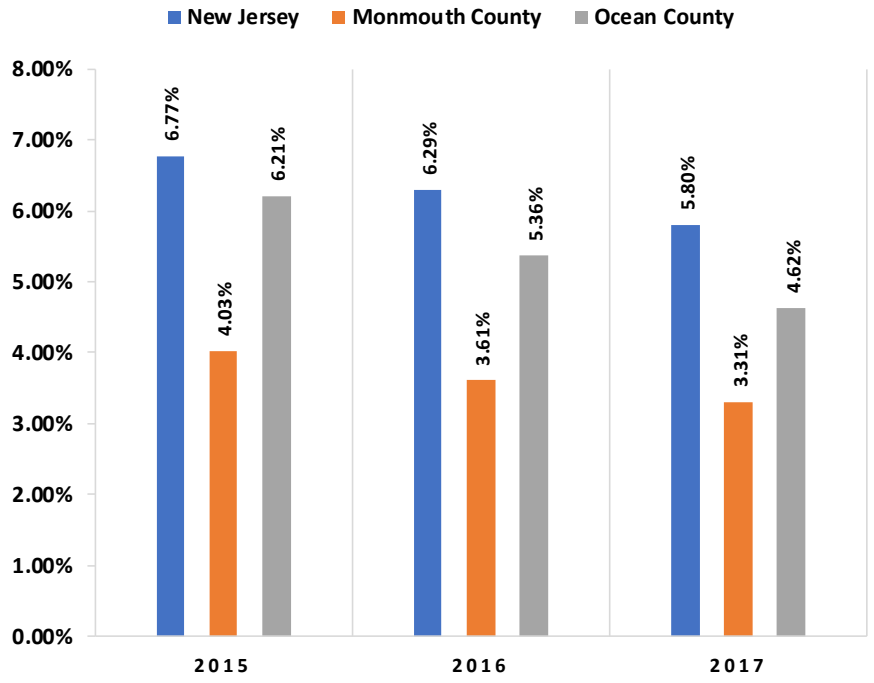
SNAP offers nutrition assistance to millions of eligible, low-income individuals and families. The Food and Nutrition Service works with State agencies, nutrition educators and neighborhood and faith-based organizations to ensure that those eligible for nutrition assistance make informed decisions and access benefits.[13]

- In 2017, 42.5% fewer Monmouth County children (10.8%) use SNAP benefits than children Statewide (18.6%).
- In 2017, 42.9% fewer Monmouth County adults (3.3%) use SNAP benefits than throughout the State (5.8%).
- The percentage of Monmouth County children and adults receiving SNAP benefits ranks in the middle performing quartile among all counties.

[13] *http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap*



Source: http://www.nj.gov/humanservices/dfd/news/cps_dec17.pdf



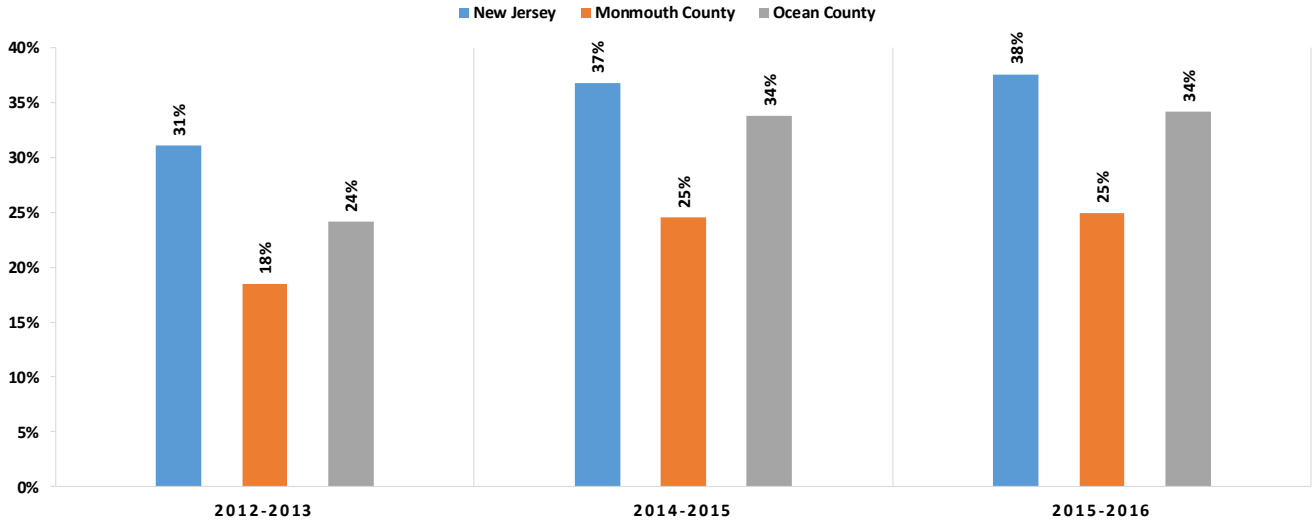
Source: http://www.nj.gov/humanservices/dfd/news/cps_dec17.pdf

Children Eligible for Free Lunch

Public schools nationwide and across New Jersey have free lunch programs for children living at or near poverty. New Jersey requires public schools serve school lunches meeting at least one-third of recommended dietary allowances. According to the National School Lunch Program, the objective is "to provide a nutritious, well-balanced lunch for children in order to promote sound eating habits, to foster good health and academic achievement and to reinforce the nutrition education taught in the classroom."[14]

- The percentage of children eligible for free lunch increased throughout New Jersey, Monmouth, and Ocean Counties between 2012-2013 and 2015-2016.
- Monmouth County reported a 7 percentage point increase in students eligible for free lunch from 18% during the 2012-2013 school years to 25% in 2015-2016 school years.
- Monmouth County is within the middle performing quartile compared to of all New Jersey counties for free school lunch eligibility, and the top performing quartile for County Health Rankings.

Children Eligible for Free Lunch
State & County Comparisons 2012-2016



Source: http://www.nj.gov/humanservices/dfd/news/cps_dec16.pdf

County Health Rankings & Roadmaps
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National Benchmark: 33.0%
Monmouth County 2016: 25.0%

[14] http://www.nj.gov/agriculture/divisions/fn/childadult/school_lunch.html

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
WFNJ/TANF (Supplemental Nutritional Assistance Program) *Percent of Population*	N.A.	N.A.	
WFNJ/TANF-Children *Percent of Children*	N.A.	N.A.	
SNAP (Supplemental Nutrition Assistance Program) *Percent of Population Receiving SNAP*	N.A.	N.A.	
SNAP-Children *Percent of Children Receiving SNAP*	N.A.	N.A.	
Children Eligible for Free Lunch	N.A.		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

2. Education

People with higher levels of educational attainment tend to have lower morbidity rates from acute and chronic diseases, independent of demographic and labor market factors. Life expectancy is increasing in the United States, yet differences have become more pronounced between those with and without a college education. The mechanisms by which education influences health are complex and likely include interrelationships between demographic and family background indicators, effects of poor health in childhood, greater resources associated with higher levels of education, a learned appreciation for the importance of good health behaviors, and one's social networks.[15] The ability to communicate in English is also a key part of educational competence.

The lack of English proficiency can negatively impact one's ability to understand and follow medical directions. Monmouth County residents experienced a decrease in the percentage of the population over age 5 with limited English proficiency.

Monmouth County

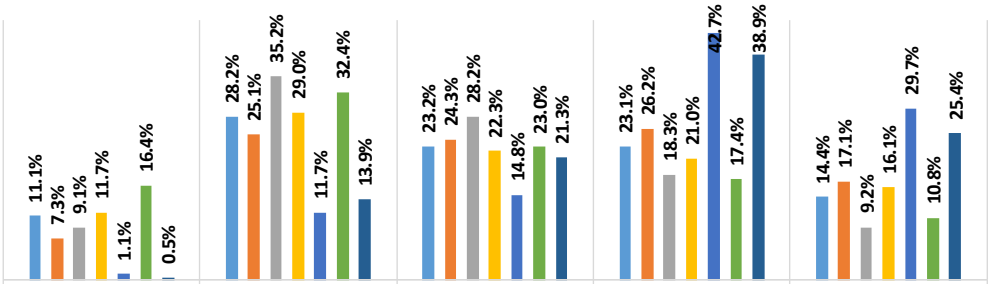
- In 2016, 7.3% of Monmouth County residents did not graduate from high school, 3.8 percentage points lower than New Jersey at 11.1%.[16] This represents an improvement from 7.4% of County residents and 11.6% statewide that did not graduate from high school as reported in the previous CHNA.
- In 2016, 43.3% of Monmouth County residents earned a bachelor's degree or higher.[17] This represents an increase from 41.9% of County residents that earned a bachelor's degree or higher as reported in the previous CHNA.

15 National Poverty Center Policy Brief #9 Education and Health 2007 http://www.npc.umich.edu/publications/policy_briefs/brief9/
16 United States Census Bureau American Community Survey 2014
17 Ibid.

MMC Service Area

- In 2016, 11.7% of Asbury Park residents did not complete high school, higher than the statewide percentage (11.1%).
- In 2016, 16.4% of Long Branch residents did not complete high school, more than the statewide percentage (11.1%).

Educational Attainment
State & County Comparisons, 2016



	No High School Diploma	High school graduate (includes equivalency)	Some College/associate's degree	Bachelor's degree	Graduate or professional degree
New Jersey	11.1%	28.2%	23.2%	23.1%	14.4%
Monmouth County	7.3%	25.1%	24.3%	26.2%	17.1%
Ocean County	9.1%	35.2%	28.2%	18.3%	9.2%
Asbury Park (07712)	11.7%	29.0%	22.3%	21.0%	16.1%
Fair Haven (07704)	1.1%	11.7%	14.8%	42.7%	29.7%
Long Branch (07740)	16.4%	32.4%	23.0%	17.4%	10.8%
Little Silver (07739)	0.5%	13.9%	21.3%	38.9%	25.4%

Source: United States Census 2016 5 Year ACS Estimates

Healthy People 2020

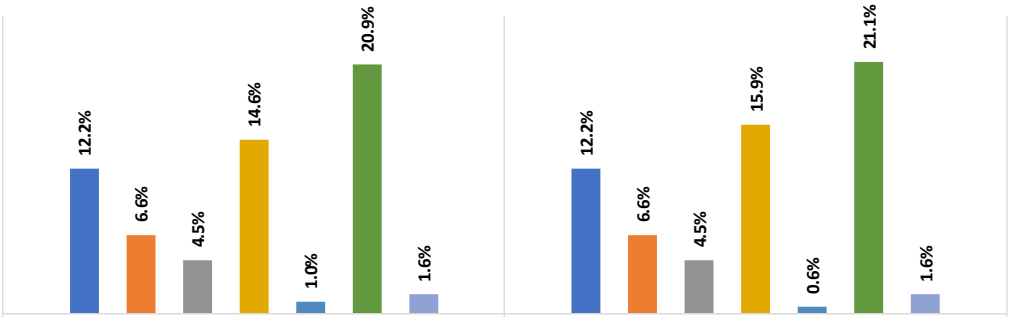
Baseline: 89.0 %
Target: 97.9%
Monmouth County 2016: 92.7%

Limited English Proficiency

The lack of English proficiency can negative impact one's ability to understand and follow medical directions. Monmouth County residents experienced a decrease in the percentage of the population over age 5 with limited English proficiency.

- The percentage of Limited English Proficiency (LEP) persons age 5+ in Monmouth County (6.6%) was lower than New Jersey (12.2%).
- In 2016, the percentage of Limited English Proficiency (LEP) individuals in Long Branch (21.1%) was higher than New Jersey (12.2%) and Monmouth County (6.6%).

Limited English Proficiency Households (%)
State & County Comparisons, 2014-2016



	2014	2016
New Jersey	12.2%	12.2%
Monmouth County	6.6%	6.6%
Ocean County	4.5%	4.5%
Asbury Park (07712)	14.6%	15.9%
Fair Haven (07704)	1.0%	0.6%
Long Branch (07740)	20.9%	21.1%
Little Silver (07739)	1.6%	1.6%

Source: United States Census 2014-2016 ACS 5 Year Estimates; Persons Age 5+ reporting speaking English "less than well".

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Educational Attainment: No High School Diploma *Percent of Population (Age 25+)*	N.A.	N.A.	
Limited English Proficiency *Percent of Population (Age 5+)*	N.A.	N.A.	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

3. Demographics

Age

Age affects how people behave in relation to their health; as people age, the body becomes more prone to disease and health behaviors become more important to good health.

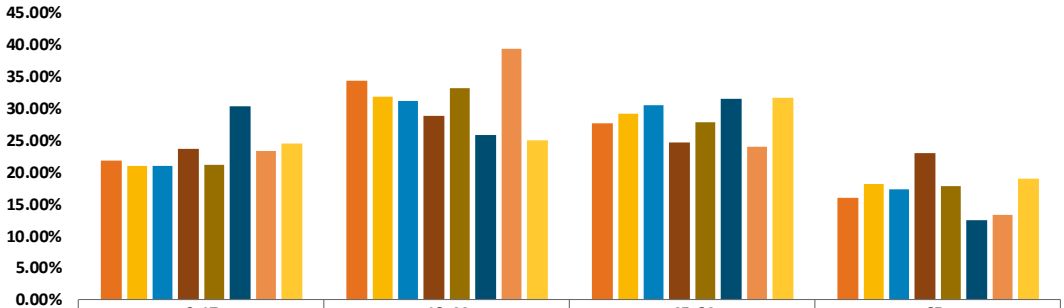
Monmouth County

- Monmouth County's population distribution is slightly older than the State.
- In 2016, 17.3% of Monmouth County residents were seniors over 65 compared to 16.0% statewide.

MMC Service Area

- In 2016, 30.3% of Fair Haven residents were 0-17, higher than the 21.0% in Monmouth County and 21.9% in New Jersey.
- In 2016, 39.4% of Long Branch residents were 18-44, higher than 31.2% in Monmouth County and 34.4% in New Jersey.
- In 2016, 18.9% of Little Silver residents were 65+, higher than 17.3% in Monmouth County and 16.0% in New Jersey.

Population by Age Cohort
State & County Comparisons



	0-17	18-44	45-64	65+
New Jersey	21.87%	34.40%	27.73%	16.00%
Monmouth Medical Center	21.05%	31.76%	29.11%	18.08%
Monmouth County	21.01%	31.17%	30.50%	17.32%
Ocean County	23.60%	28.89%	24.59%	22.92%
Asbury Park (07712)	21.18%	33.23%	27.80%	17.79%
Fair Haven (07704)	30.32%	25.75%	31.51%	12.41%
Long Branch (07740	23.37%	39.39%	23.90%	13.33%
Little Silver (07739)	24.45%	24.96%	31.65%	18.94%

Source: Claritas 2016 Population Estimate

Ethnic and Racial Makeup

Racial and ethnic minorities receive lower quality healthcare than non-minorities, even when access-related factors such as insurance status and income are controlled. Sources of disparities are complex and rooted in historic and contemporary inequities, and involve many participants at several levels, including health systems administrative and bureaucratic processes, utilization managers, healthcare professionals, and patients.[18]

18 Institute of Medicine, Unequal Treatment: confronting Racial and Ethnic Disparities in Health Care, 2003, http://www.nap.edu/read/10260/chapter/2

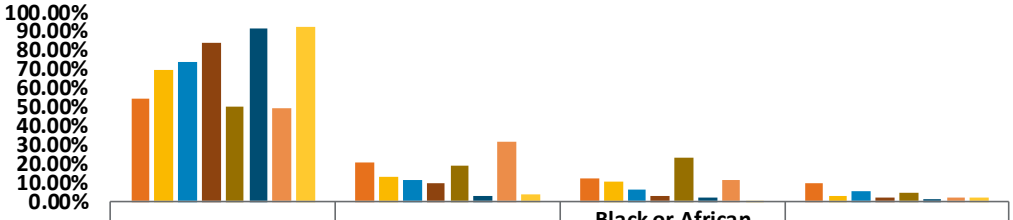
Monmouth County

- In 2018, Monmouth County had lower percentages of African-American, Hispanic and Asian populations than New Jersey.
    - 6.9% of the county population was African-American, compared to 12.8% statewide.
    - 11.3% of the population was Hispanic/Latino compared to 20.7% statewide.
    - Whites were 74.1% of the county's population compared to 54.4% in New Jersey.
    - Asians were 5.7% of the county's population compared to 8.9% statewide.

MMC Select Service Area

- In 2018, 23.5% of Asbury Park's population was African-American, higher than 12.8% in New Jersey.
- In 2018, 92.3% of Little Silver's population was White, higher than 74.1% in Monmouth County.
- In 2018, 31.5% of Long Branch's population was Hispanic/Latino, compared to 13.4% in Monmouth County and 20.7% in New Jersey.
- In 2018, 4.9% of Asbury Park's population was Asian, less than the 5.7% in Monmouth County.
- Between 2010 and 2018, the Asian population in Monmouth County grew 15.2%.

Population by Race/Ethnicity
State & County Comparisons



	White	Hispanic	Black or African American	Asian
New Jersey	54.39%	20.65%	12.78%	9.88%
Monmouth Medical Center	69.99%	13.38%	11.01%	3.25%
Monmouth County	74.09%	11.29%	6.92%	5.72%
Ocean County	83.86%	9.58%	3.09%	2.03%
Asbury Park (07712)	50.23%	18.99%	23.45%	4.93%
Fair Haven (07704)	91.87%	3.50%	1.89%	1.19%
Long Branch (07740)	49.34%	31.50%	11.36%	2.38%
Little Silver (07739)	92.27%	3.92%	0.25%	1.92%

Source: Claritas 2018 Population Estimate

Population by Race/Ethnicity
Monmouth County – Trend

Monmouth County			
RACE / ETHNICITY	2010	2018	% Change
White (alone)	483,435	462,733	-4.3%
Black / African American (alone)	43,931	43,236	-1.6%
Asian (alone)	31,018	35,727	15.2%
Native American / Pacific Islander / Other Race (alone)	2,518	2,499	-.75%
Two or More Races (alone)	8,539	1,683	15.4%
Hispanic / Latino (of Any Race)	60,939	70,524	15.7%

Source: Claritas 2018 Population Estimate

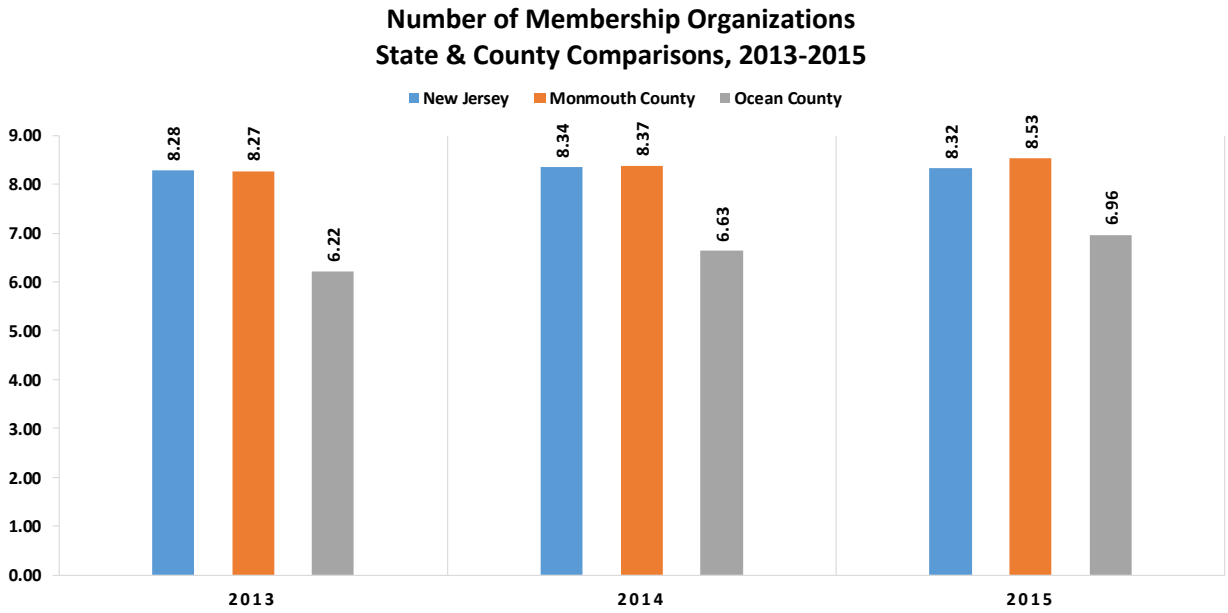
4. Social and Community Context

Social Associations

Social isolation can negatively impact health outcomes. Having a strong social network is associated with healthy lifestyle choices, positive health status, and reduced morbidity and mortality. Participation in community organizations can enhance social trust and a sense of belonging.[19] Social associations include structured membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, business and professional associations.

- Between 2013 and 2015, Monmouth County had higher membership association rates than New Jersey and Ocean County.
- The membership association rate for Monmouth County falls within the worst performing quartile compared to the County Health Ranking benchmark.

[19] http://www.countyhealthrankings.org/app/new-jersey/2015/measure/factors/140/description



Source: County Health Rankings, CDC Wonder Mortality Data, 2013 - 2015

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 22.1
Monmouth County 2015: 8.53

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Membership Organizations	N.A.		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

5. Health and Health Care

Access to affordable quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not ensure access. It is also necessary for providers to offer affordable care, be available to treat patients and be near patients.[20]

[20] http://www.countyhealthrankings.org/our-approach/health-factors/access-care

Health Insurance

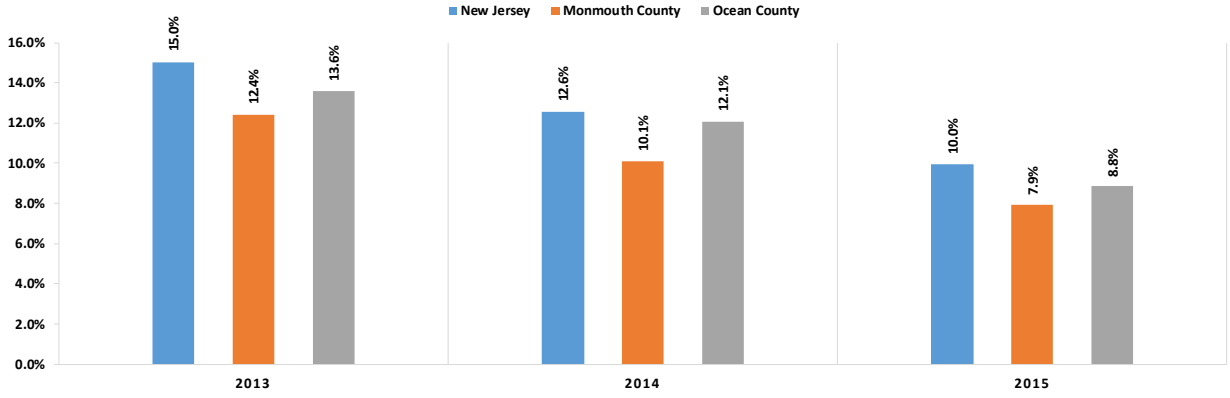
The expansion of Medicaid coverage and the Affordable Care Act's (ACA) coverage provisions, which began taking effect in 2010, helped decrease the nation's uninsured rate by 7.2 percentage points, from 16 percent in 2016. That translates into 20.4 million fewer people who lacked health insurance in 2016 compared to 2010. The uninsured rate is estimated to have increased to 15.5% in the first quarter of 2018, meaning another 4 million lost coverage since 2016 due to changes in health policy and insurance offerings. The uninsured are less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those without insurance are often diagnosed at later, less treatable disease stages than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.

Neighborhoods with low health insurance rates often have fewer providers, hospital beds and emergency resources than areas with higher rates. Even the insured have more difficulty getting care in these areas.

Cost can be a barrier to care even for those who have insurance. Lack of insurance creates barriers to timely access to care for patients and financial burdens to the providers who care for them.

- Since 2013, the non-elderly population without health insurance in Monmouth County has trended downward, decreasing from 12.4% in 2013 to 7.9% in 2015.
- From 2013 through 2015, Monmouth County had consistently lower rates of non-elderly population without health insurance than statewide.
- In 2015, Monmouth County (7.9%) was higher than the ambitious *Healthy People 2020* target of no person without health coverage. Monmouth County also had a higher percentage of individuals without insurance than the CHR Benchmark.

Non-elderly Population Without Health Insurance
State & County Comparisons 2013-2015



Source: Healthy People 2020 - CDC Behavioral Risk Factor Surveillance System
County Health Rankings - US Census Bureau's Small Area Health Insurance Estimates (SAHIE)

Healthy People 2020

Baseline: 10.0%
Target: 0.0%
Monmouth County 2015: 7.9%

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 6.0%
Monmouth County 2015: 7.9%

Access to Care

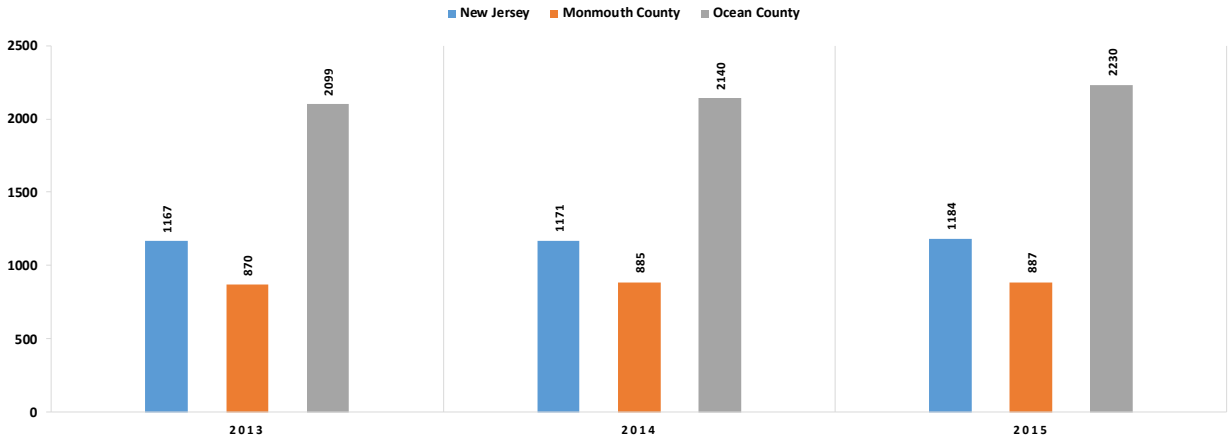
Access to affordable quality health care is important to ensuring physical, social, and mental health. Health insurance assists individuals and families to obtain primary care, specialists, and emergency care, but does not ensure access. Access to care goes beyond just insurance, it is also necessary for providers to offer affordable care, be available to treat patients and be near patients.[21]

Primary Care Physicians

Nationally, many areas lack sufficient providers to meet patient needs; as of June 2014, there are about 7,200 primary care, 5,000 mental health and 5,900 dental federally designated Health Professional Shortage Areas in the US. Having a usual primary care provider is associated with a higher likelihood of appropriate care and better outcomes. In 2017, 88% of Americans had a usual source of care, but those with low incomes are less likely to than those with higher incomes, and the uninsured are twice as likely as the insured to lack a usual care source.[22,23]

- Between 2013 and 2015, the ratio of population to primary care physicians in Monmouth County decreased from 870:1 to 887:1.
- In 2015, the Monmouth County ratio for primary care providers was better than the CHR national benchmark (1,320:1).
- Monmouth County performs in the best performing quartile of all New Jersey counties for the ratio of primary care physicians to population.

Ratio of Population to Primary Care Physicians
State & County Comparisons 2013 - 2015



Source: County Health Rankings – HRSA Area Resource File

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 1030:1
Monmouth County 2015: 887:1

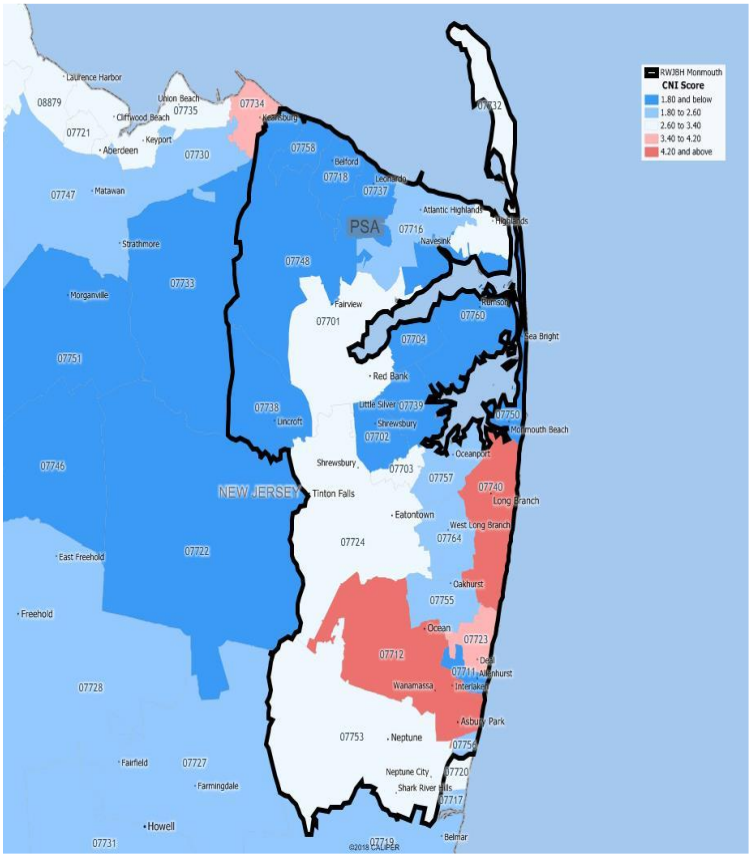
[21] http://www.countyhealthrankings.org/our-approach/health-factors/access-care
[22] http://www.countyhealthrankings.org/our-approach/health-factors/access-care
[23] http://www.cdc.gov/fastfactsaccesstohealthcare.htm

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Primary Care Physicians *Rate/ 100000 Population*	N.A		
Health Care Access/ Coverage *Do You Have Any Kind of Coverage* *% No*			

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Community Need Index [24]

The Community Need Index (CNI), jointly developed by Dignity Health and Truven Health in 2004, is strongly linked to variations in community healthcare needs and is a strong indicator of a community's demand for services.



Based on a wide array of demographic and economic statistics, the CNI provides a score for every populated ZIP Code in the United States. A score of 1.0 indicates a ZIP Code with the least need and a score of 5.0 represents a ZIP Code with the most need. The CNI is useful as part of a larger community health needs assessment to pinpoint specific areas with greater need than others.

The CNI score is an average of five barrier scores that measure socio-economic indicators of each community using 2017 source data. The five barriers are:

1. Income Barrier
   - Percentage of households below poverty line, with head of household age 65 or older
   - Percentage of families with children under 18 below poverty line
   - Percentage of single female-headed families with children under 18 below poverty line

[24] Truven Health Analytics, 2017; Insurance Coverage Estimates, 2017; Claritas, 2017; and Community Need Index, 2017. http://cni.chw-interactive.org/

2. Cultural Barrier
    - Percentage of population that is minority (including Hispanic ethnicity)
    - Percentage of population over age 5 that speaks English poorly or not at all
3. Education Barrier
    - Percentage of population over 25 without a high school diploma
4. Insurance Barrier
    - Percentage of population in the labor force, aged 16 or more, without employment
    - Percentage of population without health insurance
5. Housing Barrier
    - Percentage of households renting their home

A comparison of CNI scores and hospital utilization reveals a strong correlation between need and use. Communities with low CNI scores can be expected to have high hospital utilization. There is a causal relationship between CNI scores and preventable hospitalizations and ED visits for manageable conditions. Communities with high CNI scores may have more hospitalization and ED visits that could have been avoided with improved healthy community structures and appropriate outpatient and primary care.

Community Needs Index

	Service Area	ZIP Code	ZIP Code Description	CNI Score
Highest CNI Score (Highest Need)	RWJBH Monmouth	07740	Long Branch	4.0
		07712	Asbury Park	4.0
		07723	Deal	3.6
		07753	Neptune	3.2
		07701	Red Bank	3.0
		07724	Eatontown	3.0
Lowest CNI Score (Lowest Need)	RWJBH Monmouth	07764	West Long Branch	2.4
		07755	Oakhurst	2.0
		07748	Middletown	1.4
		07704	Fair Haven	1.2

Source: 2017 Dignity Health, Truven Health Analytics, 2016; Insurance Coverage Estimates, 2016; Claritas, 2016; and Community Need Index, 2016.

Long Branch and Asbury Park CNI scores (4.0) indicated the highest need in the Service Area, followed by Deal (3.6) and Neptune (3.2). Conversely, Fair Haven's score (1.2) and Middletown (1.4) represented the lowest CNI scores in the Service Area.

Timeliness of Service

A key indicator of the timeliness of service is emergency department (ED) utilization for conditions that could have been treated in a primary care setting.

Reasons for accessing the ED instead of a more appropriate, lower acuity level of care include:

- No regular source of primary care
- Lack of health insurance
- Cost
- Transportation
- Office hours
- Citizenship status

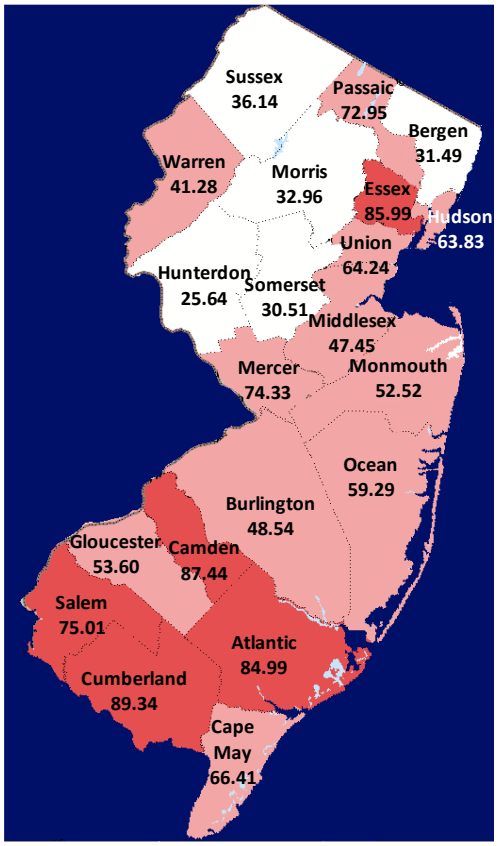
ED Utilization of Ambulatory Care Conditions

Ambulatory Care Sensitive Conditions (ACSC) are potentially preventable medical conditions that are treated in the ER although more appropriate care should have been provided in a non-emergent outpatient primary care setting. ED utilization rates may be reduced by addressing primary care access issues.

ED Utilization for Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions (ACSC) are potentially preventable medical conditions that are treated in the ED although more appropriate care should have been provided in a non-emergent outpatient primary care setting. ED utilization rates may be reduced by addressing primary care access issues. Higher rates of ACSC conditions in Emergency Departments may indicate primary care access issues, poor preventative care among the population and in some instances health barriers related to socio-economic status.

The map shows the total New Jersey ACSC Emergency Department Rate by county. Dark Red shading represents the counties with the 5 highest rates in the State. White Shading represents the counties with the 5 lowest rates in the State. Pink Shading represents counties between the highest and lowest "Top 5s".



- In 2016, Monmouth County's ACSC ED visit rate (at 52.52/1,000) was lower than the statewide rate (58.22/1,000).
- Monmouth County had the 13th highest ACSC ED visit rate of the 21 counties in 2016, 52.52/1,000, this was a 0.46 percentage point decrease from the 2013 rate.

Total ACSC ED Visits/Rate/1,000 Population

ACSC - ED Rate/1000			
COUNTY	NJ 2013	NJ 2016	Change '13-'16
CUMBERLAND	82.08	89.34	7.26
CAMDEN	92.53	87.44	(5.09)
ESSEX	81.43	85.99	4.56
ATLANTIC	85.64	84.99	(0.65)
SALEM	77.56	75.01	(2.55)
MERCER	73.13	74.33	1.20
PASSAIC	70.77	72.95	2.18
CAPE MAY	71.68	66.41	(5.27)
UNION	61.98	64.24	2.26
HUDSON	58.01	63.83	5.81
OCEAN	62.11	59.29	(2.83)

ACSC - ED Rate/1000			
COUNTY	NJ 2013	NJ 2016	Change '13-'16
GLOUCESTER	53.34	53.60	0.27
MONMOUTH	52.97	52.52	(0.46)
BURLINGTON	53.85	48.54	(5.31)
MIDDLESEX	48.46	47.45	(1.01)
WARREN	36.90	41.28	4.38
SUSSEX	25.76	36.14	10.38
MORRIS	30.40	32.96	2.56
BERGEN	31.74	31.49	(0.25)
SOMERSET	30.77	30.51	(0.26)
HUNTERDON	23.72	26.62	2.90
STATEWIDE	57.56	58.22	0.65

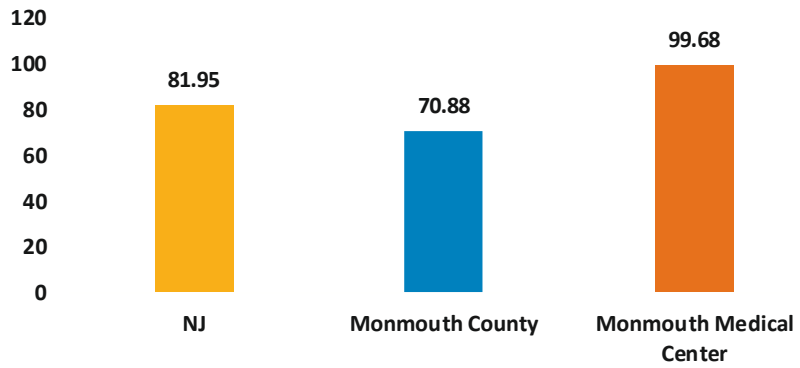
Green signifies counties with a rate decrease. Yellow indicates counties with a rate increase.

Source: NJDHSS 2013/2016 UB-04 Data – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

Children

- In 2016, Monmouth County's ACSC ED visits for children age 0-17 (70.88/1,000) was lower than the statewide rate (81.95/1,000).
- The 2016 Monmouth County ACSC visit rate among children was also lower than the rate in the MMC Service Area (99.68/1,000).
- The towns with the highest ACSC ED visit rate were Long Branch (246.10/100,000), Asbury Park (147.22/100,000), and Neptune (125.63/1,000), each of which have rates considerably higher than the MMC Service Area.

Total ACSC ED Visits for Children (Age 0-17); Rate/1,000 Population



Source: UB-04 2016 Discharges

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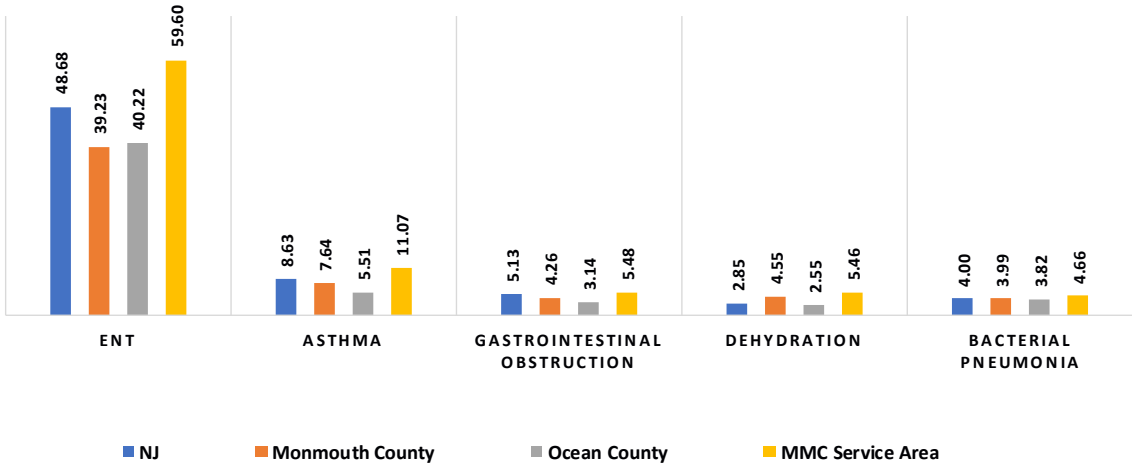
ED ACSC Volume: Top 5 by Service Area Zip Codes – Pediatric (Age 0-17), 2016
Rate/1,000 Population



ED ACSC (2016) Pediatrics (Age 0-17)				
Geographic Area	Rate	Geographic Area		Rate
Monmouth County	70.88	07740	Long Branch	246.10
New Jersey	81.95	07712	Asbury Park	147.22
Monmouth Medical Center	99.68	07753	Neptune	125.63
		07723	Deal	115.85
		07701	Red Bank	100.56

Source: UB-04 2016 Discharges

- There was a total of 5,728 ACSC ED visits for children from MMC's Service Area in 2016.
- ENT is the most common ACSC that resulted in an ED visit for children, followed by asthma, dehydration, gastrointestinal obstruction and bacterial pneumonia.

ACSC ED 2016 – Pediatric (Age 0-17)
Rate/1,000 Population

GEOGRAPHIC AREA	RATE	HIGHEST SERVICE AREA RATES	
Monmouth County	70.88	07740 Long Branch	246.10
New Jersey	81.95	07712 Asbury park	147.22
Monmouth Medical Center	99.68	07753 Neptune	125.63
		07723 Deal	115.85
		07701 Red Bank	100.56

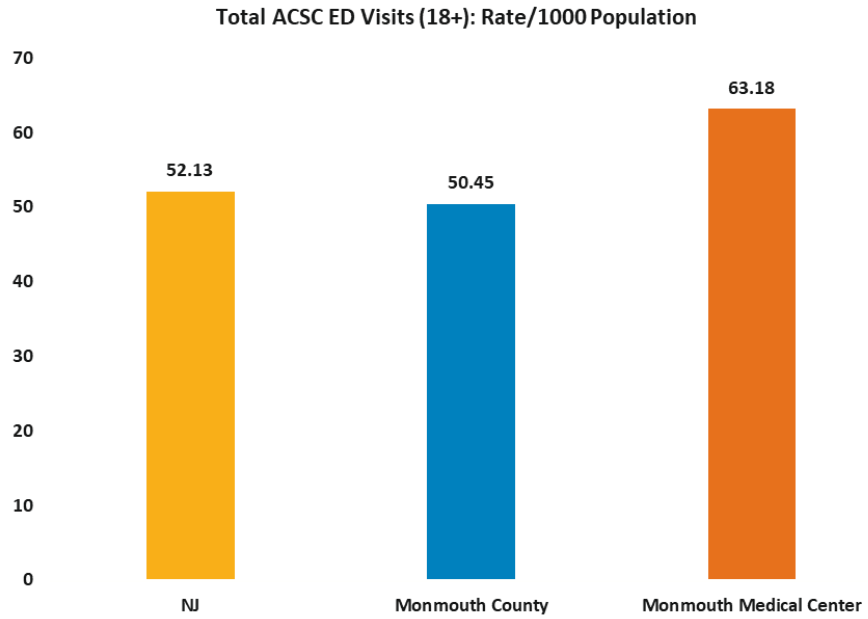
ACSC ED Volume: Top 5 by Service Area – Pediatric (Age 0-17)

EMERGENCY DEPARTMENT (2016) – AGE 0-17		
Service Area	ACSC Description (Top 5 Combined Service Area)	TOTAL IN AREA
Monmouth Medical center	ENT	3,425
	Asthma	636
	Gastrointestinal Obstruction	315
	Dehydration	314
	Bacterial Pneumonia	268
	All Others	770
	TOTAL MMC Service Area	5,728

Top 5 Based on Total ACSCs in MMC Service Area: 2016

Adults

- The 2016 Monmouth County's adult ED ACSC rate (50.45/1,000) is 13.9% higher than the statewide rate (52.13).
- Monmouth County adult ED ACSC rate is lower than MMC's Service Area rate (63.18/1,000).



Source: UB-04 2016 Discharges

- The 2016 adult ED ACSC rate for Long Branch was more than double the New Jersey rate (52.13/1,000).
- In 2016, Ocean Grove had the lowest adult ED ACSC rate (51.89/1,000), slightly below the State rate (52.13/1,000).

ACSC ED 2016 – Adults (Age 18+)
Rate/1,000 Population

GEOGRAPHIC AREA	RATE	Top 5 By Zip Code	RATE
Monmouth County	50.45	07740 Long Branch	106.58
New Jersey	52.13	07712 Asbury Park	98.94
Monmouth Medical center	63.18	07753 Neptune	94.96
		07724 Eatontown	57.55
		07756 Ocean Groove	51.89

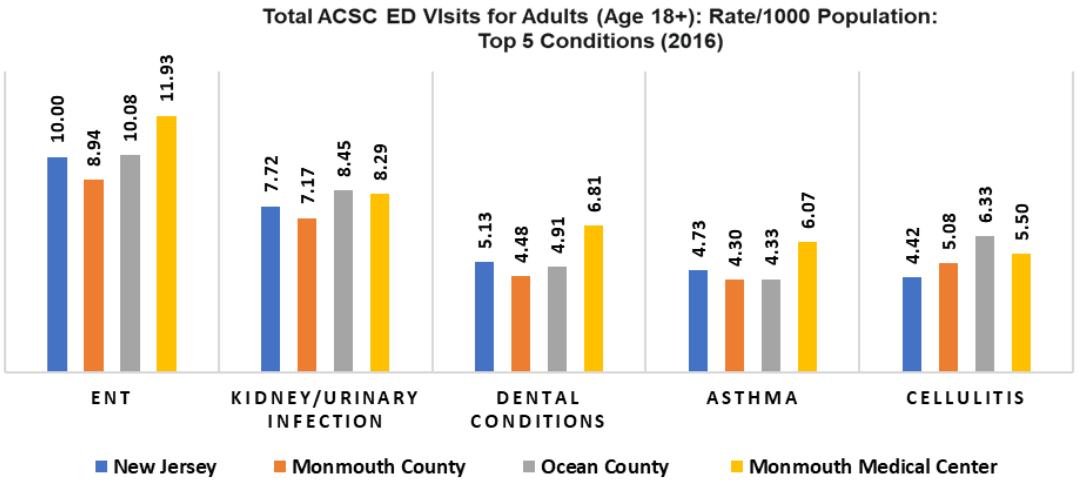
Source: UB-04 2016 Discharges

- There was a total of 13,303 adult ED ACSC visits in 2016 in the MMC Service Area.

EMERGENCY DEPARTMENT (2016) – AGE 18+		
Service Area	ACSC Description (Top 5 Combined Service Area)	TOTAL IN AREA
MMC	ENT	2,511
	Kidney/Urinary Inf.	1,747
	Dental Conditions	1,433
	Asthma	1,278
	Cellulitis	1,157
	All Others	5,177
	TOTAL Monmouth Medical center	13,303

Top 5 Based on Total ACSCs in MMC Service Area: 2016

- In 2016, ENT was the leading cause of adult ED ACSC followed by kidney/urinary infection, cellulitis, dental conditions, and asthma in the Service Area.
- In 2016, Monmouth County adults had an ED visit rate for cellulitis that was higher than the State rate.



ED ACSC (2016) Adults 18+				
Geographic Area	Rate	Geographic Area		Rate
Monmouth County	50.45	07740	Long Branch	106.58
New Jersey	52.13	07712	Asbury Park	98.94
Monmouth Medical center	63.18	07753	Neptune	94.96
		07724	Eatontown	57.55
		07756	Ocean Groove	51.89

Source: UB-04 2016 Discharges

Inpatient Utilization for Ambulatory Care Sensitive Conditions

Individuals may be admitted to the hospital due to an ACSC; higher rates of ACSC conditions among inpatients indicate primary care access issues, poor preventive care and barriers related to socioeconomic status.

- Monmouth County ranks 12/21 counties with 17.22/1,000 ACSC Inpatient admissions in 2016, a (1.85) percentage point decrease from 2013.
- In 2016, Monmouth County (17.22/1,000) had 7.4% more ACSC Inpatient admissions than the State (16.99/1,000).

Total Ambulatory Care Sensitive Conditions (ACSCs) Inpatient Admissions, per 1,000 Population 2013-2016

ACSC - IP Rate/1,000				ACSC - IP Rate/1,000			
COUNTY	NJ 2013	NJ 2016	Change '13-'16	COUNTY	NJ 2013	NJ 2016	Change '13-'16
SALEM	26.07	27.47	(1.40)	MONMOUTH	19.07	17.22	(-1.85)
CUMBERLAND	24.18	26.12	(1.94)	GLOUCESTER	19.84	15.85	(-3.99)
CAMDEN	22.87	22.61	(-0.26)	WARREN	15.94	15.69	(-0.25)
CAPE MAY	20.71	22.36	(1.65)	MIDDLESEX	17.07	15.33	(-1.74)
OCEAN	24.79	20.19	(-4.60)	UNION	16.18	15.21	(-0.97)
ESSEX	21.61	19.76	(-1.85)	SUSSEX	15.34	14.12	(-1.22)
ATLANTIC	23.63	19.66	(-3.97)	HUNTERDON	13.81	13.90	(0.09)
BURLINGTON	18.91	18.90	(-0.01)	MORRIS	15.04	13.13	(-1.91)
HUDSON	20.58	17.35	(-3.23)	BERGEN	15.20	12.18	(-3.02)
PASSAIC	20.78	17.32	(-3.46)	SOMERSET	14.04	11.48	(-2.56)
MERCER	20.17	17.23	(-2.94)	STATEWIDE	19.13	16.99	(-2.14)

Green indicates counties with a rate decrease. Yellow indicates counties with a rate increase.

Source: NJDHSS 2013/2016 UB-04 Data – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

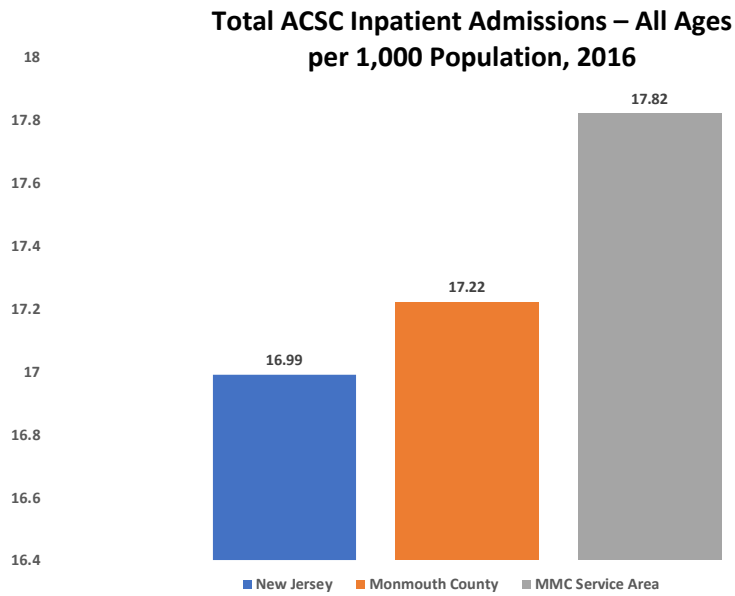
- In 2016, Shrewsbury had the highest inpatient admissions due to ACSC (37.88/1,000) followed by Ocean Grove (26.67/1,000).

Total ACSC Inpatient Admissions – Rate/1,000 Population All Ages 2016

GEOGRAPHIC AREA	RATE	HIGHEST SERVICE AREA RATES	
New Jersey	16.99	07702 Shrewsbury	37.88
Monmouth County	17.22	07756 Ocean Grove	26.67
Monmouth Medical Center	17.82	07738 Lincroft	21.06
		07701 Red Bank	20.68
		07758 Port Monmouth	20.48

*Source: UB-04 2016 Discharges

- In 2016, MMC's Service Area inpatient use rate for ACSC was higher than the Monmouth County and State rates.



Source: UB-04 2016 Discharges

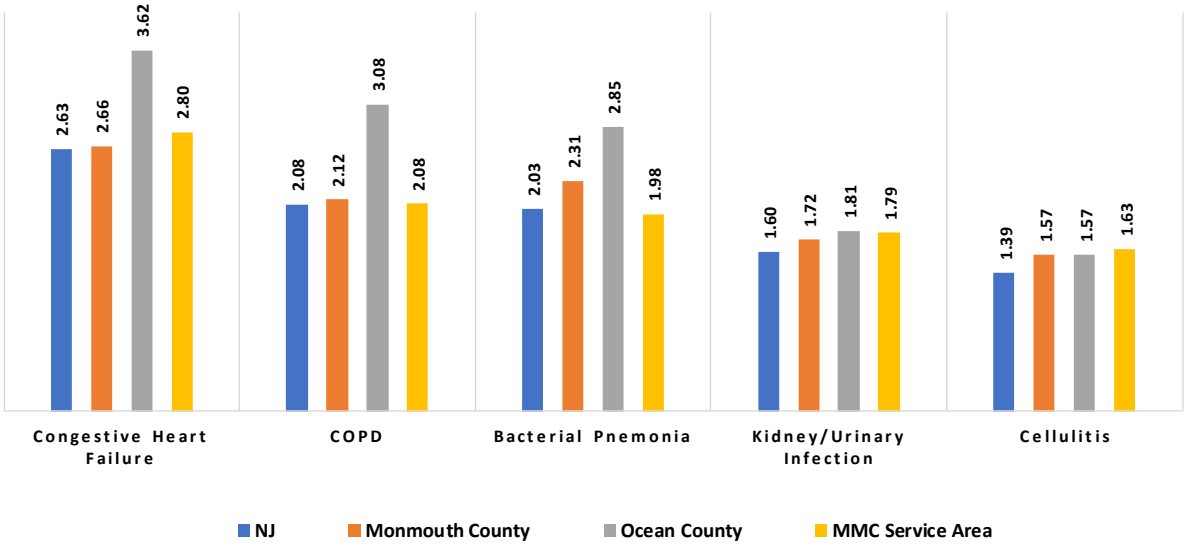
- In 2016, there were a total of 4,777 ACSC admissions from the MMC Service Area.

INPATIENT (2016) – ALL AGES		
SERVICE AREA	**ACSC Description (Top 5 Combined Conditions)**	**TOTAL IN AREA**
Monmouth Medical Center	Congestive Heart Failure	751
	COPD	558
	Bacterial Pneumonia	531
	Kidney/Urinary Infection	480
	Cellulitis	438
	All Others	2,019
	TOTAL MMC Service Area	4,777

Source: UB-04 2016 Discharges

- In 2016, congestive heart failure was the leading cause of inpatient ACSC admissions in Monmouth County followed by COPD, Bacterial Pneumonia, Kidney/Urinary Infections and Cellulitis.
- The 2016 Monmouth County inpatient ACSC rates for all of the top 5 inpatient ACSCs were higher than the rates statewide.

Total ACSC Inpatient Admissions (All Ages) by Top 5 Conditions, 2016: Rate/1,000 Population



IP ACSC (2016) All Ages			
Geographic Area	Rate	Geographic Area	Rate
New Jersey	16.99	07702 Shrewsbury	37.88
Monmouth County	17.22	07756 Ocean Grove	26.67
Monmouth Medical Center	17.82	07738 Lincroft	21.06
		07701 Red Bank	20.68
		07758 Port Monmouth	20.47

Source: UB-04 2016 Discharges

Additional information regarding Ambulatory Care Sensitive Conditions may be found in **Appendix G**: Discharges and Population 18-64 for Ambulatory Care Sensitive Conditions.

6. Neighborhood and Built Environment

The neighborhood and built environment contribute to health in a variety of ways. Pollution, crime, and access to healthy food and water are environmental and neighborhood factors that may be hazardous to a community's health.[25]

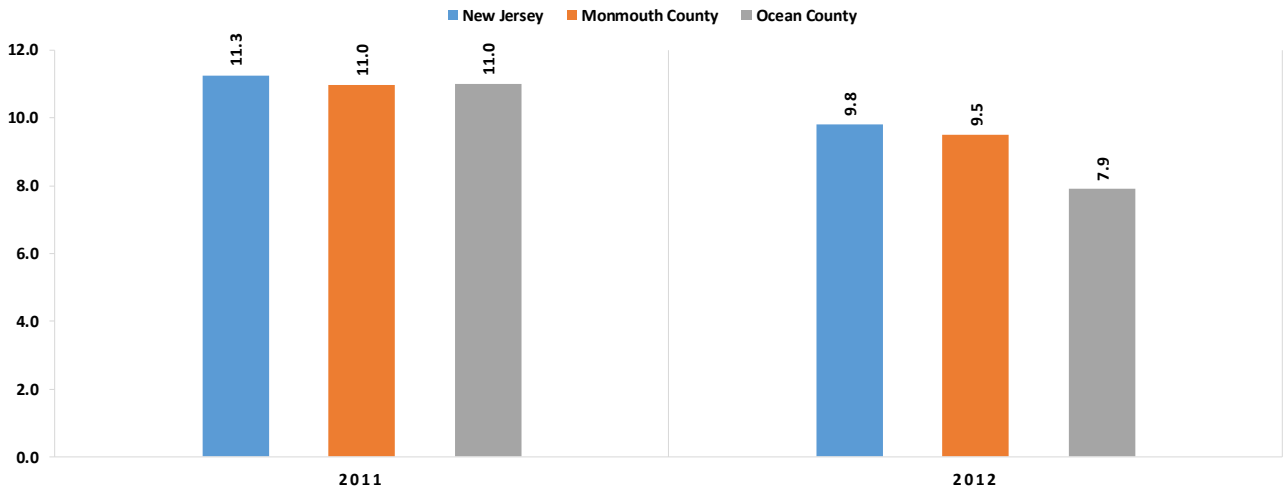
Air Quality

Outdoor air quality has improved since the 1990, but many challenges remain in protecting Americans from air quality problems. Air pollution may make it harder for people with asthma and other respiratory diseases to breathe.[26] County level data masks ZIP Code level analysis that may reveal higher concentrations of air pollution, particularly in industrialized areas of a county.

[25] Source: Commission to Build a Healthier America, Robert Wood Johnson Foundation http://www.commissiononhealth.org/PDF/888f4a18-eb90-45be-a2f8-159e84a55a4c/Issue%20Brief%203%20Sept%2008%20-%20Neighborhoods%20and%20Health.pdf
[26] http://www.cdc.gov/air/default.htm

- In 2012, the daily measure of fine particle matter in Monmouth County (9.5 PM2.5) was slightly lower than the State rate (9.8 PM2.5). Compared to all 21 counties, Monmouth County ranked in the middle quartile.
- Monmouth County experienced a 13.6% reduction in fine particulate matter in between 2011 (11.0 per cubic meter) and 2012 (9.5 per cubic meter).
- In 2012, Monmouth County (9.5 PM2.5) average daily measure of fine particles is higher than the CHR national benchmark (6.7 PM2.5), placing it in the in the worst performing quartile.

Average Daily Density of Fine Particulate Matter
State & County Comparisons, 2011-2012



Source: County Health Rankings - Environmental Public Health Tracking Network

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 6.7
Monmouth County 2012: 9.5

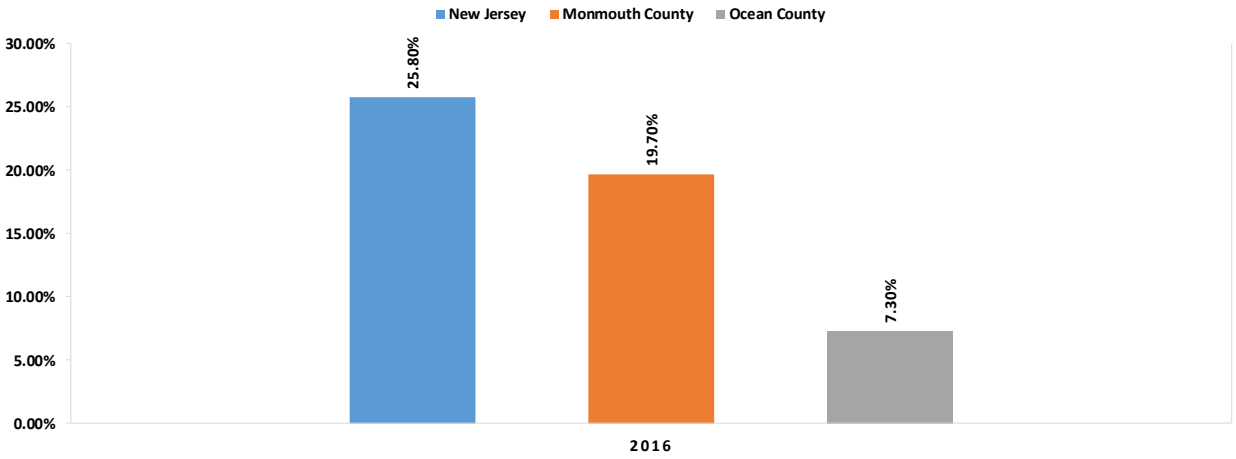
Housing Built before 1950

The potential for exposure to lead based paint in housing units built before 1950 is high. A main source of lead exposure is found in household dust with lead-based paint. Children are highly vulnerable to exposure to lead because of its adverse effects on the developing brain and nervous system.[27]

- In 2016, 19.7% of Monmouth County housing units were built before 1950, 31% lower than New Jersey overall at 25.8%.
- Monmouth County ranked among the middle performing quartiles of all counties in New Jersey, in terms of housing units built before 1950.

[27] Report On the National Survey of Lead-Based Paint in Housing, https://www.epa.gov/sites/production/files/documents/r95-003.pdf

Housing Built Before 1950 With Possible Lead-Based Paint Hazard
State & County Comparisons 2016



Source: https://www26.state.nj.us/doh-shad/indicator/view/pre1950home.percent.html

Lead Hazards

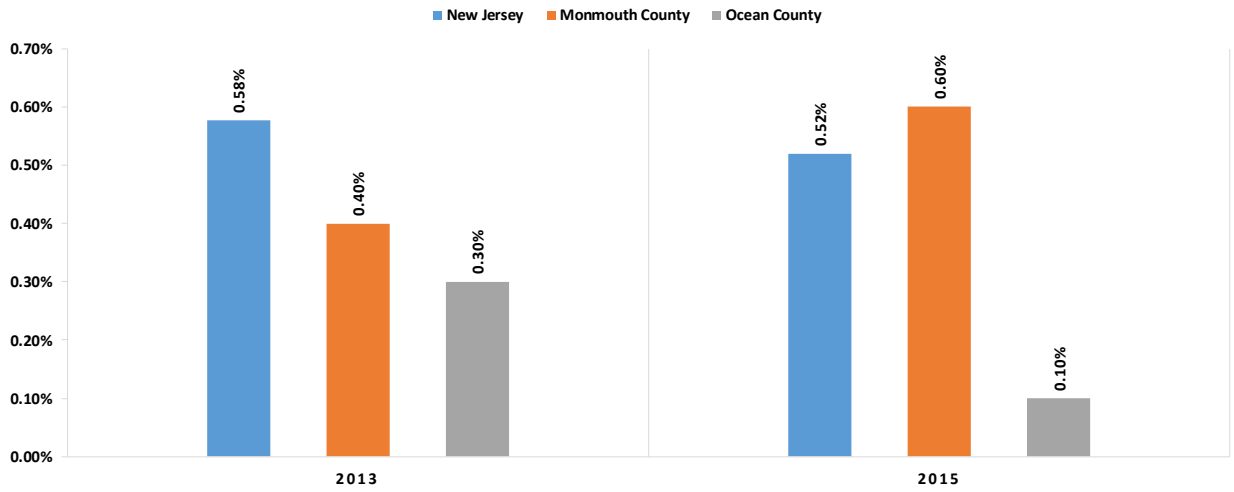
The Centers for Disease Control and Prevention (CDC) defines lead poisoning in children as a blood lead level of 10 micrograms per deciliter (µg/dL) or above. Young children can be exposed by swallowing lead dust or soil that gets on their hands or objects they put into their mouths such as toys; swallowing leaded paint chips; breathing leaded dust or lead contaminated air and eating food or drinking water that is contaminated with lead.

Very high levels of lead can cause seizures, brain damage, developmental or intellectual disabilities, coma and even death. Exposure to lead, even at low levels, has been associated with decrease hearing, lower intelligence, hyperactivity, attention deficit, and developmental problems.[28] County level analysis cannot reveal individual town disparities in blood lead levels particularly in towns with housing stock built before 1950.

- In 2015, 0.6% of Monmouth County children had elevated blood lead levels compared to 0.52% statewide.
- The percent of children with elevated blood lead levels increased 0.40% from 2013 to 2015 (0.6%). In 2015, Monmouth County ranked among the middle performing quartile among counties statewide.

[28] http://www.nj.gov/ health/fhs/newborn/ lead.shtml

Children with Elevated Blood Levels
State & County Comparisons 2013 – 2015



Source: https://www.cdc.gov/nceh/lead/data/state/njdata.htm

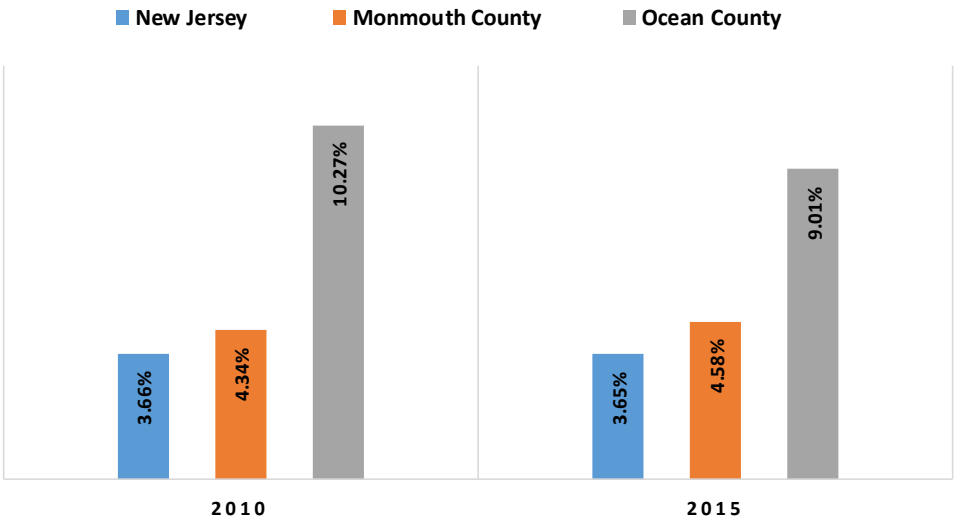
Access to Healthy Foods

Choices about food and diet are influenced by accessibility and affordability of retailers. Specifically, travel time to shopping, availability of healthy foods and food prices are key to decision making. Low-income families face greater barriers in accessing healthy and affordable food retailers, which in turn negatively affect diet and food security.[29]

- In 2015, 3.65% of New Jersey and 4.58% of Monmouth County residents suffered from limited access to healthy foods.
- Between 2010 and 2015, the percent of Monmouth County residents with limited access to healthy foods increased from 4.38% to 4.58%.

[29] https://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas/

Limited Access to Healthy Foods
State & County Comparisons 2010 - 2015



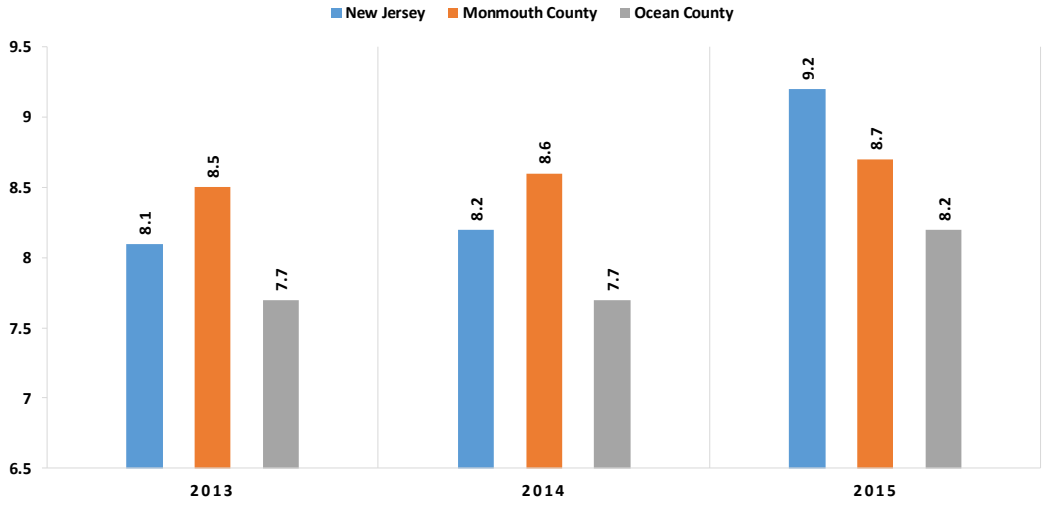
Source: Map The Meal Gap

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 2.0
Monmouth County 2015: 4.58

- In 2015, Monmouth County had a rate of 8.7 out of 10 on the food environment index which is an indicator of access to healthy foods compared to 9.2 for New Jersey residents.

Food Environment Index 2015



Source: USDA Food Environment Atlas, Map the Meal Gap from Feeding America, County Health Rankings

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 8.6
Monmouth County 2015: 8.7

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Limited Access to Healthy Foods			
Food Environment Index *Index of factors that contribute to a healthy food environment*	N.A.		
Housing Built Before 1950 with Possible Lead-Based Paint Hazard	N.A	N.A.	
Percent of Children With Elevated Blood Lead Levels *Percent of Children*	N.A	N.A.	
Annual Number of Unhealthy Air Quality Days *Due to Fine Particulate Matter*	N.A		

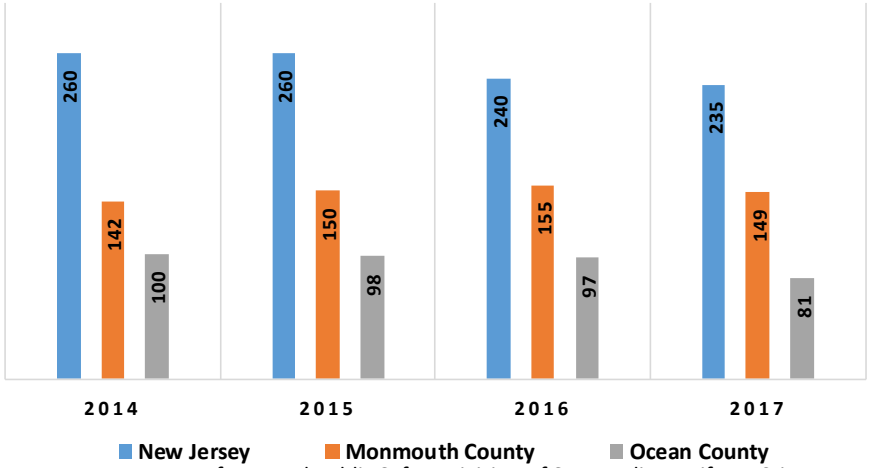
RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Injury and Crime Prevention

Injuries and violence are widespread. Most events resulting in injury, disability or death are predictable and preventable. Individual behaviors, physical environment, access to health services and the social environment affect the risk of unintentional injury and violence. Violent crime, burglaries and motor vehicle crash deaths in Monmouth County are lower than rates statewide.

- Between 2014 and 2017, the violent crime rate in Monmouth County increased from 142/100,00 to 149/100,000.
- The violent crime rate for Monmouth County places it in the worst performing quartile compared to the County Health Rankings benchmark.
- In 2017, Asbury Park ranked 4th in the State for violent crime.

Violent Crime
State & County Comparisons 2014-2017 / Rate per 100,000



Source: State of New Jersey Department of Law and Public Safety Division of State Police Uniform Crime Reporting Uniform Crime data count; retrieved on 05.10.2019 for the years 2014 ,2015, 2016 and 2017 (current) from URL https://www.njsp.org/ucr/uniform-crime-reports.shtml

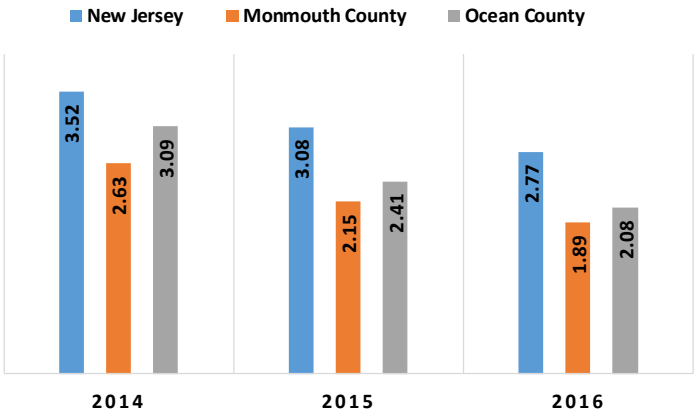
County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 62
Monmouth County 2017: 149

Burglaries

- Monmouth County has a lower burglary rate (1.89/1,000) than the New Jersey (2.77/1,000) in 2016.
- The Monmouth County burglary rate decreased from 2.63/1,000 in 2014 to 1.89/1,000 in 2016.
- Monmouth County's burglary rate ranks in the best performing quartile of New Jersey counties.

Burglary Rate
State & County Comparisons, 2014-2016



Source: http://www.njsp.org/ucr/2015/pdf/2015a_sect_7.pdf

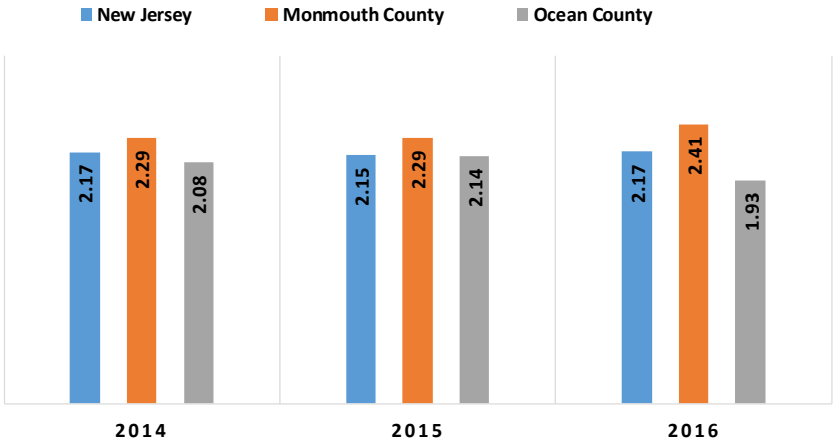
Domestic Violence Arrests

Domestic violence can negatively impact a victim's health beyond the domestic violence incident. Victims of domestic violence exhibit physical and emotional problems including, but not limited to, chronic pain, depression, anxiety, eating disorders, and post-traumatic stress disorder.[30]

- Statewide domestic violence arrest rates have remained fairly constant.
- In 2016, the Monmouth County domestic violence arrest rate (2.41/1,000) was higher than the State (2.17/1,000) and Ocean County (1.93/1,000).
- Between 2014 and 2016, the rate of domestic violence arrests in Monmouth County increased 5.2%.
- Monmouth County is within the middle quartile compared to all New Jersey counties for arrests due to domestic violence.

[30] http://www.stopvaw.org/health_effects_of_domestic_violence

Domestic Violence Arrests: Rate per 1,000
State & County Comparisons 2014 - 2016

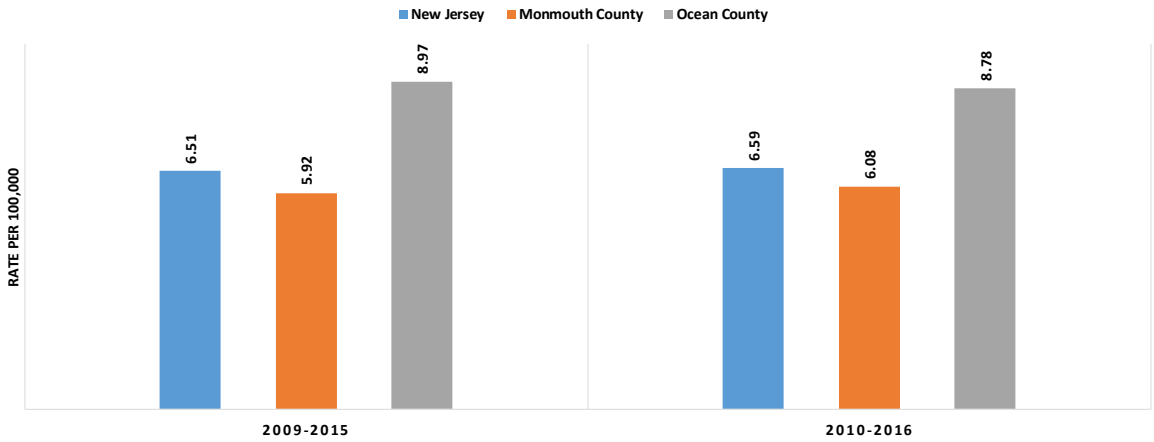


Source: County Health Rankings - The Uniform Crime Reporting (UCR) Program

Motor Vehicle Crash Deaths

- In 2010-2016, Monmouth County (6.08/100,000) had 7.7% fewer motor vehicle crash deaths than New Jersey (6.59/100,000).
- Deaths due to motor vehicle accidents increased slightly in Monmouth County between 2009-2015 (5.92/100,000) and 2010-2016 (6.08/100,000).
- 2010-2016 Monmouth County (6.08/100,000) car accident related deaths occurred 103.9% less often than the *Healthy People 2020* target (12.4/100,000).

Number of Motor Vehicle Crash Deaths
State & County Comparisons, 2009-2016



Source: County Health Rankings, CDC Wonder Mortality Data, 2009 - 2016

Healthy People 2020

Baseline: 13.8
Target: 12.4
Monmouth County 2016: 6.08

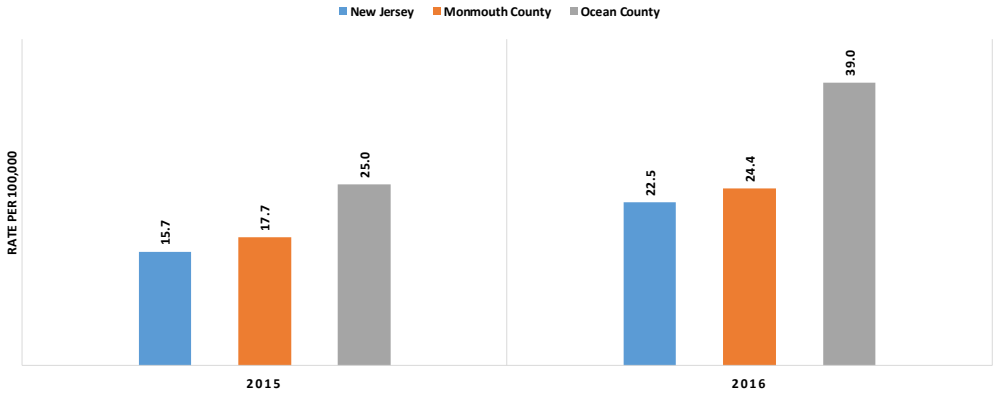
County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 9
Monmouth County 2016: 6.08

Accidental Poisoning and Exposure to Noxious Substances

- In 2016, Monmouth County (24.4/100,000) had a higher death rate due to accidental poisoning and exposure to noxious substances than statewide (22.5/100,000).
- Monmouth County had more deaths due to accidental poisoning and exposure to noxious substances in 2016 than in 2015.
- Monmouth County ranks in the middle quartile in New Jersey, and in the worst performing quartile with respect to the *Healthy People 2020* target.

Deaths Due to Accidental Poisoning and Exposure to Noxious Substances
State & County Comparisons 2015-2016



Source: NJ SHAD

Healthy People 2020

Baseline: 13.2
Target: 13.2
Monmouth County 2016: 24.4

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Violent Crime *Rate/ 100000 Population*	N.A		
Burglary *Rate/ 1000 Population*	N.A	N.A.	
Domestic Violence Arrests *Rate/ 1000 Population*	N.A	N.A	
Deaths Due to Motor Vehicle Crashes *Rate/ 1000 Population*			
Deaths Due to Poisoning *Rate/ 1000 Population*		N.A	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

D. HEALTH FACTORS

Health factors represent the influences that impact one's health. These include demographic, social, environmental, economic, and individual behaviors as well as clinical care and access to services. Social determinants are described in Section B following Health Factors.

1. Clinical Care Measures

Inpatient and ED Utilization

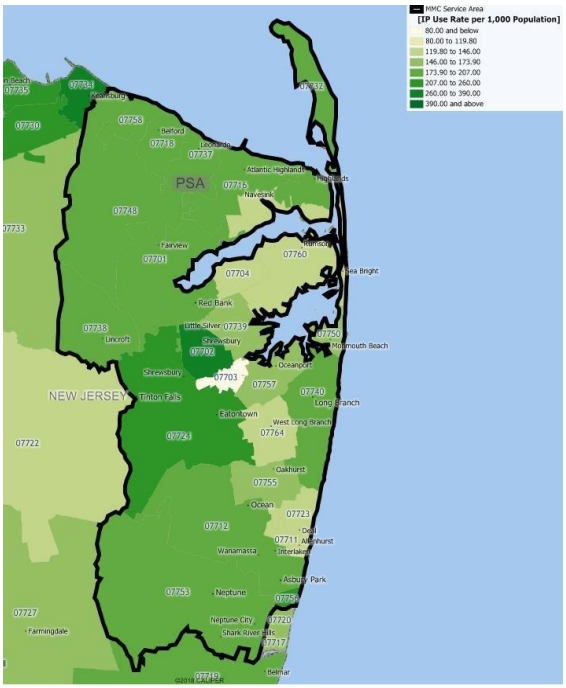
Factors impacting hospital utilization may include policy change, advances in technology, practice patterns and demographics. Many federal and state health care payment reforms, including the Affordable Care Act (ACA), were designed to improve care transitions, coordination of care, enhance ambulatory care and improve access to primary care. The anticipatory result would include improved coordinated care and declines in inpatient and ED utilization.

Inpatient

- Monmouth County's 2016 inpatient utilization rate (171.70/1,000) was higher than the State (160.22/1,000).
- MMC's Service Area inpatient rate (180.72/1,000) was higher than the Monmouth County and State rates.
- Shrewsbury had the highest inpatient use rate in the MMC Service Area (268.76/1,000).

Inpatient Use Rates per 1,000 Population 2016

GEOGRAPHIC AREA	RATE
New Jersey	160.22
Monmouth County	171.70
Monmouth Medical Center	180.72
TOP 5 BY ZIP CODE	
07702 Shrewsbury	268.76
07756 Ocean Grove	252.40
07724 Eatontown	211.18
07753 Neptune	201.42
07701 Red Bank	196.57



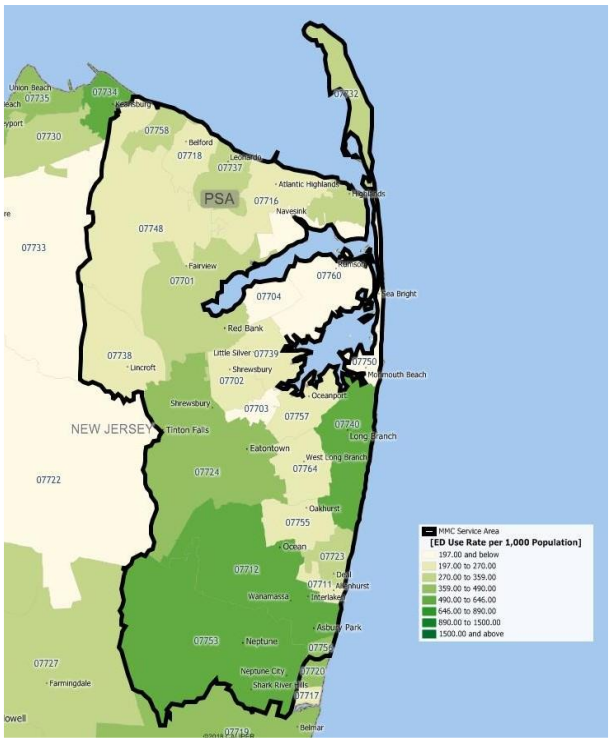
Source: UB-04 2016 Discharges Includes Inpatient & Same Day Stay, Excludes Normal Newborn; Population – Claritas 2016 Estimate

Emergency Department

- Monmouth County's 2016 ED visit rate (322.18/1,000) was lower than the State rate (352.20/1,000).
- MMC's 2016 Service Area (351.26/1,000) ED use rate was comparable to the State rate.
- In 2016, Long Branch's ED visit rate (634.85/1,000) was nearly twice as large as the County rate (322.18/1,000).

ED Use Rate per 1,000 Population 2016

GEOGRAPHIC AREA	RATE
New Jersey	352.20
Monmouth County	322.18
Monmouth Medical Center	351.26
TOP 5 BY ZIP CODE	
07740 Long Branch	634.85
07712 Asbury Park	554.94
07753 Neptune	533.42
07756 Ocean Grove	375.90
07724 Eatontown	372.11



*Source: UB-04 2016 ED Discharges; Claritas 2016 Estimate
** Emergency Room Use Among Adults Aged 18–64: Early Release of Estimates From the National Health Interview Survey, January–June 2011; http ://www.cdc.gov/nchs/data/nhis/earlyrelease/emergency_room_use_january-june_2011.pdf

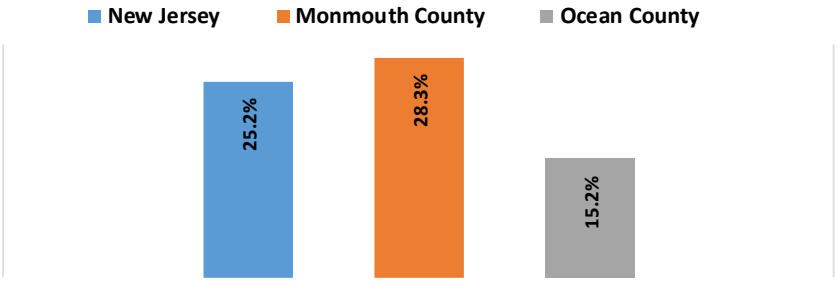
Cesarean Section

A Cesarean Section (C-section) is a major surgical procedure performed because of health problems in the mother, position of the baby, and/or distress in the infant.[31] The U.S. cesarean delivery rate reached a high of 32.9% of all births in 2009, rising 60% from 1996 (20.7%). Recently, the American College of Obstetricians and Gynecologists developed clinical guidelines for reducing the occurrence of non-medically indicated cesarean delivery and labor induction prior to 39 weeks. Efforts to reduce such births include initiatives to improve perinatal care quality, changes in hospital policy to disallow elective delivery prior to 39 weeks, and education of the public.[32]

- Monmouth County's 2016 primary C-section rate (28.3%) was higher than the State rate (25.2%).
- The 2016 Monmouth County primary C-section rate (28.3%) was higher than Ocean County (15.2%).
- In 2016, the Monmouth County primary C-section rate was in the bottom quartile of New Jersey counties, and the middle quartile for the *Healthy People 2020* target.
- County-wide, women with a primary C-section trended upward from 2013 through 2016, increasing from 27.0% in 2013, to 28.5% in 2016.

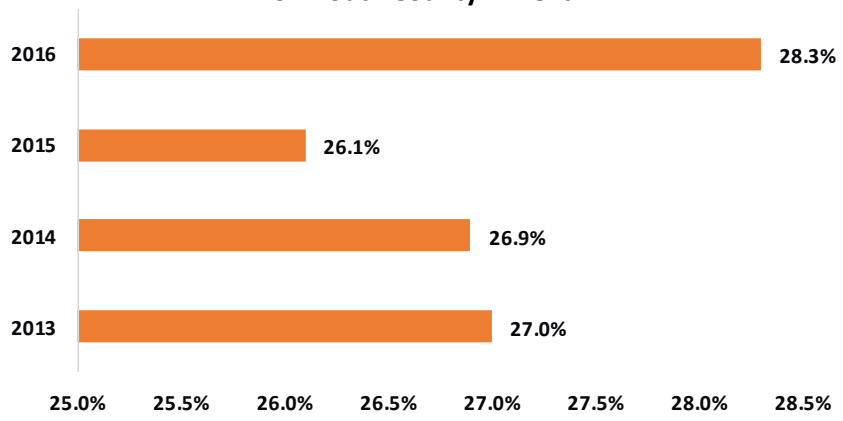
[31] http://www.nlm.nih.gov/medlineplus/cesareansection.html
[32] http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_01.pdf

Primary C-Section Rates (2016)
State & County Comparisons



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html
*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females
**Repeat C-Section: Single >=37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean

Monmouth County – Trend



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html
*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females
**Repeat C-Section: Single >=37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean

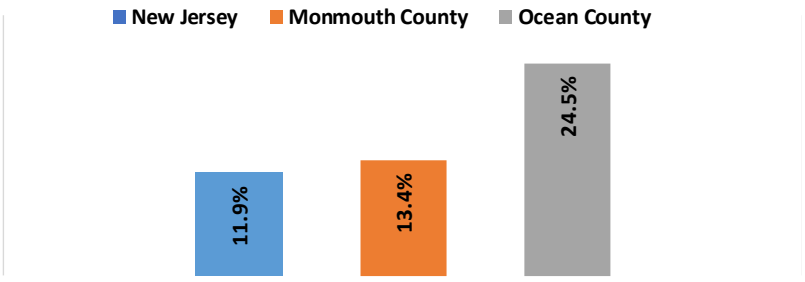
Healthy People 2020

Baseline: 26.5%
Target: 23.9%
Monmouth County 2016: 28.3%

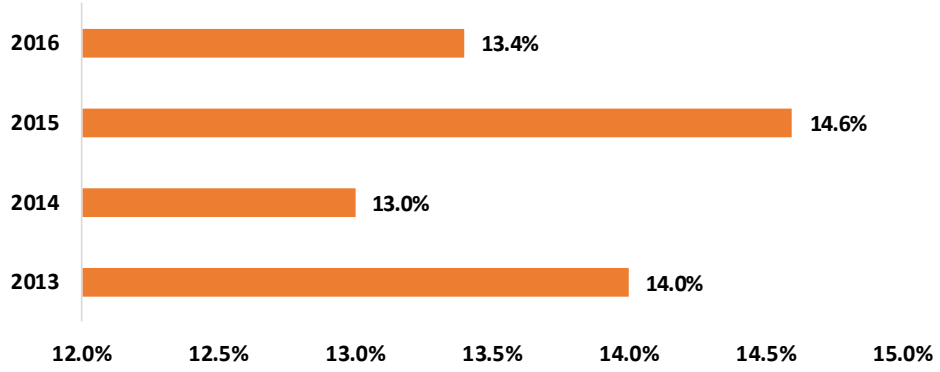
<u>Vaginal Birth After C-Section (VBAC)</u>

- Monmouth County's 2016 VBAC rate (13.4%) was higher than the State rate (11.9%). Monmouth County ranks in the middle performing quartile of all 21 New Jersey counties.
- County-wide women with a VBAC trended downward from 2013 through 2016, decreasing from 14.0% in 2013 to 13.4% in 2016.

Vaginal Birth After Cesarean Section (VBAC) Rates (2016)
State & County Comparisons



Monmouth County – Trend



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html
*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females
**Repeat C-Section: Single >=37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Primary C-Section Rate *Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females*		N.A.	
VBAC Rate	N.A	N.A.	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

2. ***Health Behaviors***

Maternal / Fetal Health

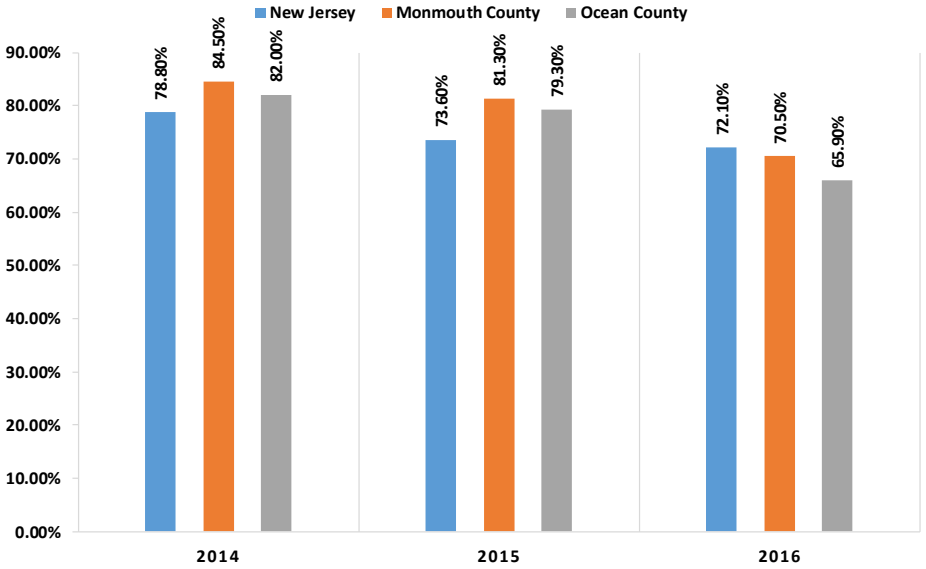
Prenatal Care

The medical care a woman receives during pregnancy monitors her health and the developing fetus. Low-risk pregnancies should visit a prenatal provider every four or six weeks through 28 weeks, then every two or three weeks from weeks 28-36, and finally every week in the ninth month until delivery. A high-risk pregnancy requires additional visits.[33] Pregnant women who do not receive adequate prenatal care risk undetected complications and an increased possibility of adverse outcomes.

Early and regular prenatal care is a strategy to improve health outcomes for mothers and infants. Two significant benefits are improved birth weight and decreased preterm delivery. Infants born to mothers who receive no prenatal care have an infant mortality rate five times higher than mothers who receive appropriate prenatal care in the first trimester of pregnancy. Enrollment in care during the first trimester of pregnancy reflects timely initiation of prenatal care.[34]

- In 2016, 70.5% of Monmouth County women entered prenatal care in the first trimester compared to 72.1% in New Jersey. As compared to other New Jersey counties, Monmouth County ranks in the middle quartile.
- Monmouth County women enrolled in first trimester prenatal care declined from 85.9% in 2008 to 70.5% in 2016.

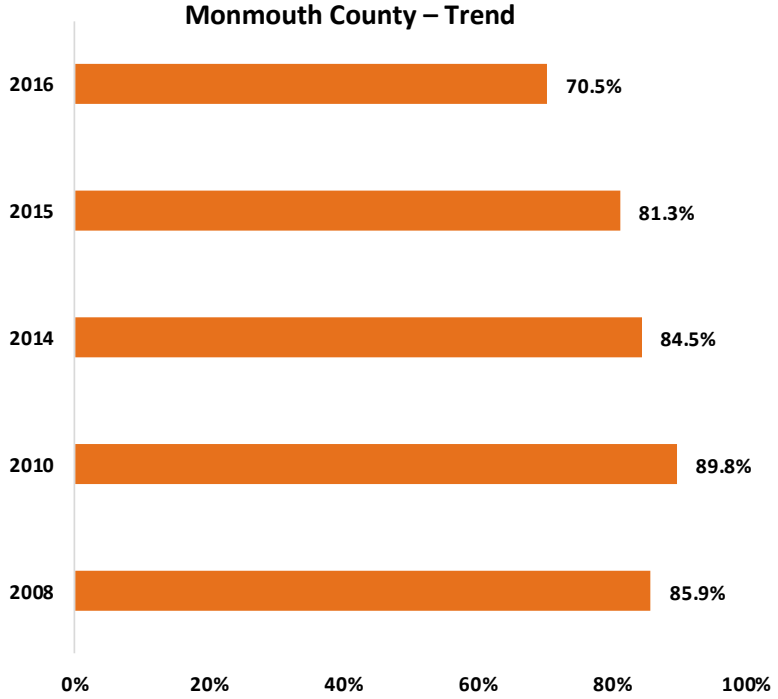
Percentage of Live Births with First Trimester Prenatal Care
State & County Comparisons 2014-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: Percentages are based on Total Number of Live Births for County and State

[33] http://www.plannedparenthood.org/health-info/pregnancy/prenatal-care
[34] http://www.hrsa.gov/quality/toolbox/measures/prenatalfirsttrimester/index.html

Percentage of Live Births with First Trimester Prenatal Care
Monmouth County – Trend



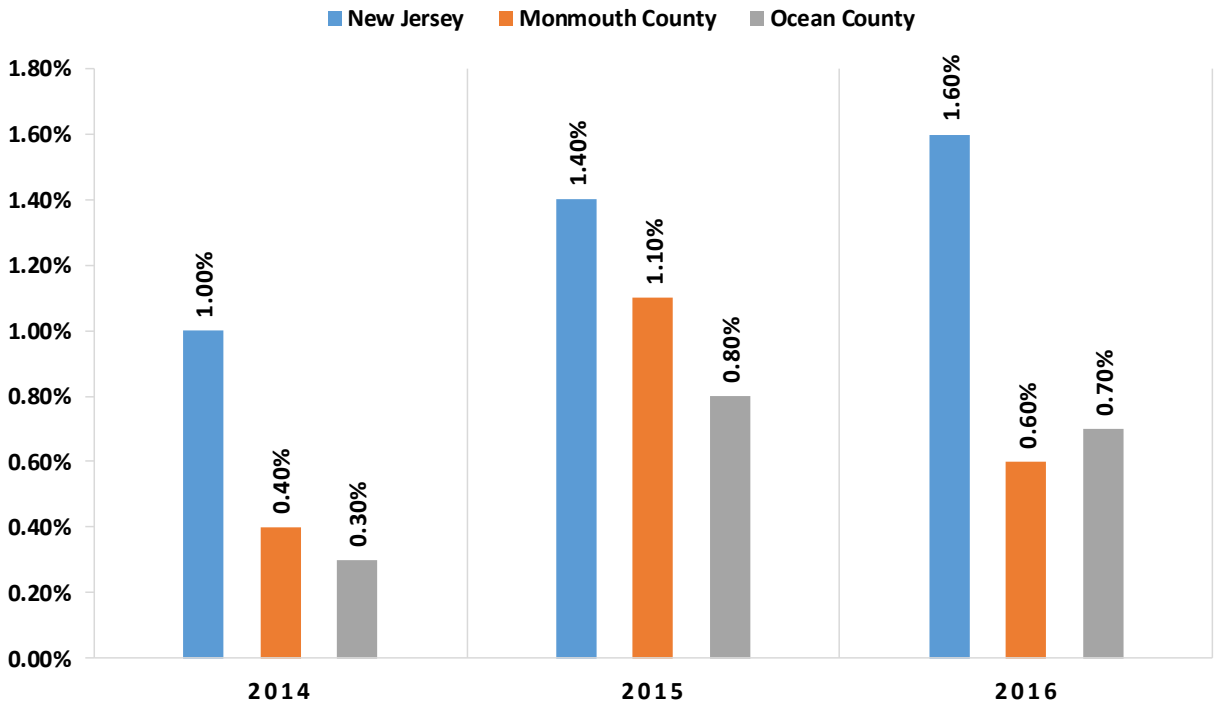
Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: Percentages are based on Total Number of Live Births for County and State

Healthy People 2020

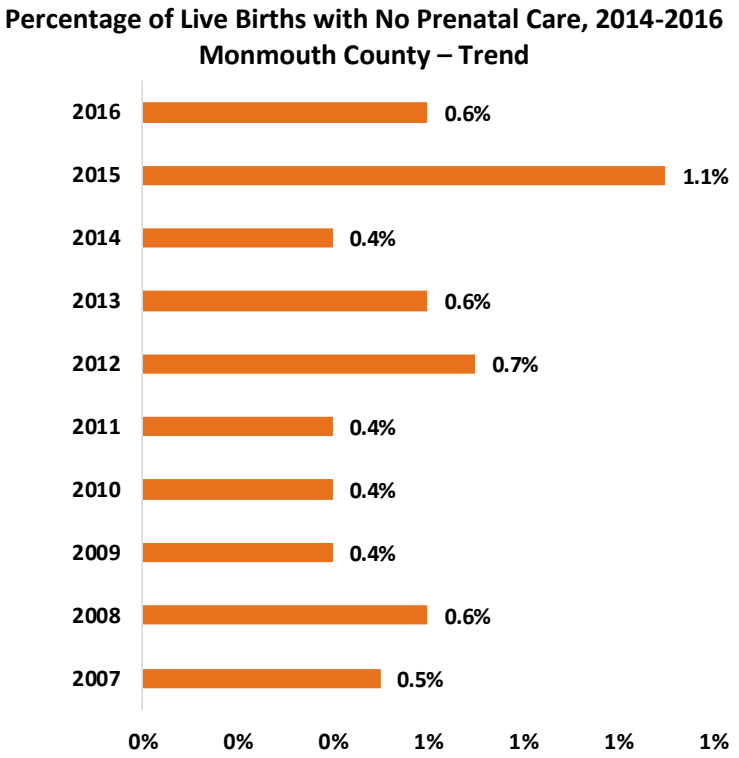
Baseline: 70.8%
Target: 77.9%
Monmouth County 2016: 70.5%

- The percent of Monmouth County women without prenatal care ranged from a low of 0.4% in 2009 to a high of 1.1% in 2015.
- In 2016, the Monmouth County rate for no prenatal care (0.6%) was less than the State rate of 1.6% and performed in the top quartile for New Jersey.

Percentage of Live Births with No Prenatal Care
State & County Comparisons 2014-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: Percentages are based on Total Number of Live Births for County and State



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: Percentages are based on Total Number of Live Births for County and State

High Risk Sexual Behaviors

Teen Pregnancy

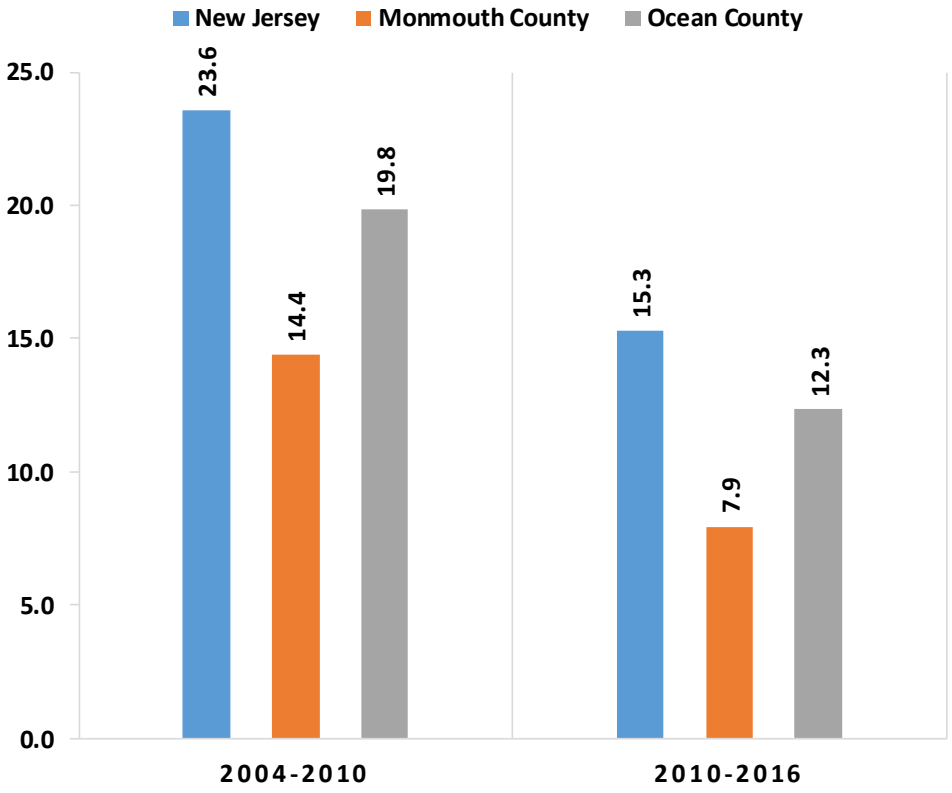
In 2016, there were 20.3 births/1,000 American adolescent females aged 15-19 years; approximately 209,809 babies were born to teens, with nearly eighty-nine percent of these births occurring outside of marriage. The national teen birth rate has trended downward over the past 20 years. In 1991, the U.S. teen birth rate was 61.8 births/1,000 adolescent females. However, the U.S. teen birth rate remains higher than that of many other developed countries, including Canada and the United Kingdom.[35] Pregnant teens are less likely than older women to receive recommended prenatal care and are more likely to have pre-term or low birth weight babies. Teen mothers are often at increased risk for STIs and repeat pregnancies, are less likely than their peers to complete high school and more likely to live below the poverty level and rely on public assistance. Risky sexual behaviors can have high economic costs for communities and individuals.[36]

- The 2010-2016 Monmouth County (7.9/1,000) birth rate among teens aged 15-19 was nearly half the State rate (15.3/1,000) and in the best performing quartile statewide.

[35] http://www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/teen-pregnancy/trends.html
[36] http://www.countyhealthrankings.org/our-approach/health-factors/sexual-activity

- The birth rate among Monmouth County teens aged 15-17 decreased from 5.2/1,000 in 2007-2011 to 2.9/1,000 in 2012-2016 and was in the best performing quartile statewide.
- For both age cohorts, 15-17 and 15-19, the percent of Monmouth County teen births is consistently lower than statewide rates.

Teen Births Age 15-19, Rate 1,000 Female Population
State & County Comparisons



Source: NJDOH Center for Health Statistics State Health Assessment Data

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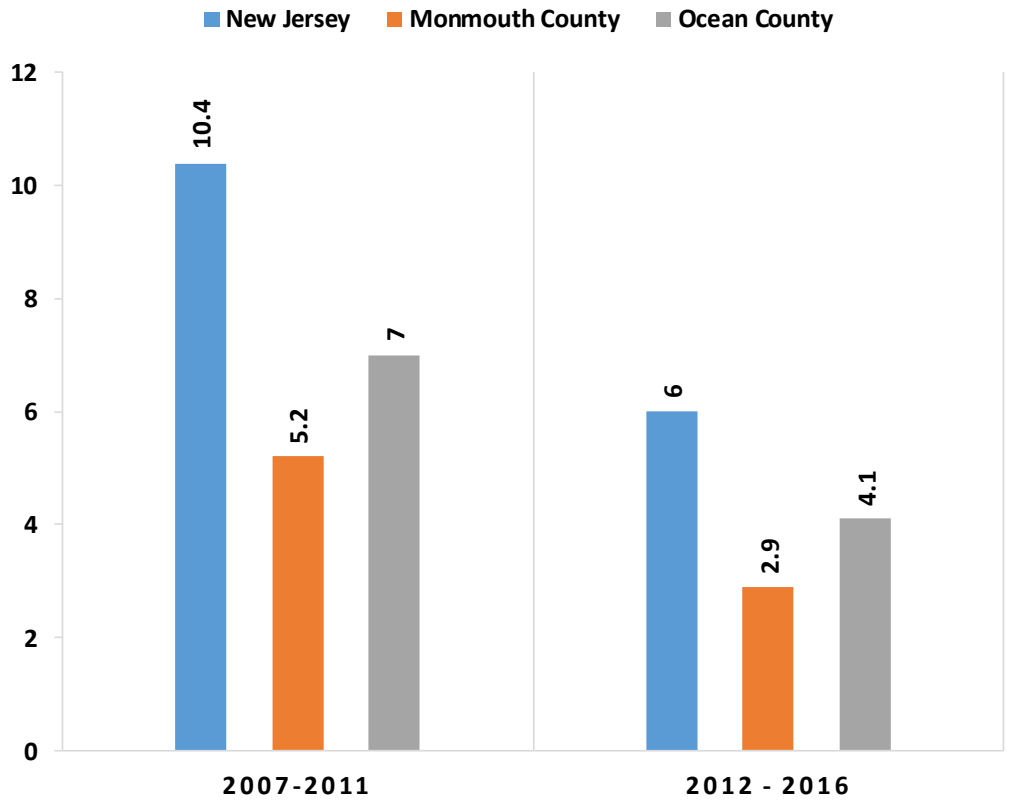
National Benchmark: 15
Monmouth County 2016: 7.9

Teen Births Age 15-17, Rate 1,000 Female Population
State & County Comparisons



Source: NJDOH Center for Health Statistics State Health Assessment Data

Baseline: 40.2
Target: 36.2
Monmouth County 2016: 2.9

In a 2016 CDC Teen Pregnancy Statistics data brief, *State Disparities in Teenage Birth Rates in the United States*, based upon 2014 data, New Jersey is one of 10 states with the lowest teen birth rates (<20/1,000) compared to National figures (41.5/1,000). However, the New Jersey rate shows tremendous variability when examined by town.

- The Ocean Grove 2016 birth rate to teens aged 15-19 (30.19/1,000) was almost five times the Monmouth County rate (5.57/1,000).

Teen Birth Rates 2016 – Deliveries Among 15-19 Year Old

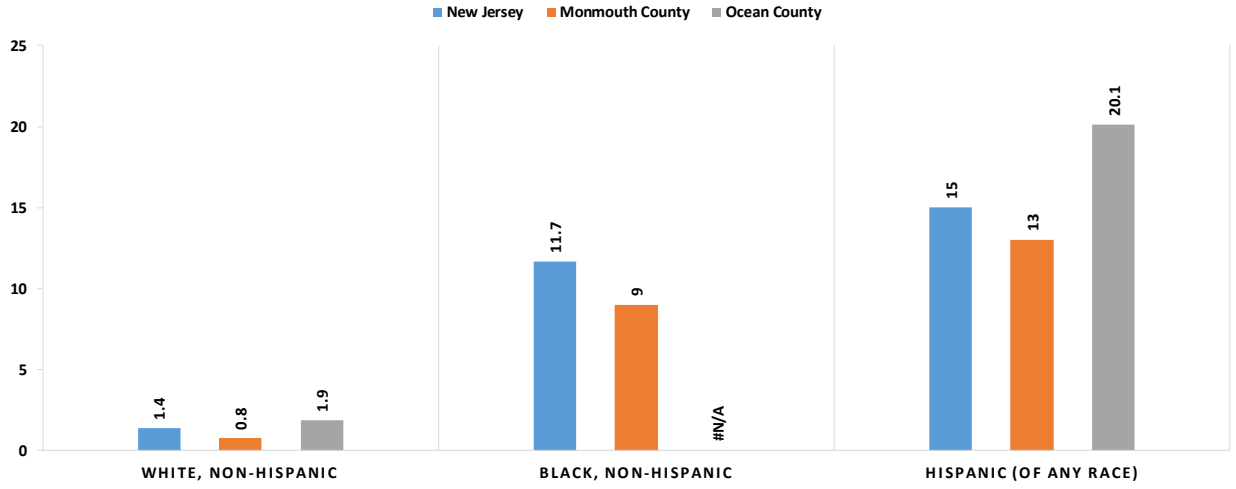
GEOGRAPHIC AREA	2016 RATE
New Jersey	11.54
Monmouth County	5.57
Monmouth Medical Center	7.65
TOP 5 BY SA ZIP CODE	**2016 RATE**
(07756) Ocean Grove	30.19
(07732) Highlands	25.04
(07753) Neptune	16.67
(07740) Long Branch	15.44
(07701) Red Bank	15.37

*Source: UB-04 2016 Discharges – All Deliveries to Mothers Age 15-19; Claritas Population Estimate
** NCHS Data Brief http://www.cdc.gov/nchs/data/databriefs/db46.pdf

Teen Births by Mother's Race/Ethnicity (Age 15-17)

- The 2012-2016 Monmouth County teen birth rate for Whites, Blacks and Hispanics was lower relative to New Jersey and Ocean County.
- The rate among Monmouth County teens, 15-17, was highest among Hispanics (13.0/1,000).

Teen Births by Mother's Race/Ethnicity, Aged 15-17
State & County Comparisons, 2012-2016



Source: Age 15-17- NJDOH Center for Health Statistics State Health Assessment Data

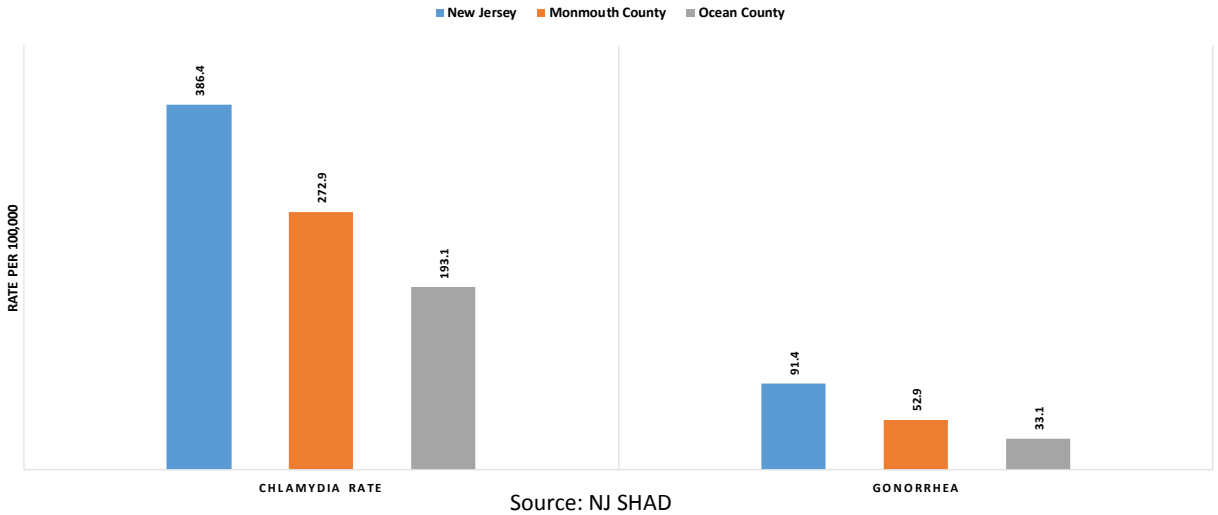
Sexually Transmitted Infection

Sexually transmitted infections (STI) are caused by bacteria, parasites and viruses contracted through relations with an infected individual. There are more than 20 types of STIs, including Chlamydia, Gonorrhea, Genital herpes, HIV/AIDS , HPV, Syphilis and Trichomoniasis. Most STIs affect both men and women, but in many cases health problems may be more severe for women. If pregnant, a STI can cause serious health complications for the baby.[37]

- Chlamydia is the most prevalent STI. In 2016, the Monmouth County chlamydia rate (272.9/100,000) was lower than the New Jersey rate (386.4/100,000) and performed in the middle quartile statewide.
- The rate of chlamydia in Monmouth County (272.9/100,000) was higher than the CHR national benchmark (145.1/100,000).
- In 2016, Monmouth County (52.9/100,000) had a far lower gonorrhea rate than the State (91.4/100,000).
- Monmouth County ranks in the middle quartile of New Jersey counties with regard to chlamydia and gonorrhea infection rates.

[37] http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html

Sexually Transmitted Diseases: Rate / 100,000 Population
Chlamydia and Gonorrhea Rates
State & County Comparisons 2016



Source: NJ SHAD

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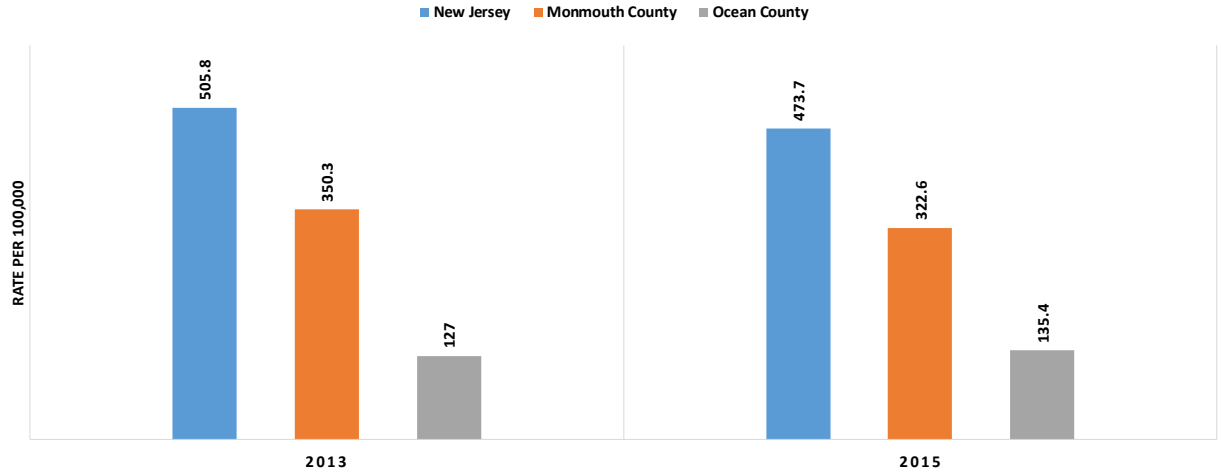
National Benchmark: 145.1
Monmouth County 2016: 272.9

HIV/AIDS

Human immunodeficiency virus (HIV) is spread mainly by having sex with someone infected with HIV or sharing needles with someone positive. Approximately 50,000 new HIV infections occur in the United States each year.

- County-wide HIV/AIDS prevalence rates declined between 2013 (350.3/100,000) and 2015 (322.6/100,000).
- In 2015, HIV/AIDS prevalence rate in Monmouth County (322.6/100,000) was lower than the New Jersey rate (473.7/100,000). Monmouth County is in the middle quartile statewide.
- Monmouth County had a higher rate of HIV/AIDS infections than neighboring Ocean County.
- The Monmouth County prevalence rate was higher than the CHR benchmark of 49/100,000, placing Monmouth County in the worst performing quartile.

HIV Prevalence Rates 2013-2015
State & County Comparisons



Source: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, County Health Rankings

County Health Rankings & Roadmaps
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National Benchmark: 49
Monmouth County 2015: 322.6

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
First Trimester Prenatal Care *Percentage of Live Births*		N.A.	
No Prenatal Care *Percentage of Live Births*	N.A	N.A.	

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
STDs: Chlamydia *Rate per 100,000 Population*	N.A.		
STDs: Gonorrhea *Rate per 100,000 Population*	N.A.	N.A.	
Teen Births Ages 15-19 *Rate per 100,000 Female Population*	N.A.		
Teen Births Ages 15-17 *Rate per 100,000 Female Population*		N.A.	
Teen Births 15-17 By Race/Ethnicity(Blacks Non-Hispanics) *Rate per 100,000 Population*	N.A	N.A.	
HIV/AIDS: Prevalence *Rate per 100,000 Population*	N.A		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Individual Behavior

A CDC report indicates that people can live longer if they practice one or more healthy lifestyle behaviors including: eating a healthy diet, not smoking, regular exercise and limiting alcohol consumption. People who engage in all of these behaviors are 66 percent less likely to die early from cancer, 65 percent less likely to die early from cardiovascular disease and 57 percent less likely to die early from other causes compared to those who do not engage in any of these behaviors.[38]

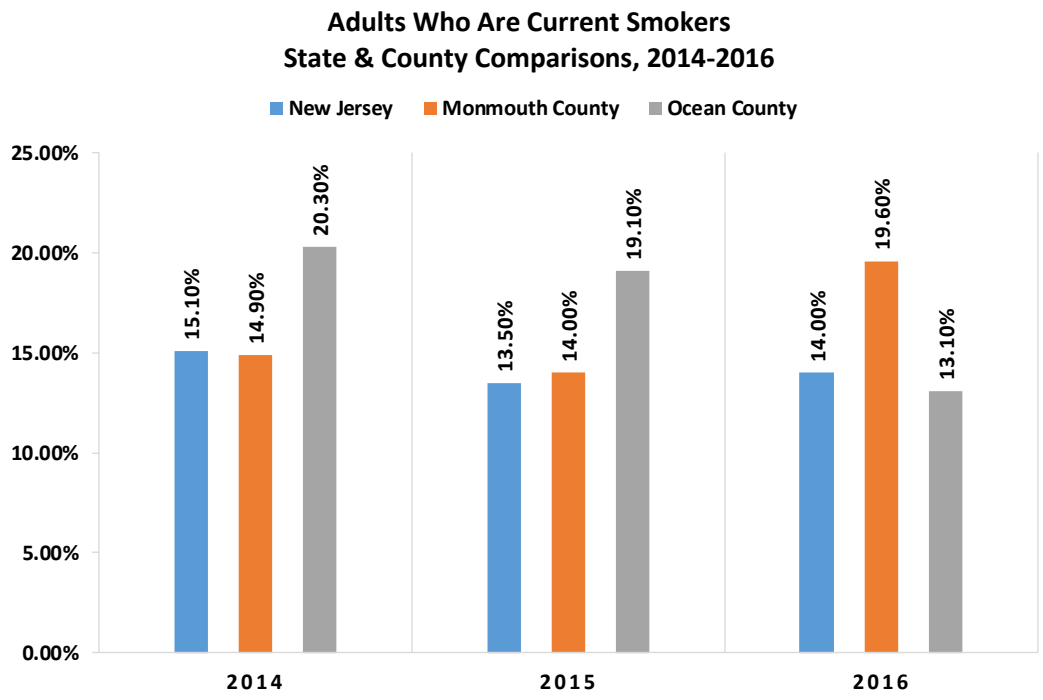
Tobacco Use

Tobacco use is the leading cause of preventable death in the United States. Smoking leads to disease and disability, and harms nearly every organ in the body, and causes cancer, heart disease, stroke, diabetes, and lung diseases such as emphysema, bronchitis, and chronic airway obstruction. Exposure to secondhand smoke can lead to lung cancer and heart disease. Each year, smoking kills approximately 480,000 Americans, including 41,000 from secondhand smoke. On average, smokers die 10 years earlier than nonsmokers.

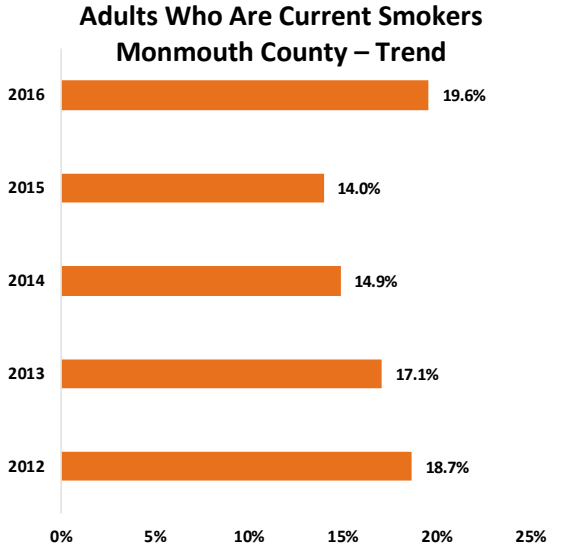
About 15% of U.S. adults smoke. Each day, nearly 3,200 youth smoke their first cigarette, and 2,100 people transition from occasional to daily smokers. Smokeless tobacco also leads to various cancers, gum and teeth problems, and nicotine addiction. Almost 6% of young adults use smokeless tobacco and half of new users are younger than 18.[39], [40]

- Between 2012 and 2016, smoking rates have fluctuated in Monmouth County with an overall increase of 0.9 percentage points.
- In 2016, there were more smokers in Monmouth County (19.6%) than New Jersey (14.0%). Monmouth County had more adult smokers than neighboring Ocean County (13.1%). Monmouth County ranks in the poorest performing quartile statewide.

[38] http://www.cdc.gov/features/livelonger/
[39] http://www.countyhealthrankings.org/our-approach/health-factors/tobacco-use
[40] http://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm



Source: CDC New Jersey Behavioral Risk Factor Surveillance System (NJBRFS)



Source: CDC New Jersey Behavioral Risk Factor Surveillance System (NJBRFS)

Healthy People 2020

Baseline: 20.6%
Target: 12.0%
Monmouth County 2016: 14.4%

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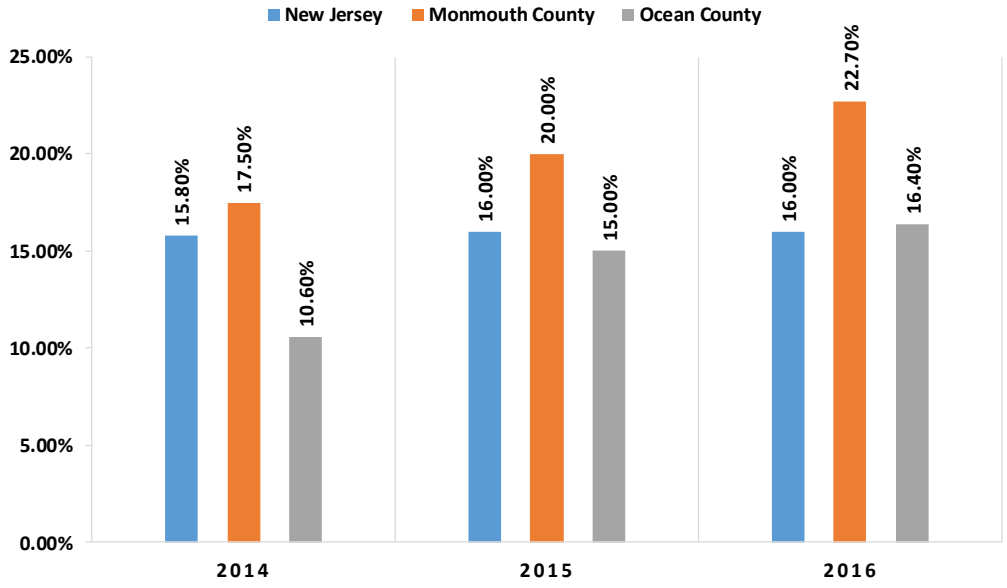
National Benchmark: 14.0%
Monmouth County 2016: 19.6%

Alcohol Use

Although moderate alcohol use is associated with reduced risk of heart disease and diabetes, excessive consumption is the third leading cause of preventable death nationally. Excessive consumption considers both the amount and the frequency of drinking. Short-term, excessive drinking is linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, failure to fulfill responsibilities and motor vehicle crashes. Over time, excessive alcohol consumption is a risk factor for hypertension, acute myocardial infarction, fetal alcohol syndrome, liver disease and certain cancers.[41]

- Binge drinkers, those men that consume more than 5 drinks and women that consume more than 4 drinks in one occasion, increased from 17.5% in 2014, to 22.7% in 2016.
- In 2016, 22.7% of Monmouth County residents were binge drinkers compared to 16% statewide. Monmouth County had a higher rate of binge drinkers than surrounding Ocean County.
- Statewide, Monmouth County performs in the poorest performing quartile.

Adults Reporting Binge Drinking
State & County Comparisons, 2014-2016



Source: CDC New Jersey Behavioral Risk Factor Surveillance System
Question: During the past 30 days how many days per week or per month did you have at least one drink of any alcoholic beverage? If response is not 0 then ask: Considering all types of alcoholic beverages how many times during the past 30 days did you have 5(for males)/4(for females) or more drinks on an occasion?
"Binge Drinking" is defined when someone has at least 5(for males)/4(for females) or more drinks on an occasion a month.

County Health Rankings & Roadmaps
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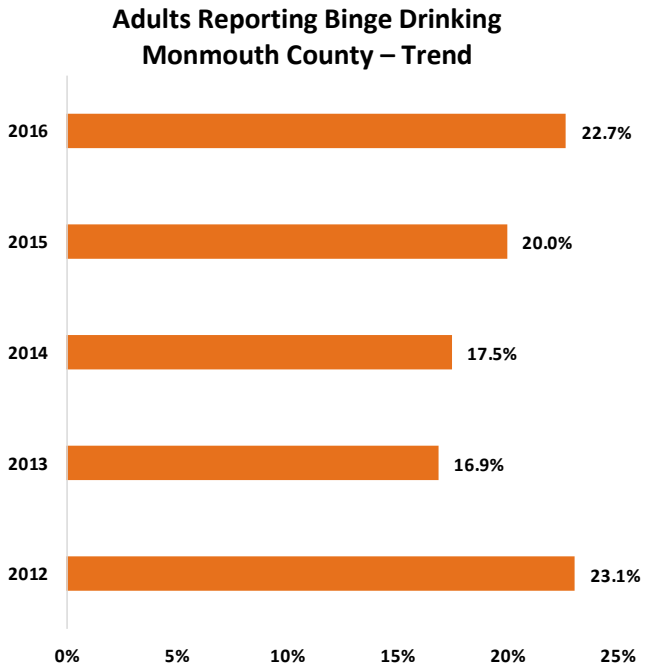
National Benchmark: 13.0%
Monmouth County 2016: 22.7%

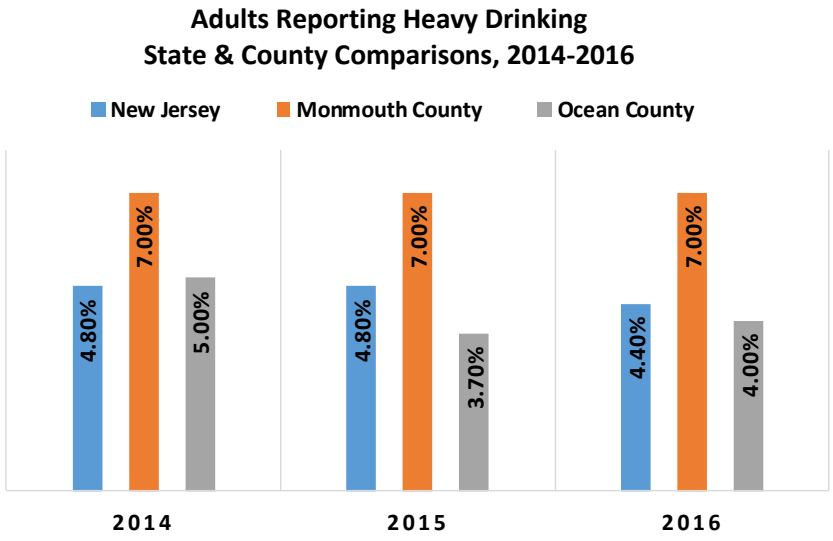
[41] http://www.countyhealthrankings.org/our-approach/health-factors/alcohol-drug-use

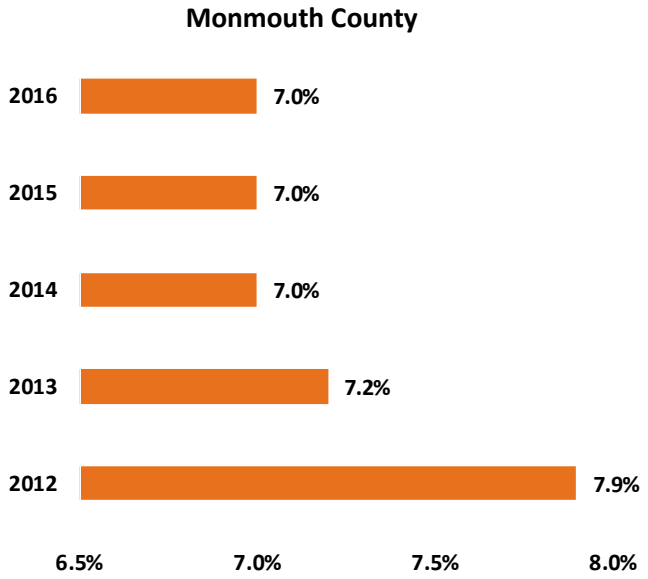


Source: CDC New Jersey Behavioral Risk Factor Surveillance System
Question: During the past 30 days how many days per week or per month did you have at least one drink of any alcoholic beverage? If response is not 0 then ask: Considering all types of alcoholic beverages how many times during the past 30 days did you have 5(for males)/4(for females) or more drinks on an occasion?
"Binge Drinking" is defined when someone has at least 5(for males)/4(for females) or more drinks on an occasion a month.

Heavy drinking is defined when someone has at least 60 drinks a month (for males) and 30 (for females).

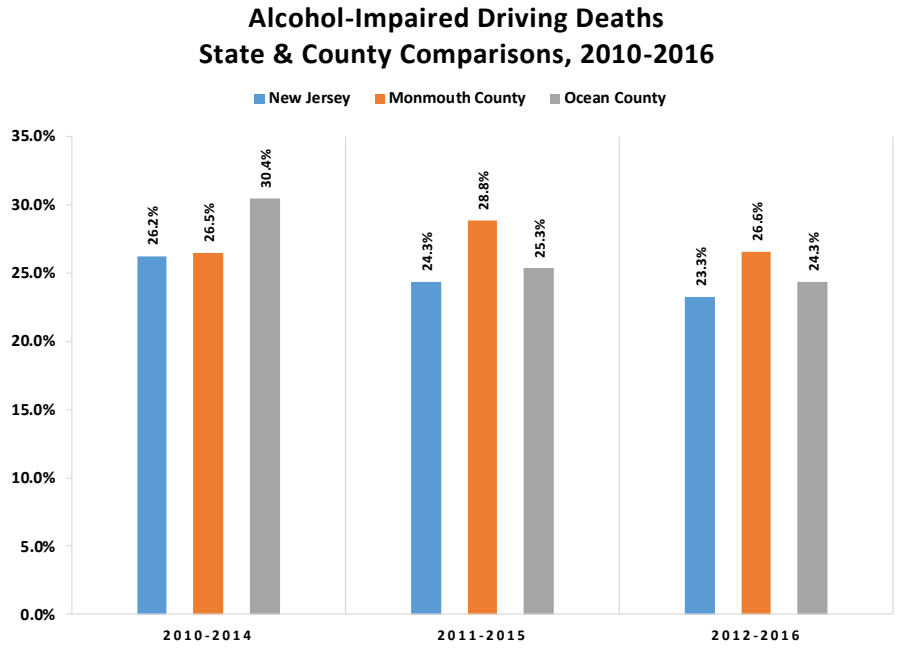
- County-wide, residents who were heavy drinkers remained stable at 7.0% from 2014 to 2016.
- In 2016, Monmouth County had the highest percent of residents reporting heavy drinking, relative to the State and Ocean County.
- Monmouth County ranked in the worst performing quartile among the 21 counties in New Jersey.

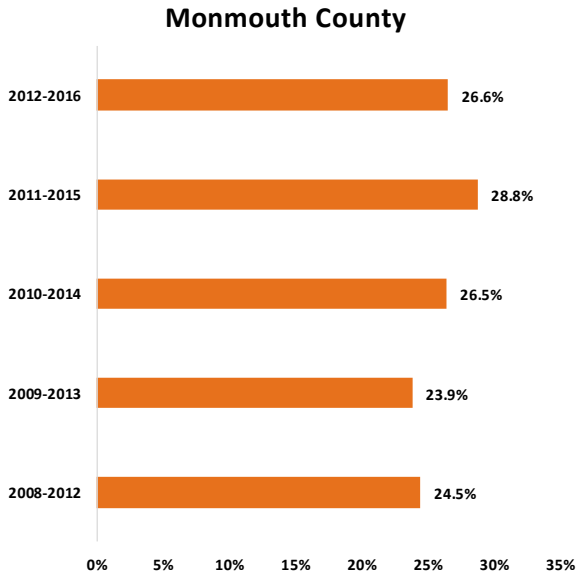




Source: CDC New Jersey Behavioral Risk Factor Surveillance System
Question: During the past 30 days how many days per week or per month did you have at least one drink of any alcoholic beverage? If response is not 0 then ask: Considering all types of alcoholic beverages how many drinks have you had during the past 30 days?
“Heavy Drinking" is defined when someone has at least 60(for males)/30(for females) or more drinks a month.

- Alcohol impaired driving deaths in Monmouth County increased from 24.5% between 2008-2012 to 26.6% in 2012-2016.
- The rate of alcohol impaired driving deaths in Monmouth County has been historically higher compared to New Jersey and Ocean County.





Source: NJDOH New Jersey Fatality Analysis Health Reporting System County Health Rankings

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
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National Benchmark: 13.0%
Monmouth County 2016: 26.6%

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Excessive Drinking *Binge Drinkers*	N.A.		
Excessive Drinking *Heavy Drinkers*	N.A.	N.A.	
Alcohol Impaired Driving Deaths	N.A.		
Tobacco Use			

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

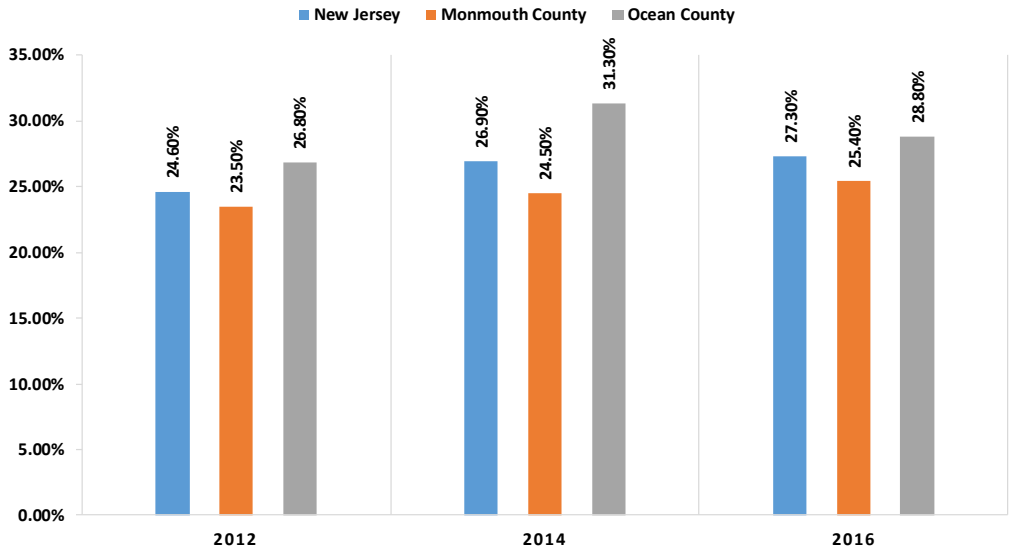
Obesity

Healthy food is a key component to good health; insufficient nutrition hinders growth and development. As of 2016, 41 million Americans struggled with hunger in the U.S. A household that is food insecure has limited or uncertain access to enough food to support a healthy life. Obesity among food insecure people, as well as low income individuals, occurs in part because they are often subject to the same challenges as other Americans (more sedentary lifestyles, increased portion size) and because they face unique challenges in adopting and maintaining healthy behaviors, including limited resources and lack of access to affordable healthy food, cycles of food deprivation and overeating, high levels of stress and anxiety, fewer opportunities for physical activity, greater exposure to marketing of obesity promoting products, and limited access to health care.[42]

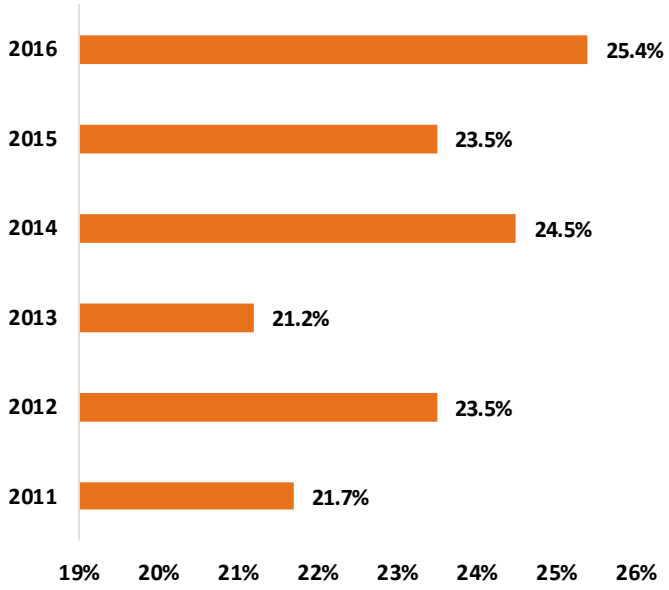
- The percent of Monmouth County residents with a Body Mass Index (BMI) >=30 trended upward from 21.7% in 2011, to 25.4% in 2016.
- In 2016, Monmouth County (25.4%) had a lower rate of obesity than Ocean County (28.8%) and the State (27.3%), and ranked in the middle quartile among New Jersey counties.
- In 2016, a lower percent of Monmouth County residents (25.4%) are obese than the *Healthy People 2020* target (30.6%)
- In 2016, Monmouth County residents with a BMI>=30 ranked in the best performing quartile in regard to the County Health Rankings and *Health People 2020* target.

[42] http://www.frac.org

Reported BMI>=30
State & County Comparisons, 2012-2016



Monmouth County



Source: CDC Behavioral Risk Factor Surveillance System

Healthy People 2020

Baseline: 33.9%
Target: 30.5%
Monmouth County 2016: 25.4%

County Health Rankings & Roadmaps
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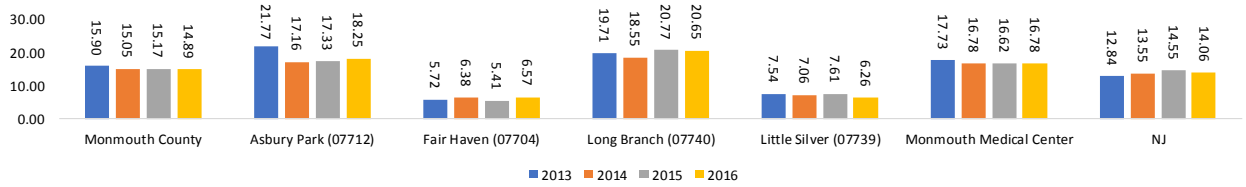
National Benchmark: 26.0%
Monmouth County 2016: 25.4%

- In 2016, Long Branch residents had a higher rate of patients hospitalized with a diagnosis of obesity (20.65/1,000) as compared to Monmouth County (14.89/1,000).
- In 2016, patients hospitalized from Asbury Park had higher rates of obesity than hospitalized residents of MMC's Service Area.

Disease Incidence: Obesity, Rate per 1,000 Population



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges For MS-DRGs In the Range 682-685

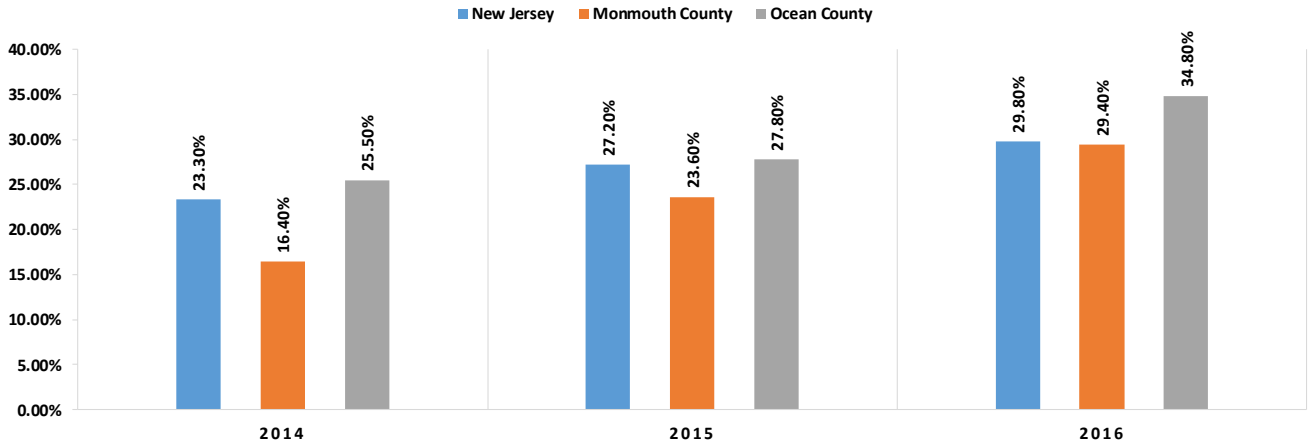
Exercise

Inadequate physical activity contributes to increased risk of coronary heart disease, diabetes and some cancers. Nationally, half of adults and nearly three-quarters of high school students do not meet the CDC's recommended physical activity levels.[43]

- Within Monmouth County, the percent of individuals reporting no leisure time physical activity trended upward from 16.4% in 2014, to 29.4% in 2016.
- From 2014 to 2016, Monmouth County had a lower percentage of residents reporting no leisure time physical activity than the State and Ocean County.
- Compared to all counties statewide, Monmouth County performs in the middle quartile.
- Monmouth County performs in the bottom quartile compared to the County Health Rankings benchmark.

[43] http://www.county healthrankings.org/our-approach/health-factors/diet-and-exercise

Percent of Adults Age 20+ Reporting No Leisure-Time Physical Activity
State and County Comparison 2014-2016



Source: CDC Behavioral Risk Factor Surveillance System

Healthy People 2020

Baseline: 36.2%
Target: 32.6%
Monmouth County 2016: 29.4%

County Health Rankings & Roadmaps
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National Benchmark: 23.0%
Monmouth County 2016: 29.4%

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Obesity *Percent With Reported BMI >= 30*			
Exercise: Adults *Percent of Adults Age 20+ Reporting No Leisure-Time Physical Activity*			

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Health Screenings

Screening tests can detect disease and conditions in early stages, when they may be easier to treat.

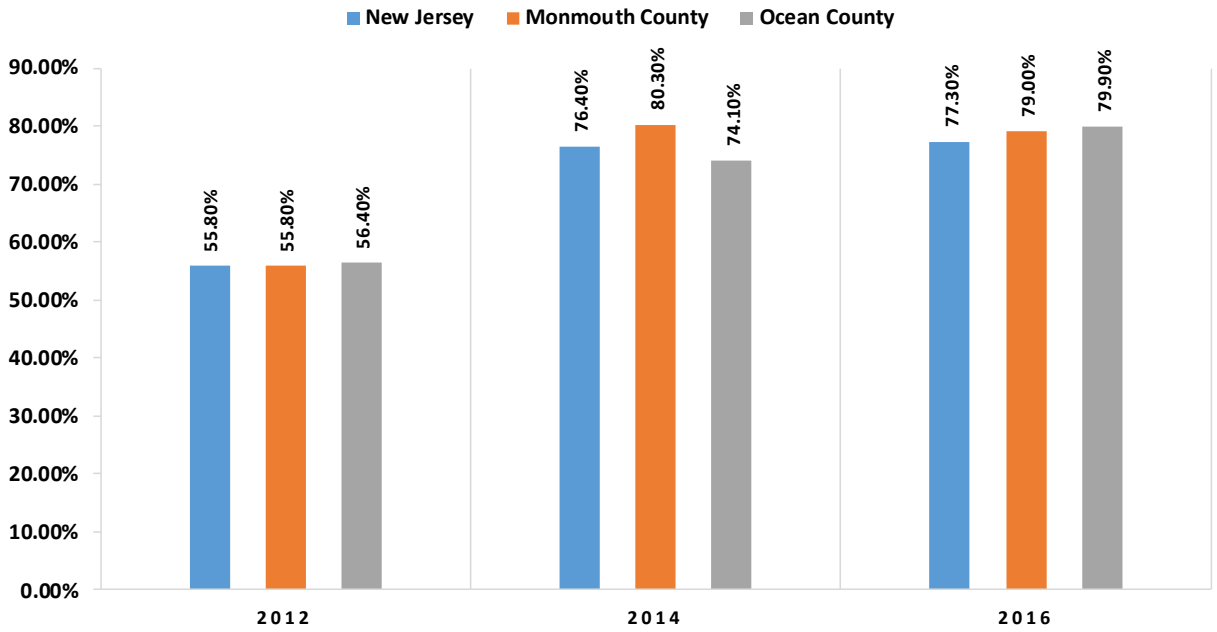
Cancer Screening

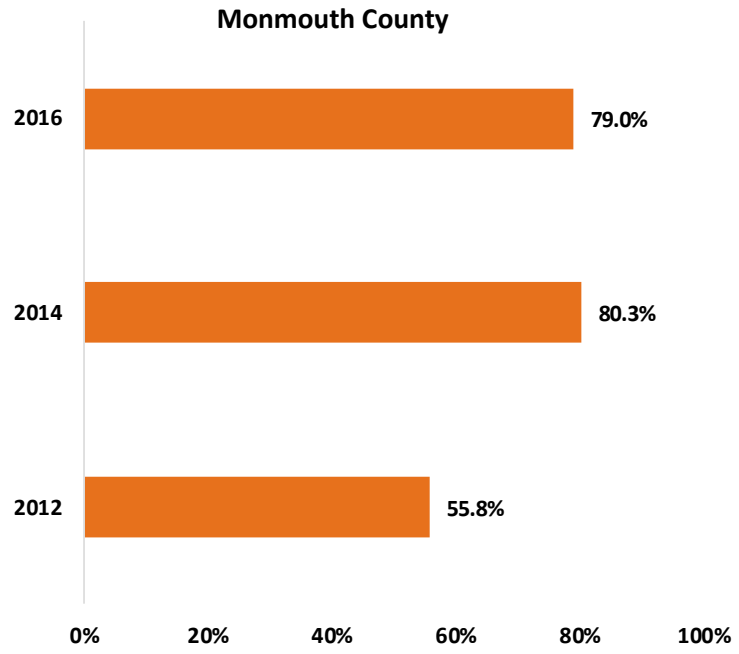
Breast Cancer (mammography)

According to the American Cancer Association, women ages 40 to 44 should have the choice to start annual breast cancer screening with mammograms (x-rays of the breast) if they wish to do so. Women age 45 to 54 should get mammograms every year. Women 55 and older should switch to mammograms every 2 years, or can continue yearly screening. Screening should continue as long as a woman is in good health and is expected to live 10 more years or longer. Women should also know how their breasts normally look and feel and report any breast changes to a health care provider right away. Some women – because of their family history, a genetic tendency, or certain other factors – should be screened with MRIs along with mammograms. The number of women who fall into this category is very small.

- In 2016, 79% of Monmouth County women over age 40 had a mammography within the past two years, up 23.2 percentage points since 2012. Compared to all counties statewide, Monmouth County performs in the middle quartile.
- In 2016, Monmouth County performed in the top quartile in terms of the County Health Ranking benchmark and in the middle quartile for the *Healthy People 2020* target.

Women Age 50+ Who Had a Mammogram Within Past 2 Years
State & County Comparisons, 2012-2016





Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Healthy People 2020

Baseline: 69.8%
Target: 81.1%
Monmouth County 2016: 79.0%

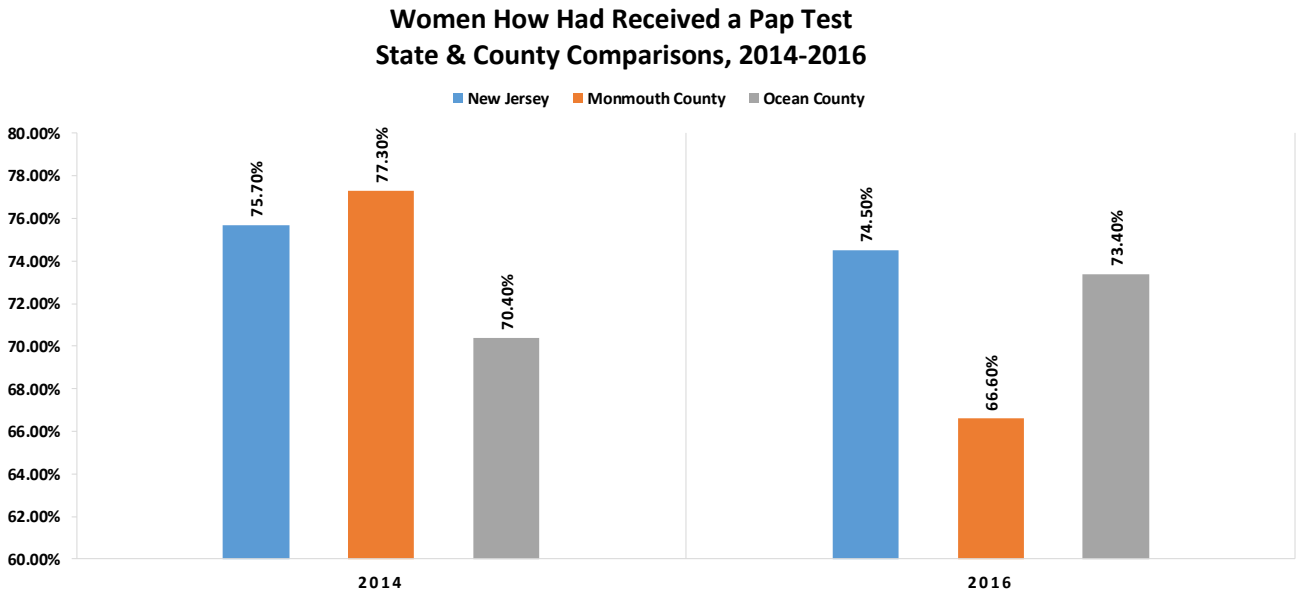
County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 71.0%
Monmouth County 2016: 79.0%

Cervical Cancer (pap smear)

According to the American Cancer Association, cervical cancer testing should start at age 21. Women between the ages of 21 and 29 should have a Pap test done every 3 years. Women between the ages of 30 and 65 should have a Pap test plus an HPV test (called "co-testing") done every 5 years. Women over age 65 who have regular cervical cancer testing in the past 10 years with normal results should not be tested for cervical cancer. Women with a history of a serious cervical pre-cancer should continue to be tested for at least 20 years after that diagnosis, even if testing goes past age 65. Some women – because of their health history (HIV infection, organ transplant, DES exposure, etc.) – may need a different screening schedule for cervical cancer.

- In 2016, 66.6% of Monmouth County women over age 18 had a pap smear within the past three years as compared to 74.5% of New Jersey women 18+. Fewer Monmouth County women over age 18 had a pap test within 3 years than in comparative Ocean County (73.4%). Compared to the State overall, Monmouth County performs in the worst performing quartile.
- Between 2014 and 2016, Monmouth County women who had a pap test within the past three years decreased by 10.7 percentage points from 77.3% to 66.6%.



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Healthy People 2020

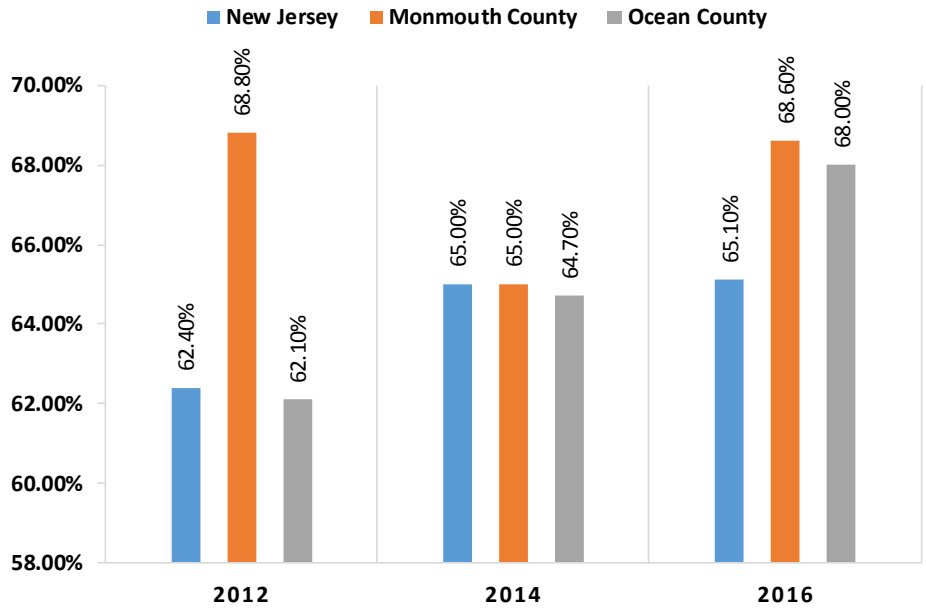
Baseline: 60.2%
Target: 66.2%
Monmouth County 2016: 66.6%

Colon-rectal Cancer (sigmoidoscopy or colonoscopy)

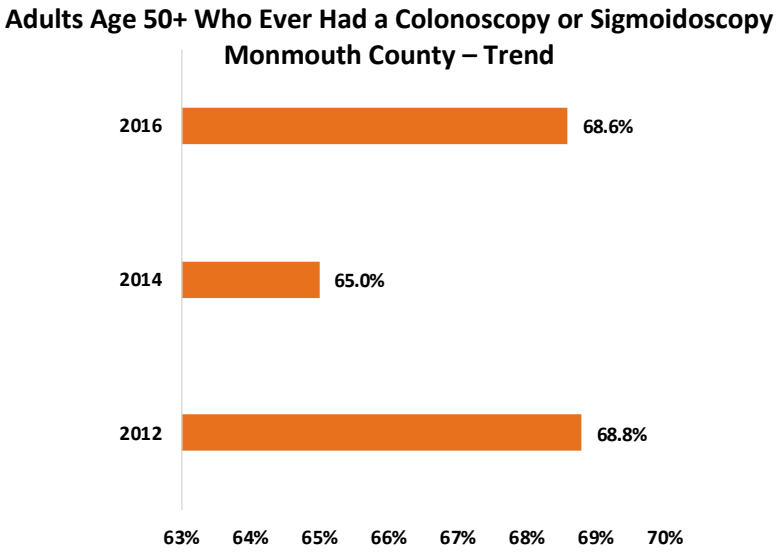
According to the American Cancer Association, starting at age 50, both men and women should follow one of these testing plans: colonoscopy every 10 years, CT colonography (virtual colonoscopy) every 5 years, flexible sigmoidoscopy every 5 years, or double-contrast barium enema every 5 years.

- In 2016, a slightly lower percentage of Monmouth County adults over age 50 (68.6%) participated in colon-rectal screening than in 2012 (68.8%). Compared to all New Jersey counties, Monmouth County performs in the middle performing quartile.
- In 2016, the percent of Monmouth County residents screened for colon cancer was 3.5 percentage points higher than the State, and 0.6 percentage points higher than Ocean County.
- In 2016, fewer Monmouth County adults (68.6%) over age 50 had a colonoscopy/sigmoidoscopy than the *Healthy People 2020* target of 70.5%.

Adults Age 50+ Who Ever Had a Colonoscopy or Sigmoidoscopy
State & County Comparisons, 2012-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

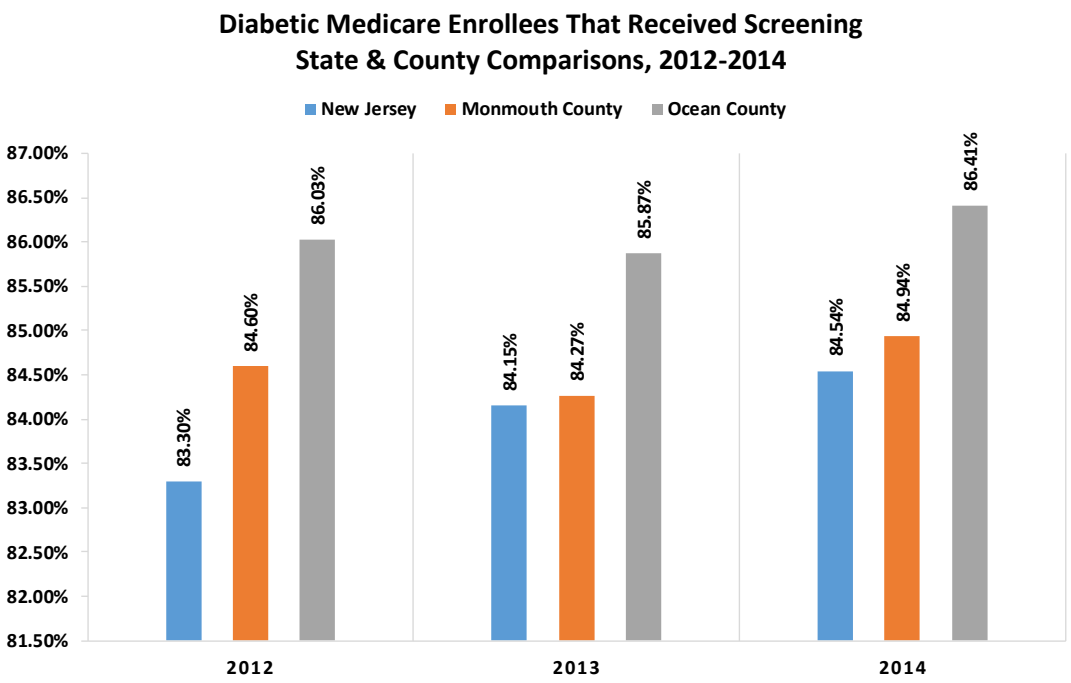
Healthy People 2020

Baseline: 52.1%
Target: 70.5%
Monmouth County 2016: 68.6%

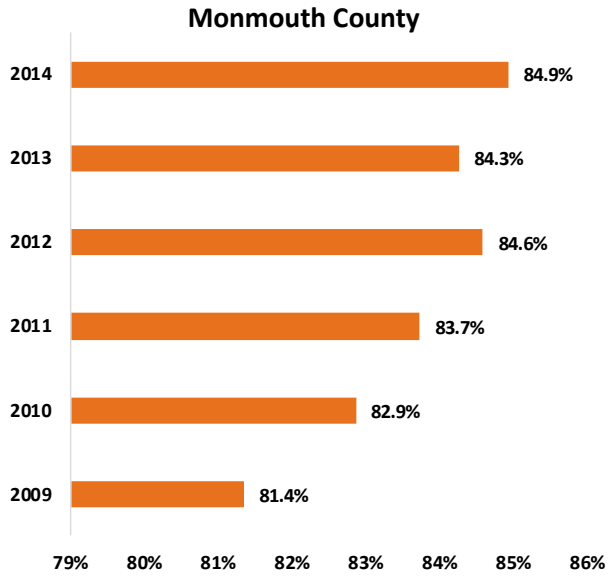
Diabetes

There are several ways to diagnose diabetes including A1C, Fasting Plasma Glucose (FPG), Oral Glucose Tolerance Test (OGTT) and Random (Casual) Plasma Glucose Test. Diabetes screenings are an effective means of diagnosing and managing illness.

- In 2014, almost 85% of Monmouth County diabetic Medicare enrollees received HbA1c screening, higher than the State. As compared to all New Jersey counties, Monmouth County performs in the middle quartile.
- The percent of Monmouth County diabetic Medicare enrollees receiving HbA1c screening has trended upward since 2009.
- In 2014, fewer Monmouth County diabetic Medicare enrollees (85%) were screened than the CHR national benchmark (91%). Monmouth County ranked in the middle quartile of the CHR benchmark.



Source: County Health Rankings – Dartmouth Atlas of Health Care



Source: County Health Rankings – Dartmouth Atlas of Health Care

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 91.0%
Monmouth County 2014: 84.9%

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Mammograms *Women Age 50+ Who Have NOT Had a Mammogram Within Past Two Years*			
Pap Test *Women Who Have Had a PAP Test Within Past Three Years*		N.A.	
Sigmoidoscopy/ Colonoscopy *Adults Age 50+ Who Have Ever Had a Sigmoidoscopy or Colonoscopy*		N.A.	
HbA1c Screening *% Diabetic Medicare Enrollees Receiving Screening*	N.A.		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Immunizations

It is better to prevent disease than to treat it after it occurs; vaccines prevent disease and save millions of lives. Vaccines introduce the antigens that cause diseases. Immunity, the body's means to preventing disease, recognizes germs and produces antibodies to fight them. Even after many years, the immune system continues to produce antibodies to thwart disease from recurring. Through vaccination we can develop immunity without suffering from disease.[44]

Childhood Immunizations: DPT, polio, MMR & Hib (aged 19-35 months)

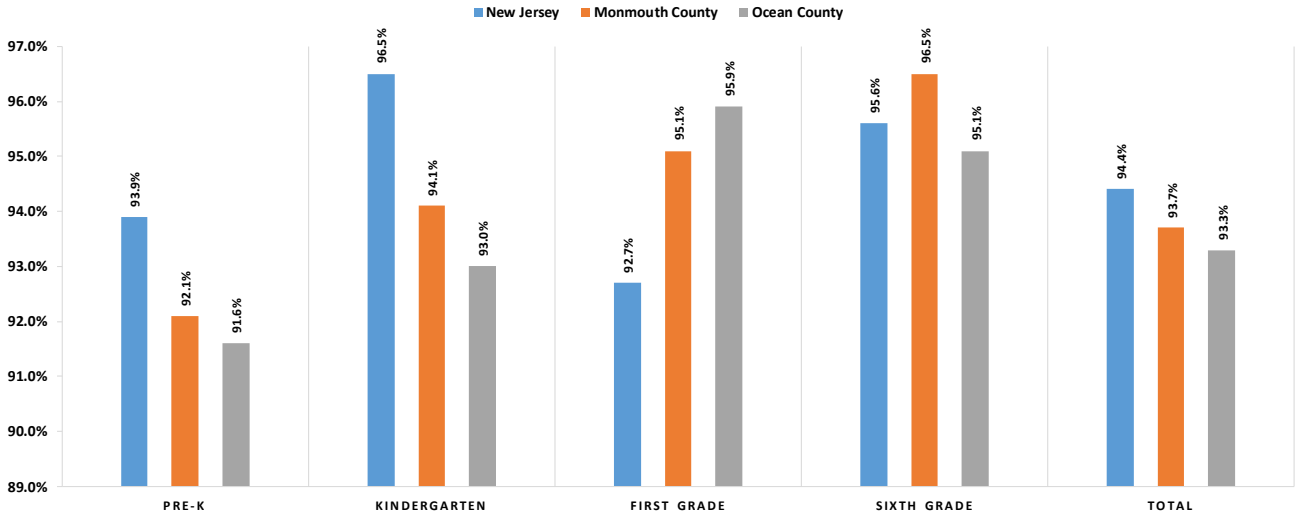
Young children are readily susceptible to disease and the consequences can be serious or life-threatening. Childhood immunizations minimize impact of vaccine preventable diseases. Combined 4 vaccine series (4:3:1:3) refers to 4 or more doses of DTP/DT, 3 or more doses of poliovirus vaccine, 1 or more doses of MCV and 3 or more doses of Hib.[45] Conflicting information in the news and on the internet about children's immunizations may cause vaccine hesitancy among select parents. Health care providers have been encouraged to use interventions to overcome vaccine non-compliance, including parental counseling, increasing access to vaccinations, offering combination vaccines, public education, and reminder recall strategies.

Childhood immunization is an evidenced-based strategy, which is known to reduce the incidence, prevalence and mortality of many communicable diseases in many Western Countries including the U.S.

- In 2016, 95.1% of first grade students in Monmouth County had received all required immunizations compared to 92.7% statewide.
- 93.7% of all Monmouth County students received all required immunizations, comparable to the statewide percentage (94.4%).
- Monmouth County is in the bottom quartile statewide.

[44] http://www.cdc.gov/vaccines/vac-gen/howvpd.htm#why
[45] http://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/tech-notes.html)

Childhood Immunization: Percent of Children Meeting All Immunization Requirements
State and County Comparisons, 2016



Source: NJDOH Annual Immunization Status Report
http://www.nj.gov/health/cd/documents/status_report/2016/all_schools_vac.pdf
Data are the most current County-Level figures available.

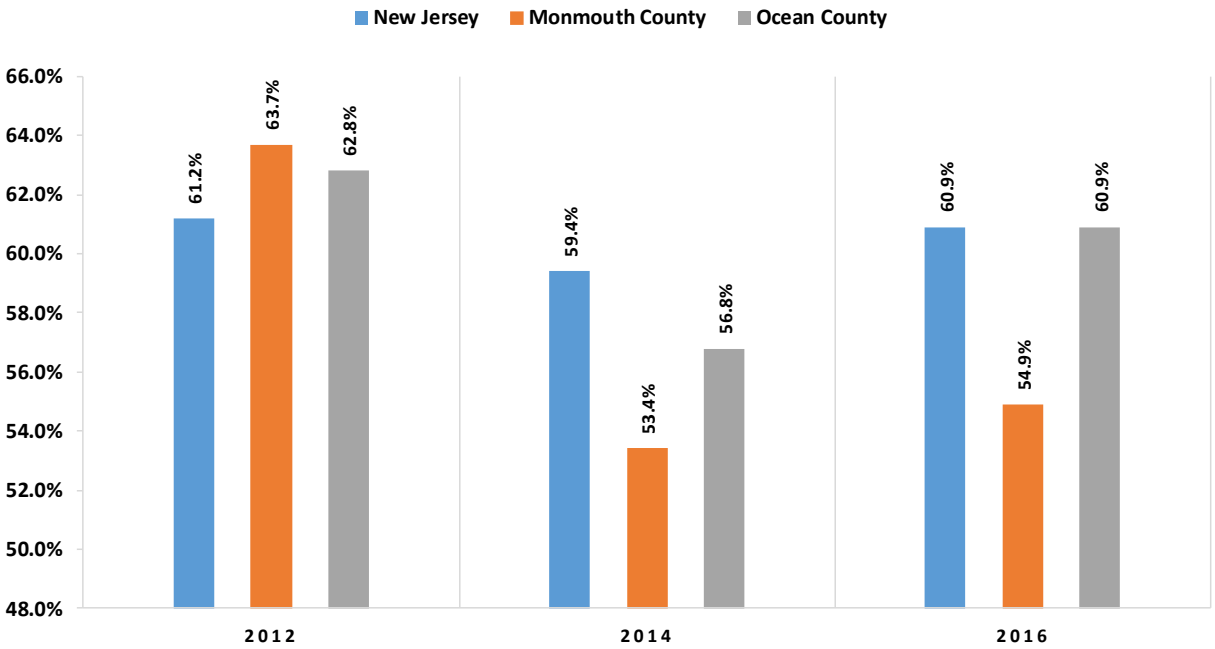
Adult Flu

Immunizations are not just for children. As we age, the immune system weakens putting us at higher risk for certain diseases. Greater than 60 percent of seasonal flu-related hospitalizations occur in people 65 and older. The single best way to protect against the flu is an annual vaccination.[46]

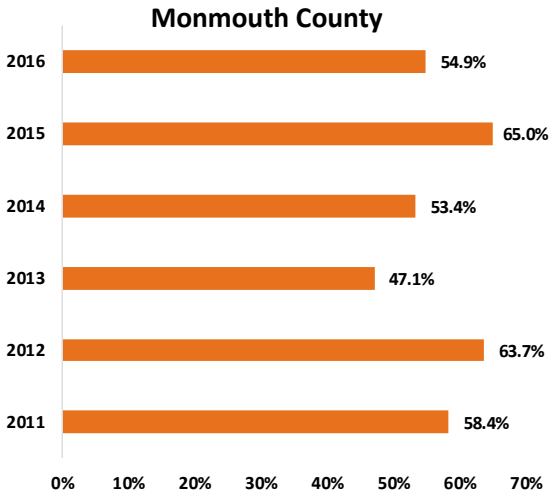
- Monmouth County had the lowest percent of adults receiving flu shots in comparison to residents of New Jersey and Ocean County.
- Between 2012 and 2016, the percentage of Monmouth County adults who had a flu shot fluctuated with an overall decrease of 8.8 percentage points.
- The percent of 2016 Monmouth County adults who received the flu shot in the past year (54.9%) was lower than the *Healthy People 2020* target of 90.0%.
- Monmouth County performs in the worst *Healthy People 2020* quartile.
- As compared to all counties statewide, Monmouth County performs in the middle performing quartile.

[46] http://www.cdc.gov/vaccines/adults/rec-vac/index.html)

Adults Age 65+ Who Had a Flu Shot in the Past Year
State & County Comparisons, 2012-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Healthy People 2020

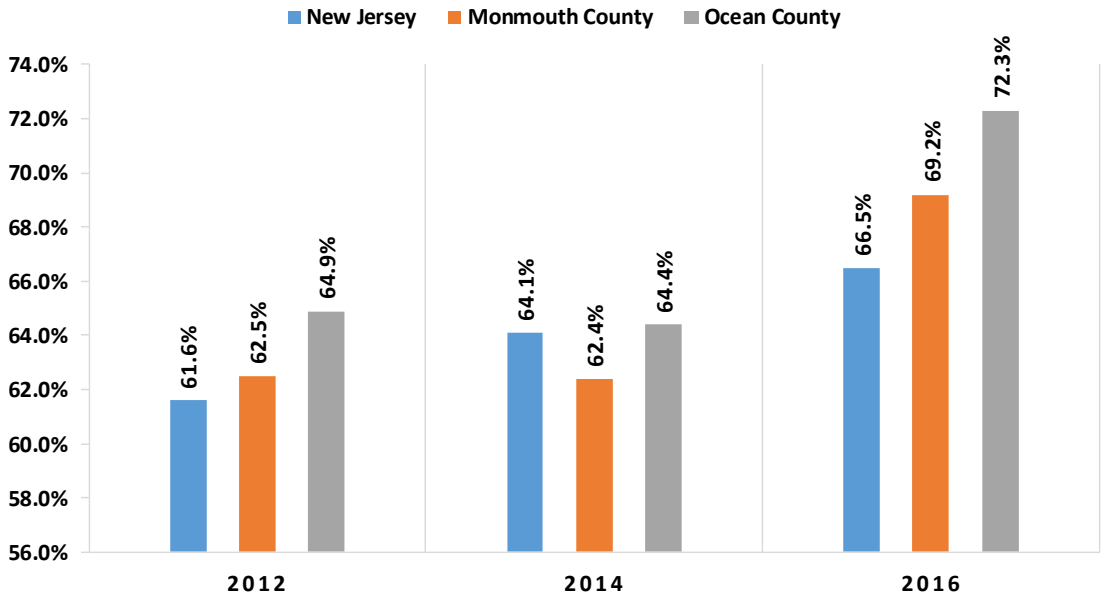
Baseline: 66.6%
Target: 90.0%
Monmouth County 2016: 54.9%

Adult Pneumonia

The pneumococcal vaccine protects us against some of the 90 types of pneumococcal bacteria. Pneumococcal vaccine is recommended for all adults 65 years or older.[47]

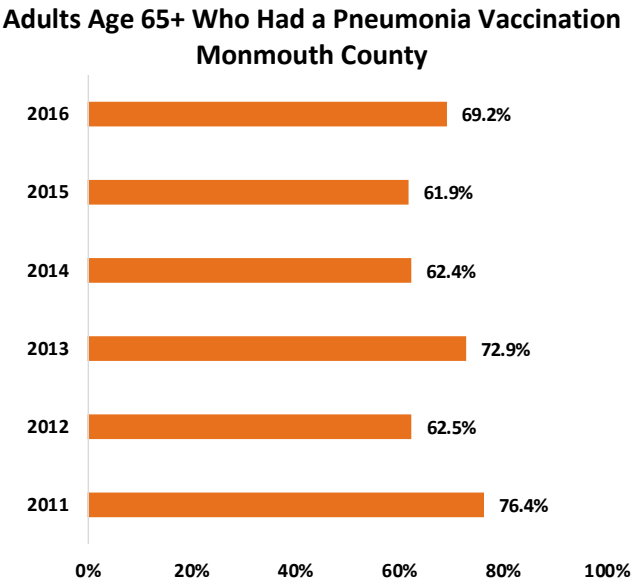
- The percent of Monmouth County adults age 65+ who had a pneumonia vaccine decreased from 2011 through 2016, from 76.4% to 69.2%.
- In 2016, the percent of Monmouth County (69.2%) adults that have never had a pneumonia vaccine is higher than statewide (66.5%) and less than the *Healthy People 2020* target (90.0%). As compared to all counties statewide, Monmouth County performs in the middle quartile. Monmouth County performs in the middle quartile in the *Healthy People 2020* target as well.

Adults Age 65+ Who Had a Pneumonia Vaccination
State & County Comparisons, 2012-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

[47] http://www.cdc.gov/pneumococcal/about/prevention.html



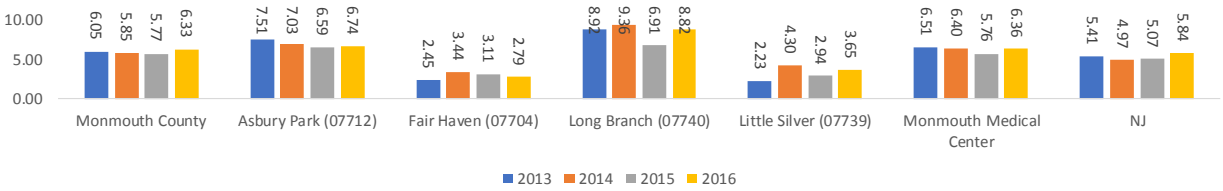
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Healthy People 2020

Baseline: 60.0 %
Target: 90.0%
Monmouth County 2016: 69.2%

- MMC Service Area residents who used a hospital service had a slightly higher rate of pneumonia (6.36/1,000) than residents of the County (6.33/1,000).
- In 2016, Long Branch residents who used a hospital service had the highest rate of pneumonia (8.82/1,000), and Fair Haven at 2.79/1,000 was the lowest of the comparison geographies.

Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population: Pneumonia



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census Definition: Inpatient, Same Day Stay and ED Discharges – For MS-DRGs 177, 178, 179, 193, 194, 195

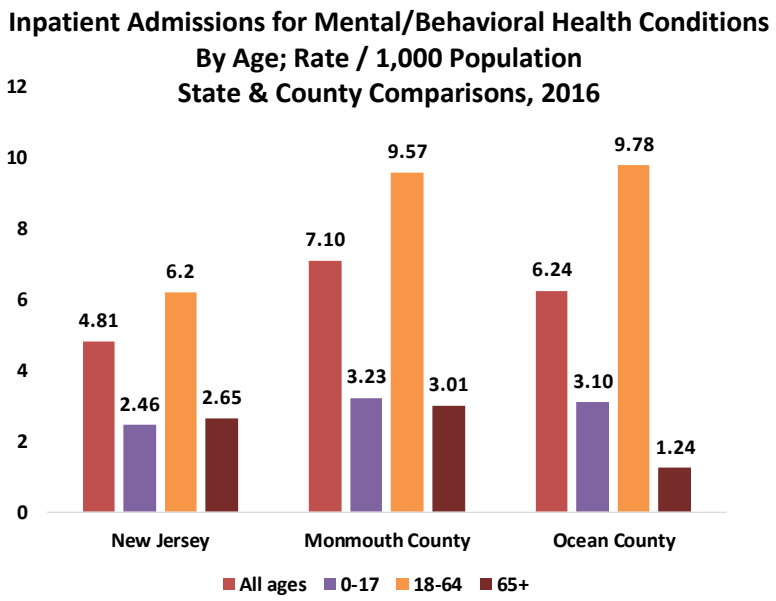
Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Flu Shot *Adults Age 65+ Who Have NOT Had a Flu Shot in the Past Year* *%No*		N.A	
Pneumonia Vaccination *Adults Age 65+ Who Have NOT Ever Had a Pneumonia Vaccination* *%Never*		N.A.	
Children Meeting All Immunization Requirements	N.A.	N.A.	

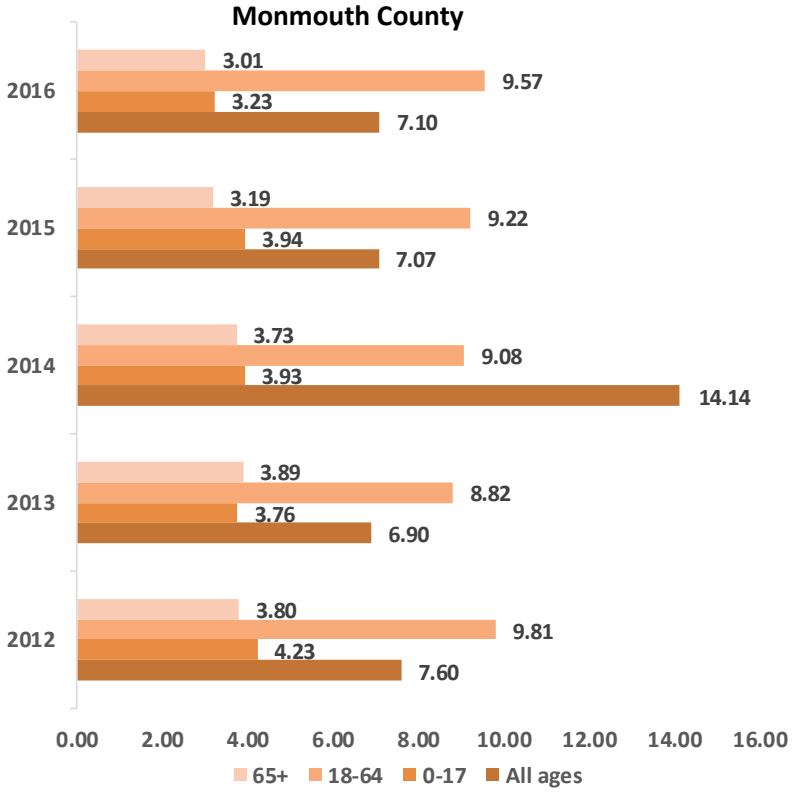
RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

4. Behavioral Health Utilization

Mental Health

- In 2016, Monmouth County (7.10/1,000) had the highest rate of residents with an inpatient hospitalization for a mental health condition across all age cohorts, as compared to the State and comparison counties.
- Within Monmouth County, by age cohort in 2016, adults 18-64 (9.57/1,000) had the highest rate of mental/behavioral health inpatient hospital admissions compared to older adults 65+ (3.01/1,000) and children (3.23/1,000).
- Monmouth County had slightly fewer inpatient hospitalizations for mental/behavioral health conditions in 2016 (7.10/1,000) than in 2012 (7.60/1,000).

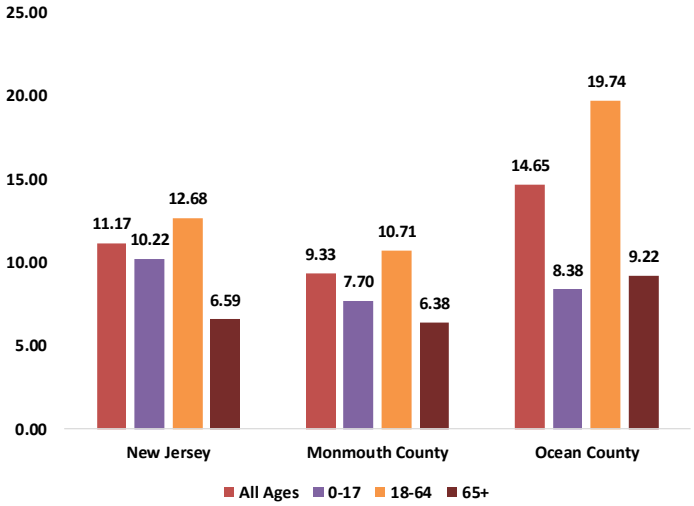




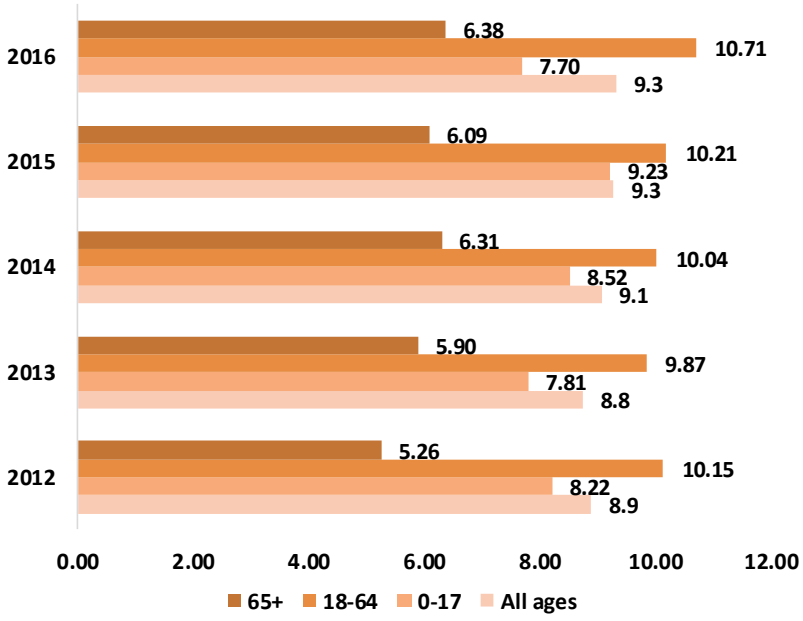
Source: NJDHSS 2012 - 2016 UB-04 Data MDC 19 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, Monmouth County (9.33/1,000) had a lower ED visit rate for mental health conditions than the State (11.17/1,000) and Ocean County (14.65/1,000).
- In 2016, Monmouth County adults 18-64 (10.71/1,000) had the highest rate of ED visits compared to children (7.70/1,000) and older adults 65+ (6.38/1,000).
- Monmouth County ED visits for mental/behavioral health conditions increased between 2012 (8.90/1,000) and 2016 (9.33/1,000).

ED Visits for Mental/Behavioral Health Conditions (2016): By Age; Rate / 1,000 Population
State & County Comparisons 2016



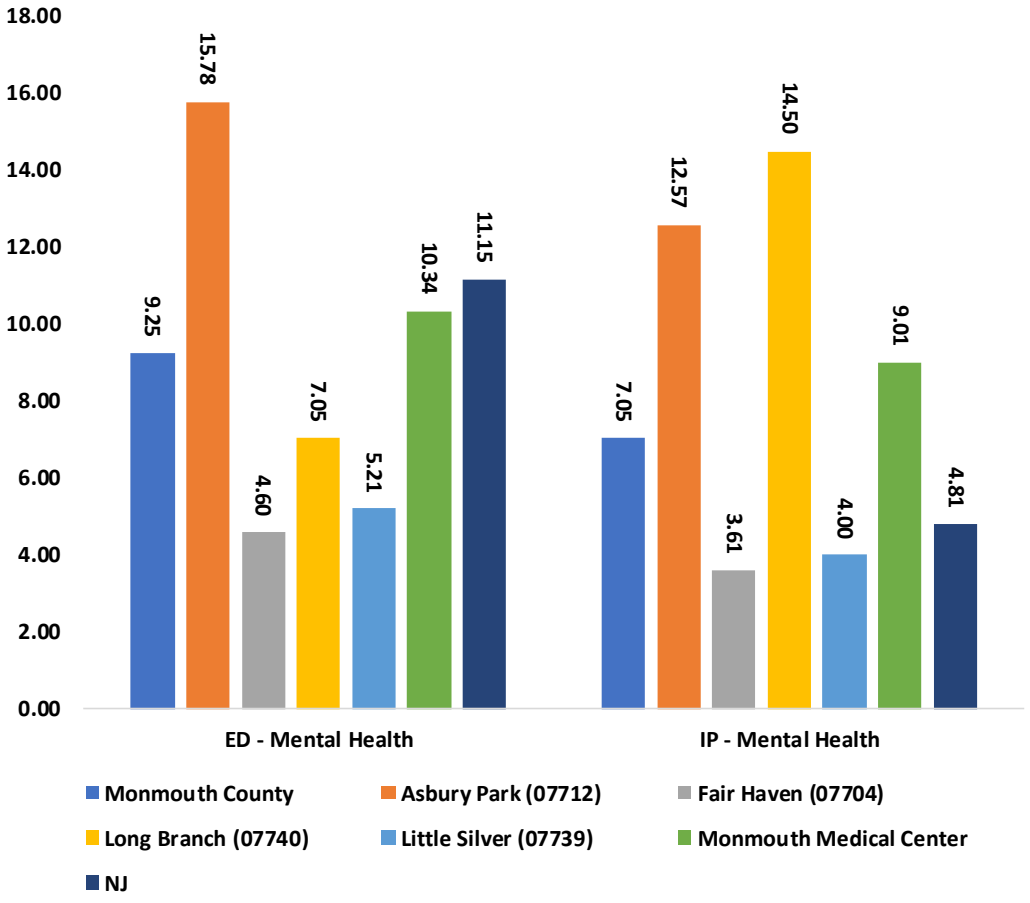
Monmouth County



Source: NJDHSS 2012- 2016 UB-04 Data MDC 19 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, inpatient hospitalizations for mental/behavioral health for MMC's Service Area (9.01/1,000) exceeded the New Jersey rate (4.81/1,000) and was higher than the Monmouth County rate (7.05/1,000).
- In 2016, the emergency department visit rate for mental/behavioral health in Asbury Park (15.78/1,000) was greater than Monmouth County (9.25/1,000) and greater than the New Jersey rate (11.15/1,000).
- In 2016, the emergency department visit rate for mental health in Fair Haven was less than the New Jersey rate (11.15/1,000) and less than the Monmouth County rate (9.25/1,000).

Mental Health Use Rate /1,000 Population: 2016



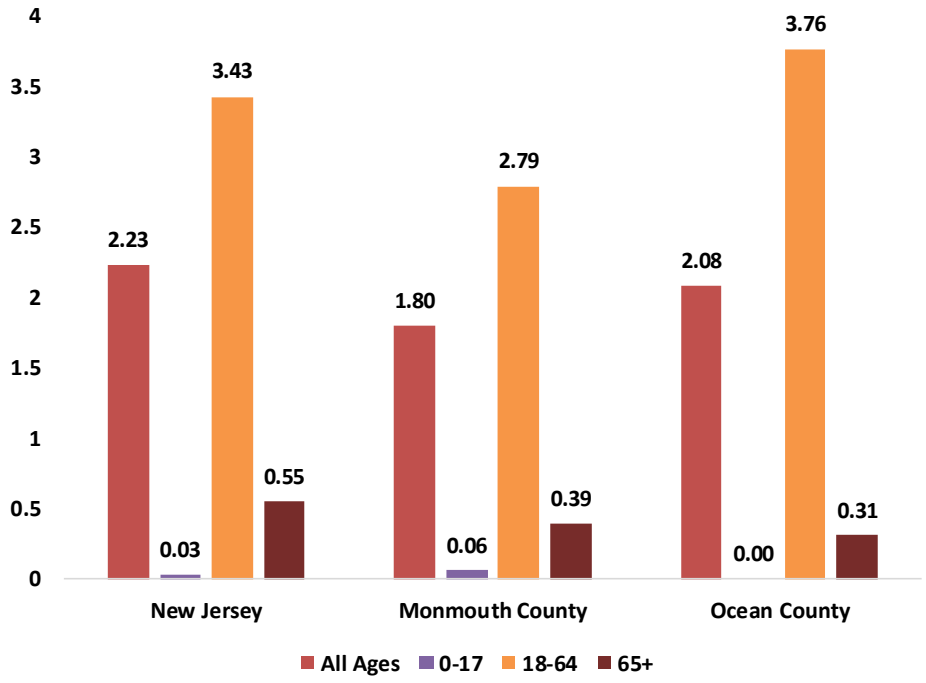
*Source: UB-04 2016 Discharges; Claritas Population Estimate
** Mental Health Defined as MDC 19

Substance Abuse

Substance abuse has a major impact on individuals, families and communities. In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95 percent of people with substance use problems are considered unaware of their problem. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.[48]

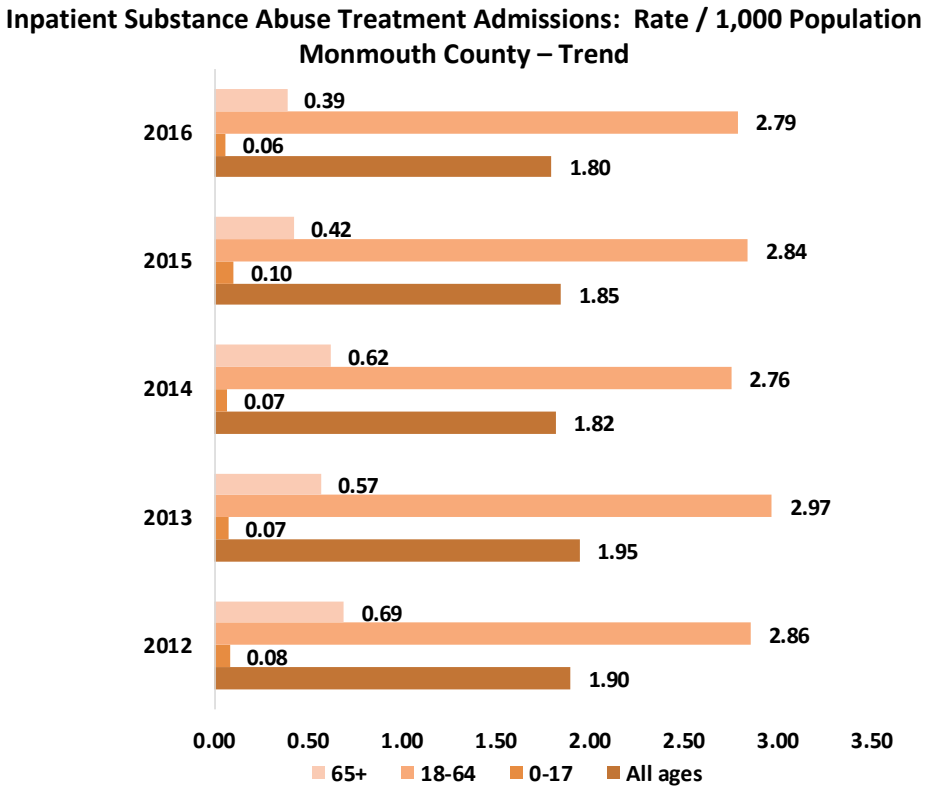
- In 2016, Monmouth County had a lower use rate for residents with an inpatient admission for substance abuse than the State and Ocean County, and among all age cohorts except those 0-17.
- Inpatient use rates in Monmouth County trended downward among all age cohorts.

Inpatient Substance Abuse Treatment Admissions: Rate / 1,000 Population
State & County Comparisons 2016



Source: NJDHSS 2012 - 2016 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

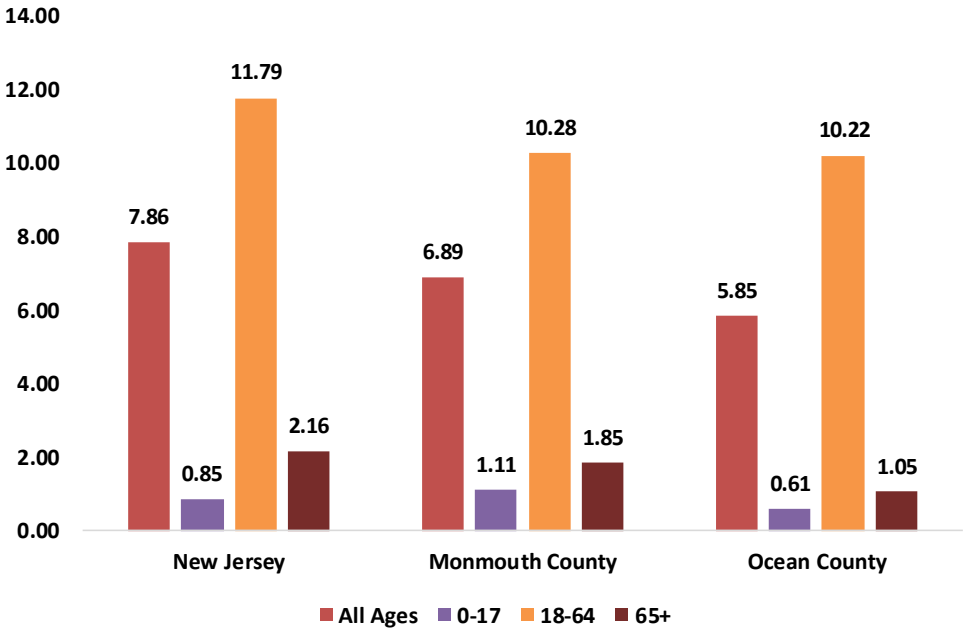
[48] http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse

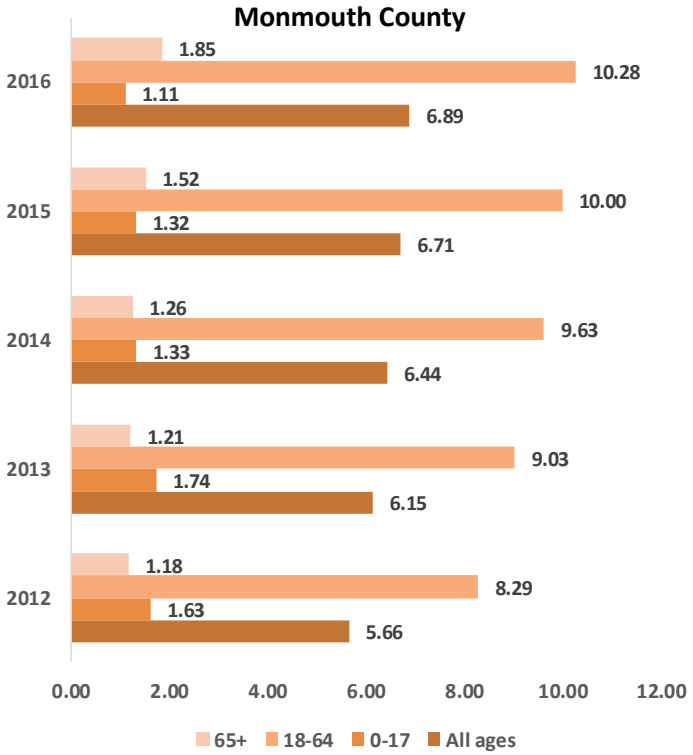


Source: NJDHSS 2012 - 2016 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, Monmouth County (6.89/1,000) had a lower ED visit rate for substance abuse than the State (7.86/1,000).
- Between 2012 and 2016, ED visit rate for substance abuse in Monmouth County increased from 5.66/1,000 to 6.89/1,000.

ED Visits for Substance Abuse: By Age; Rate / 1,000 Population
State & County Comparisons 2016

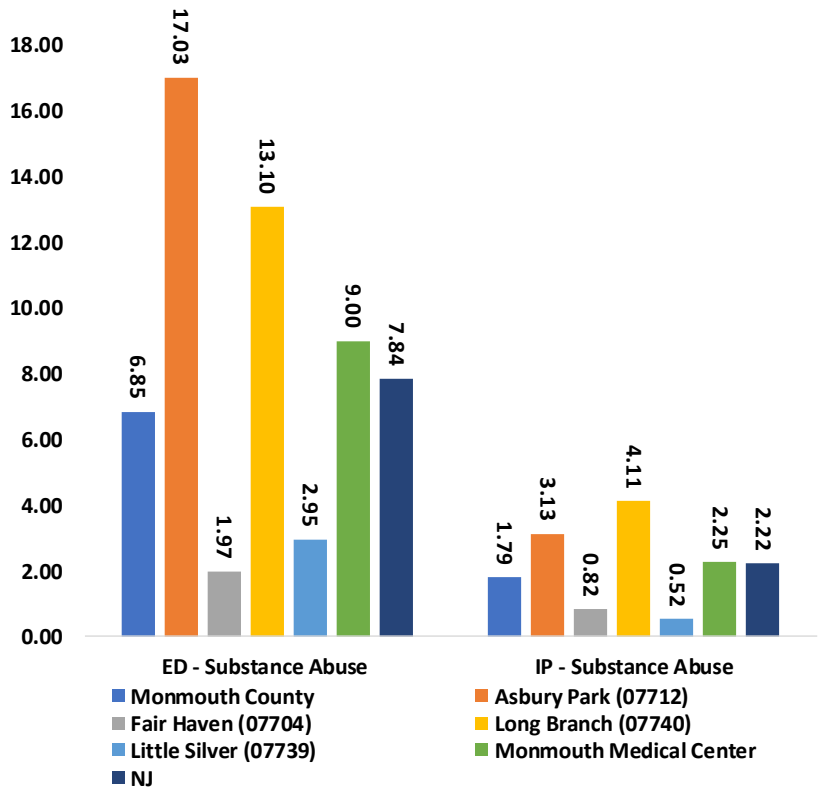




Source: NJDHSS 2012 - 2016 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- Inpatient hospitalization to general hospitals for substance abuse in the MMC Service Area (2.25/1,000) was higher than the County rate (1.79/1,000), and the State (2.22/1,000).
- Long Branch's (4.11/1,000) rate for inpatient hospitalization for substance abuse was higher than Monmouth County's (1.79/1,000).
- In 2016, emergency department visits for substance abuse in MMC's Service Area (9.00/1,000) was higher than the Monmouth County rate (6.85/1,000) and the New Jersey rate (7.84/1,000).
- In 2016, the emergency department utilization rate for substance abuse in Asbury Park (17.03/1,000) was higher than the Monmouth County rate (9.00/1,000).

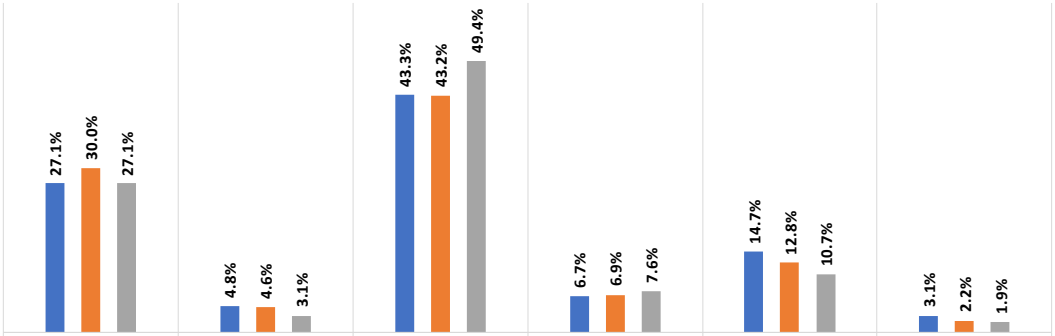
Substance Abuse Use Rate 1,000 Population: 2016



*Source: UB-04 2016 Discharges; Claritas Population Estimate
** Substance Abuse Defined As MDC 20

- In 2016, heroin was the leading reason for admission to a drug treatment center followed by alcohol for Monmouth County residents.

Primary Drug Treatment Admissions
State & County Comparisons 2016



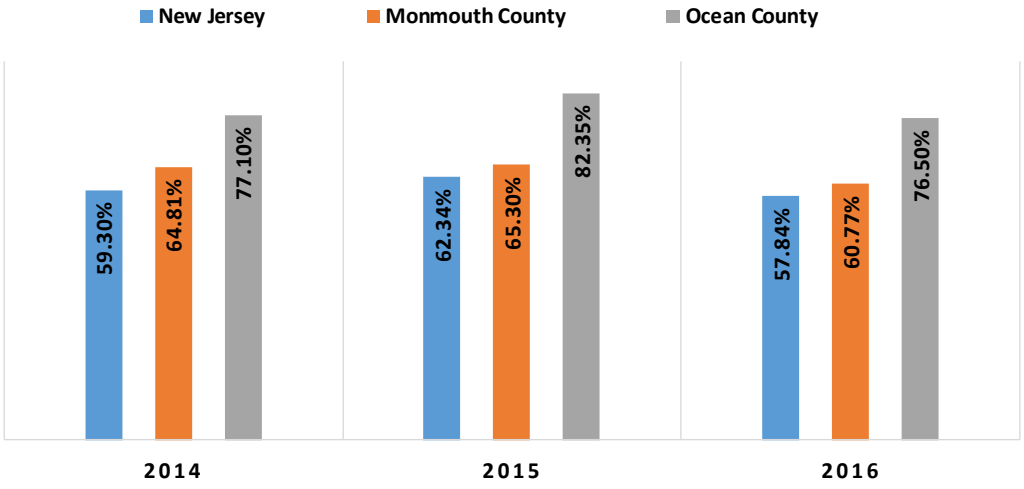
	Alcohol	Cocaine/Crack	Heroin	Other Opiates	Marijuana/Hashish	Other Drugs
New Jersey	27.1%	4.8%	43.3%	6.7%	14.7%	3.1%
Monmouth County	30.0%	4.6%	43.2%	6.9%	12.8%	2.2%
Ocean County	27.1%	3.1%	49.4%	7.6%	10.7%	1.9%

Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf

Between 2014 and 2016, the number of drugs dispensed went down across the State, as well as in Monmouth County.

- In 2016, the number of drugs dispensed reached slightly more than 60% of the Monmouth County population.

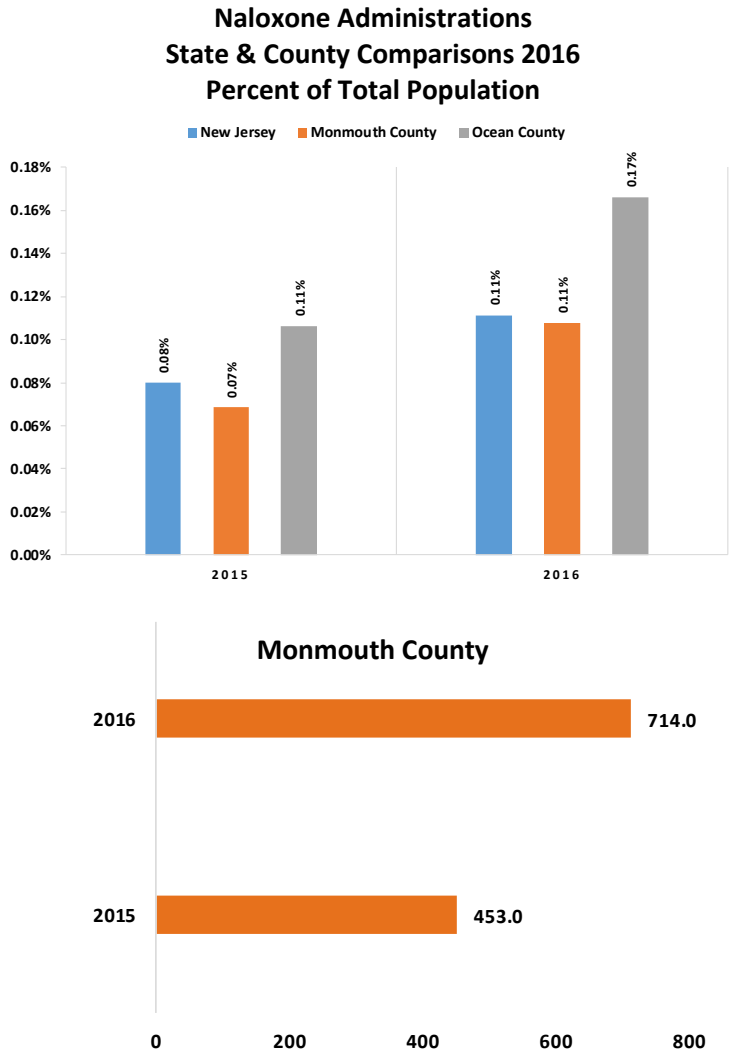
Opioid Dispensing
State & County Comparisons 2016



Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf

Naloxone is a FDA approved medication to prevent overdose by opiods such as herion, morphine and oxycodone. It blocks opiod receptor sites reversing the toxic effects of overdose.

- Between 2015 and 2016, the number of Naloxone administrations increased statewide; and in Monmouth and Ocean Counties. In Monmouth County, Naloxone administrations increased from 453 administrations to 714.



Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Treatment Admissions for Alcohol *Percentage of Total Treatment Admissions*	N.A	N.A.	
Treatment Admissions for Cocaine/Crack *Percentage of Total Treatment Admissions*	N.A	N.A	
Treatment Admissions for Heroin *Percentage of Total Treatment Admissions*	N.A.	N.A	
Treatment Admissions for Other Opiates *Percentage of Total Treatment Admissions*	N.A	N.A.	
Treatment Admissions for Marijuana *Percentage of Total Treatment Admissions*	N.A	N.A	
Treatment Admissions for Other Drugs *Percentage of Total Treatment Admissions*	N.A	N.A	
Total Substance Abuse Treatment Admissions *Rate/ 100000 Population*	N.A	N.A	
Opioid Dispensations	N.A	N.A	
Naloxone Administrations	N.A	N.A	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

E. HEALTH OUTCOMES

Disease-specific mortality, health status and morbidity are among the outcomes presented. Indicators of general health and mental health measures are also discussed in this section.

1. Mortality - Leading Cause of Death

According to the CDC, mortality statistics are one of few data sets comparable for small geographic areas, available for long time periods and appropriate as a primary source for public health planning.

- Between 2013 and 2016, Monmouth County age-adjusted mortality rates (AAMR) improved (decreased) for chronic lower respiratory disease (-15.8%), %), cancer (-9.6%), septicemia (-9.2), diabetes (-6.5%), influenza and pneumonia (-6.3%), and stroke (-4.3%).
- Between 2013 and 2016, four of the top 10 leading causes of death for Monmouth County increased including: diseases of the heart (1.5%), unintentional injuries (42.0%), nephritis (7.6%), and Alzheimer's disease (8.4%).

Top 10 Causes of Death in Monmouth County
Age-Adjusted Rate/100,000 Population 2008-2016

Causes of Death	2008	2013	2016	Change 13'-16'
Diseases of Heart	187.7	159	161.4	1.5%
Cancer (Malignant Neoplasms)	182.0	152.7	138.0	-9.6%
Unintentional Injuries	25.9	30.0	42.6	42.0%
Chronic Lower Respiratory Diseases (CLRD)	42.1	36.0	30.3	-15.8%
Stroke (Cerebrovascular Diseases)	35.1	30.0	28.7	-4.3%
Alzheimer's Disease	25.3	19.1	20.7	8.4%
Diabetes Mellitus	22.6	17.0	15.9	-6.5%
Septicemia	15.7	15.3	13.9	-9.2%
Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)	16.9	11.9	12.8	7.6%
Influenza and Pneumonia	11.3	9.5	8.9	-6.3%

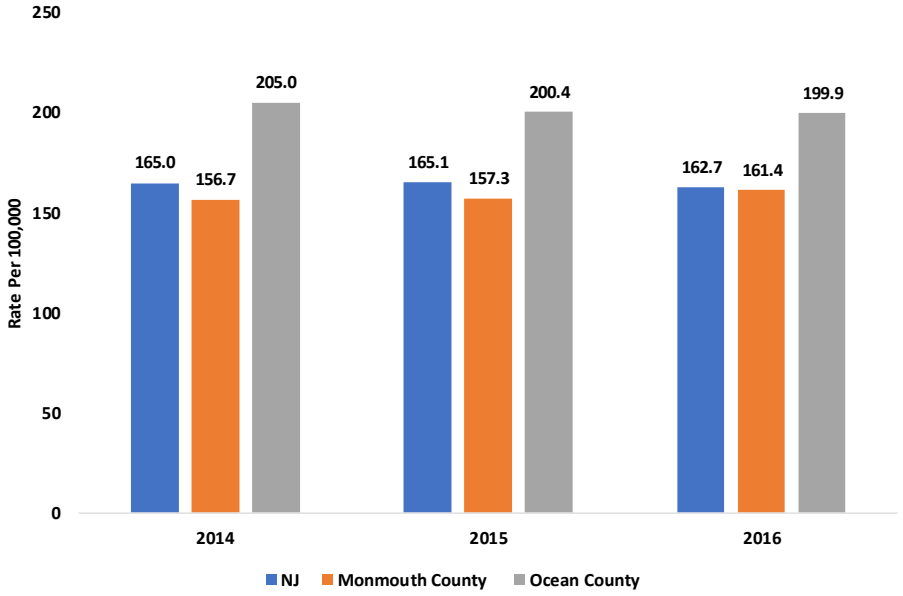
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

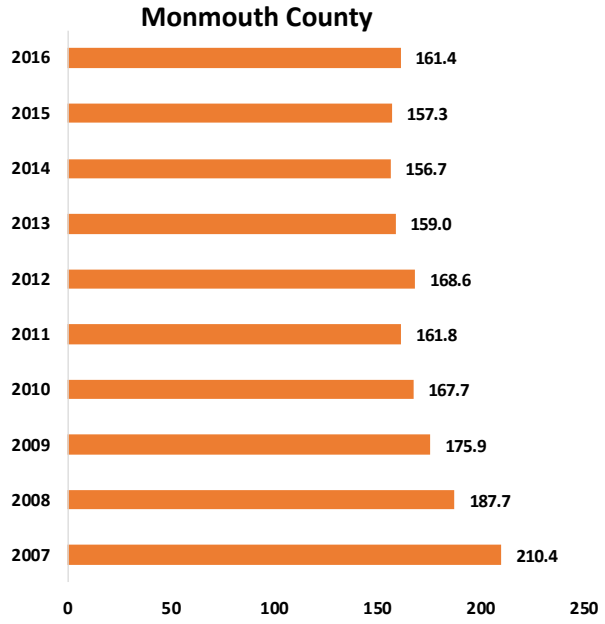
Heart Disease (1)

Heart disease includes several conditions, most commonly, coronary artery disease, angina, heart failure and arrhythmias. Nationally, statewide and in Monmouth County, heart disease remains the leading cause of death. Responsible for 1 in every 4 deaths, approximately 610,000 people die of heart disease in the United States each year.

- The County AAMR for heart disease deaths increased between 2014 (156.7/100,000) and 2016 (161.4/100,000).
- The 2016, the Monmouth County mortality rate due to heart disease (161.4/100,000) was slightly lower than statewide rate (162.7/100,000).
- In 2016, across the County, Blacks (169.8/100,000) had the highest heart disease mortality rate as compared to Whites (167.4/100,000) and Hispanics (83.0/100,000).

Deaths Due to Diseases of the Heart: Age-Adjusted Rate/100,000 Population
State & County Comparisons 2014-2016

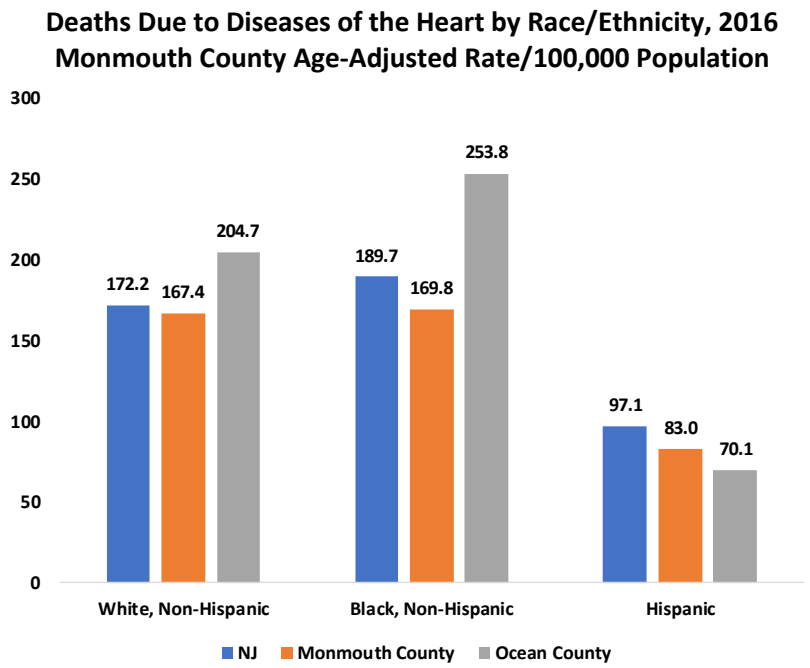


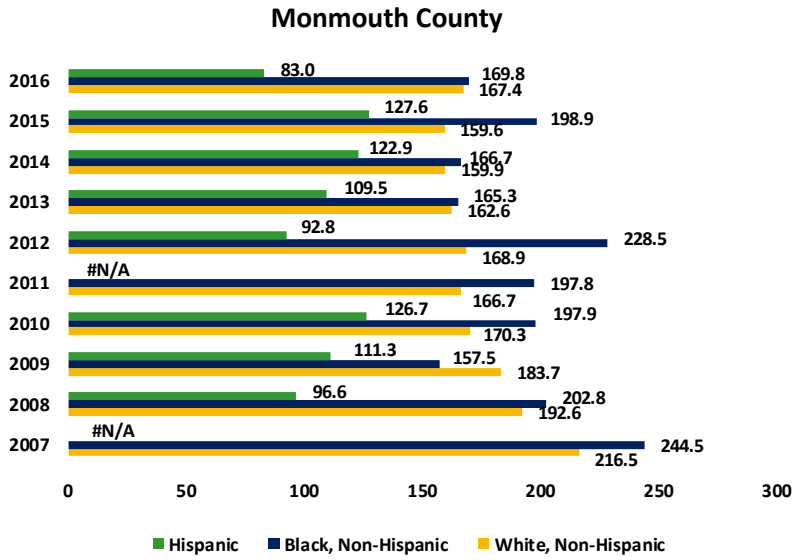


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Healthy People 2020

Baseline: 129.2
Target: 103.4
Monmouth County 2016: 161.4





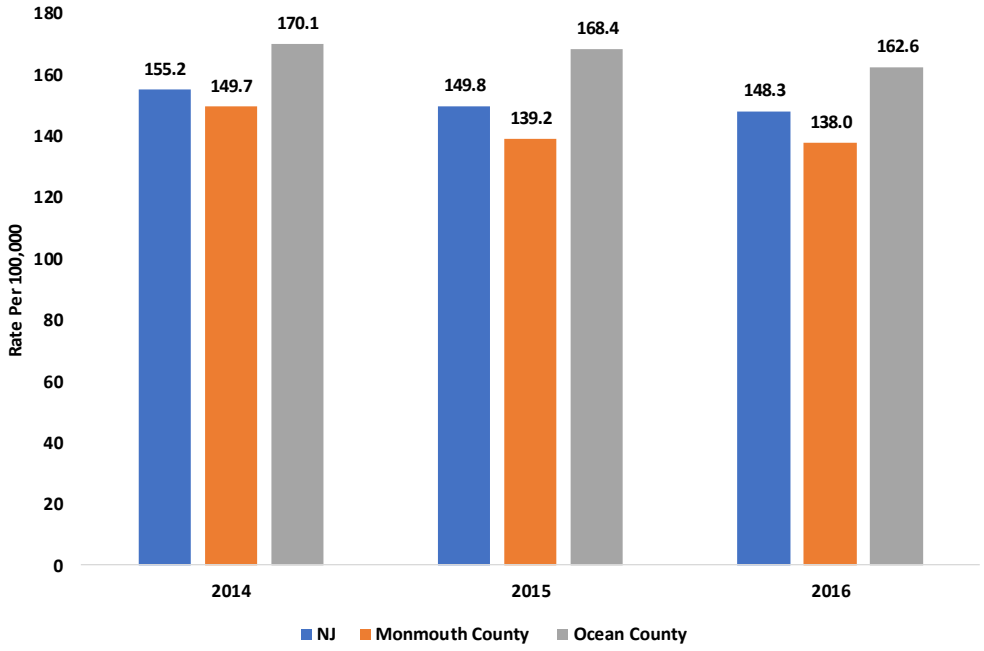
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Cancer (2)

Although there are many types of cancer, all originate from abnormal cells with untreated disease.[49] Approximately half of American men and one-third of women will develop some form of cancer throughout their lifetimes. Cancer risk may be reduced by basic lifestyle modifications including limiting or avoiding tobacco, sun protection, being physically active and eating healthy foods. Early detection greatly improves positive outcomes. Cancer is the second leading cause of death in the United States, New Jersey and Monmouth County.[50]

- Monmouth County deaths due to cancer decreased between 2014 (149.7/100,000) and 2016 (138.0/100,000). The 2016 County mortality rate was lower than New Jersey (148.3/100,000) and ranks in the middle quartile statewide.
- The 2016 Monmouth County cancer AAMR (149.7/100,000) performed better than the *Healthy People 2020* target of 161.4/100,000.

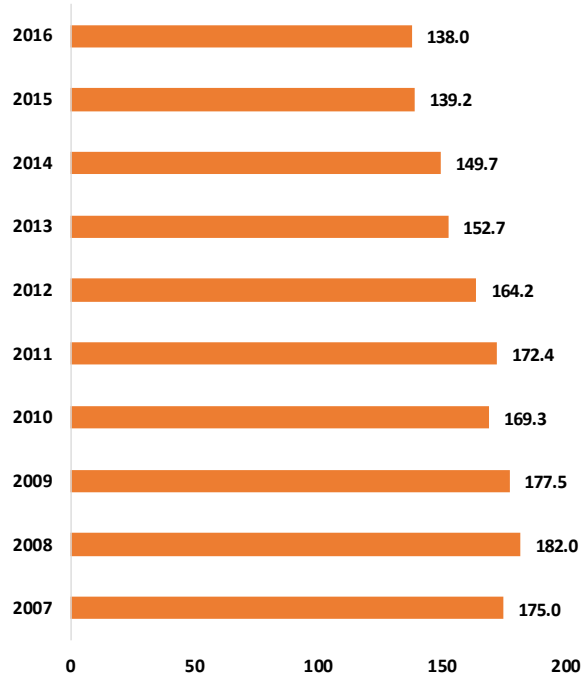
Deaths Due to Malignant Neoplasms (Cancer): Age-Adjusted Rate/100,000 Population
State & County Comparisons, 2014-2016



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

[49] http://www.cancer.org/cancer/cancerbasics/what-is-cancer
[50] http://www.cancer.org/ cancer/cancerbasics/questions-people-ask-about-cancer

Deaths Due to Malignant Neoplasms (Cancer): Age-Adjusted Rate/100,000 Population
Monmouth County – Trend

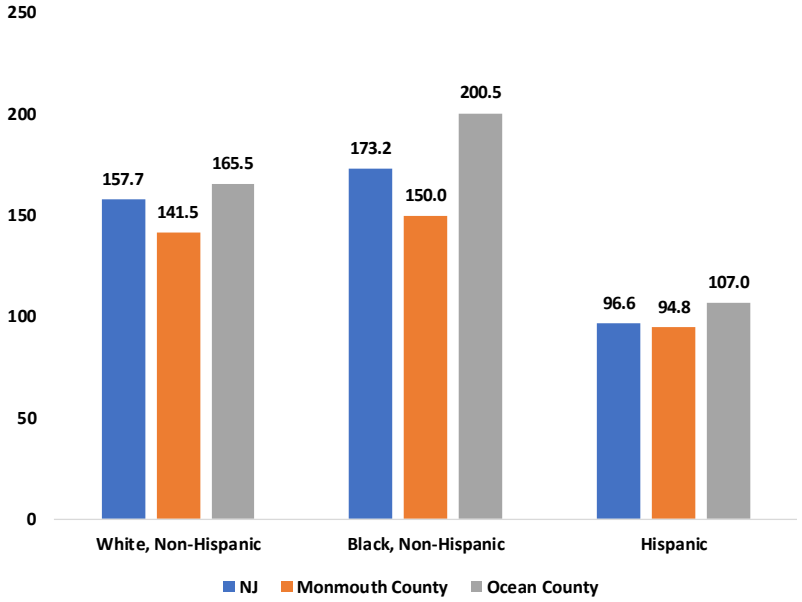


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

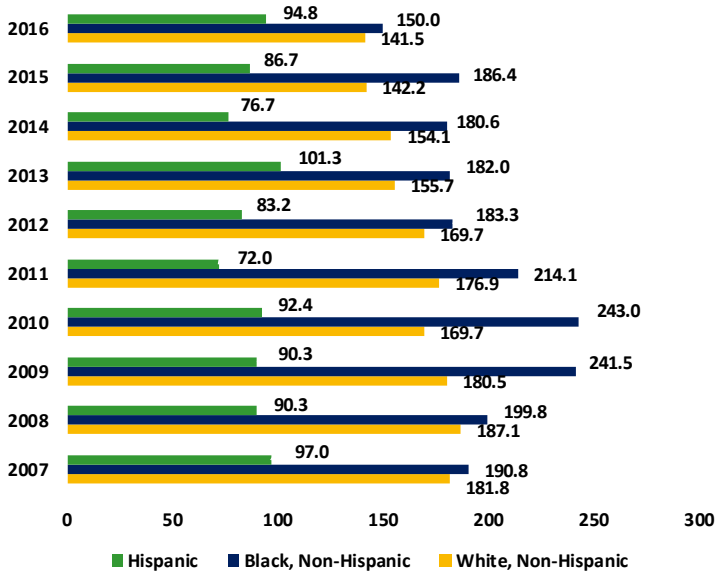
Baseline: 179.3
Target: 161.4
Monmouth County 2016: 138.0

- In 2016, the mortality rate for malignant neoplasm deaths among Blacks in Monmouth County was higher than the rate for Whites and Hispanics.
- The mortality rate for cancer among Blacks in Monmouth County has historically been higher than Whites who historically experienced a higher death rate than Hispanics.

Deaths Due to Malignant Neoplasms (Cancer): By Race/Ethnicity
State & County Comparisons, 2014-2016



Monmouth County

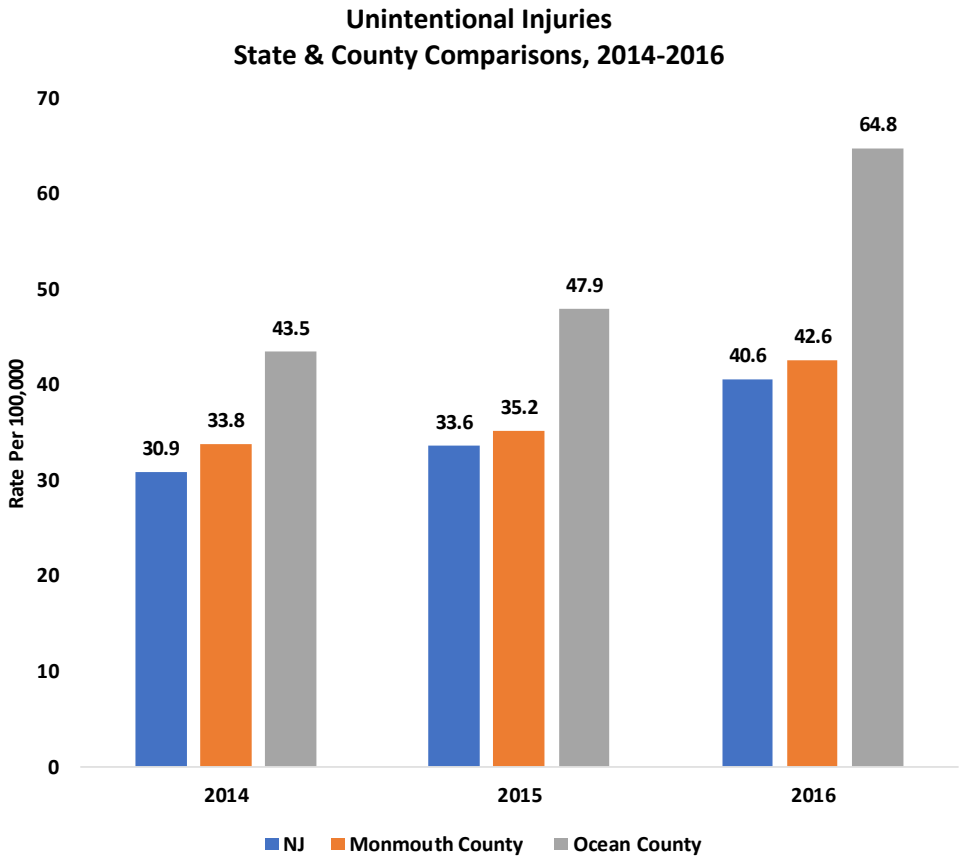


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Unintentional Injuries (3)

The majority of unintentional injuries are preventable and predictable. Deaths due to unintentional injury often occur as a result of motor vehicle accidents, falls, firearms, drownings, suffocations, bites, stings, sports/recreational activities, natural disasters, fires, burns and poisonings. Public Health prevention strategies including minimum age drinking requirements, seatbelt and helmet laws, smoke alarms, exercise programs and other safety awareness campaigns reduce unintentional injury and death.[51]

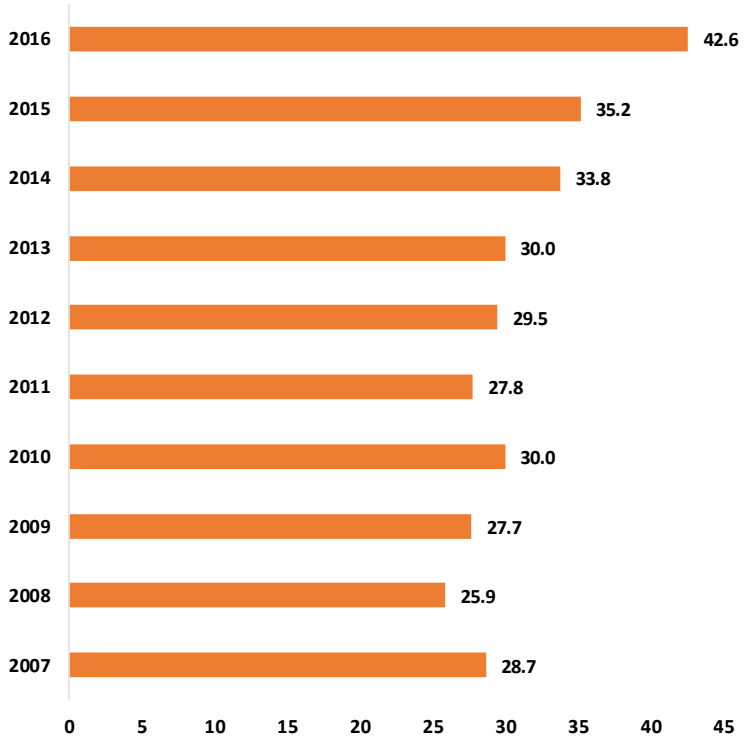
- The unintentional injury death rate increased between 2014 and 2016, from 33.8/100,000 to 42.6/100,000. Monmouth County ranked in the middle performing quartile among New Jersey counties.
- The 2016 Monmouth County unintentional injury AAMR was 2 percentage points higher than the statewide rate.



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

[51] http://www.cdph.ca.gov/programs/ohir/Pages/UnInjury2010Background.aspx

Unintentional Injuries
Monmouth County – Trend

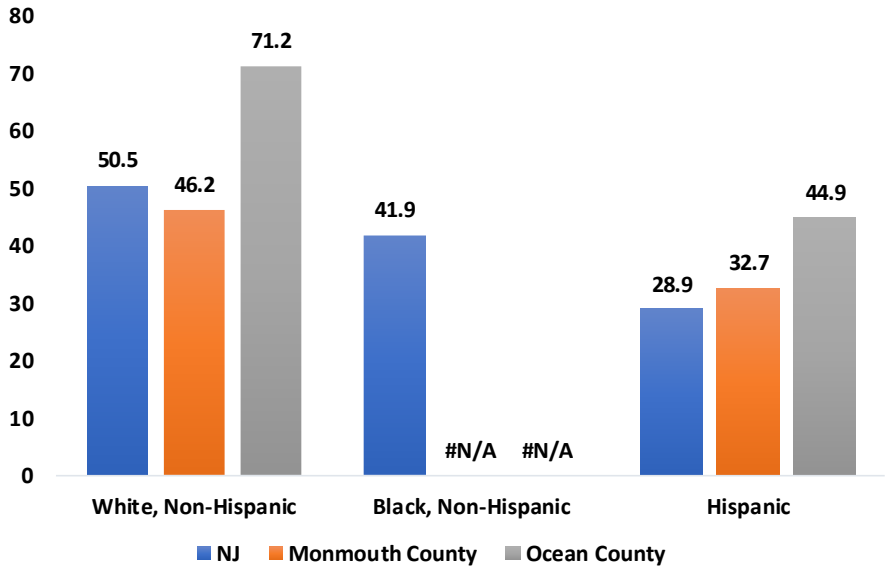


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

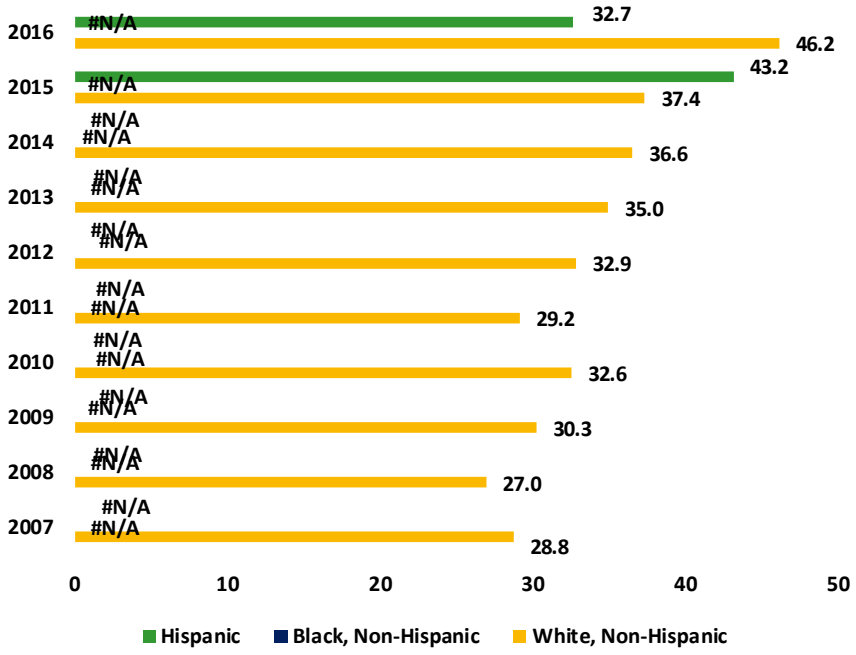
Baseline: 40.4
Target: 36.4
Monmouth County 2016: 42.6

- The 2016 unintentional injury death rate for Whites (46.2/100,000) was higher than the rate for Hispanics (32.7/100,000).

Unintentional Injuries by Race/Ethnicity
State & County Comparisons, 2014-2016



Monmouth County



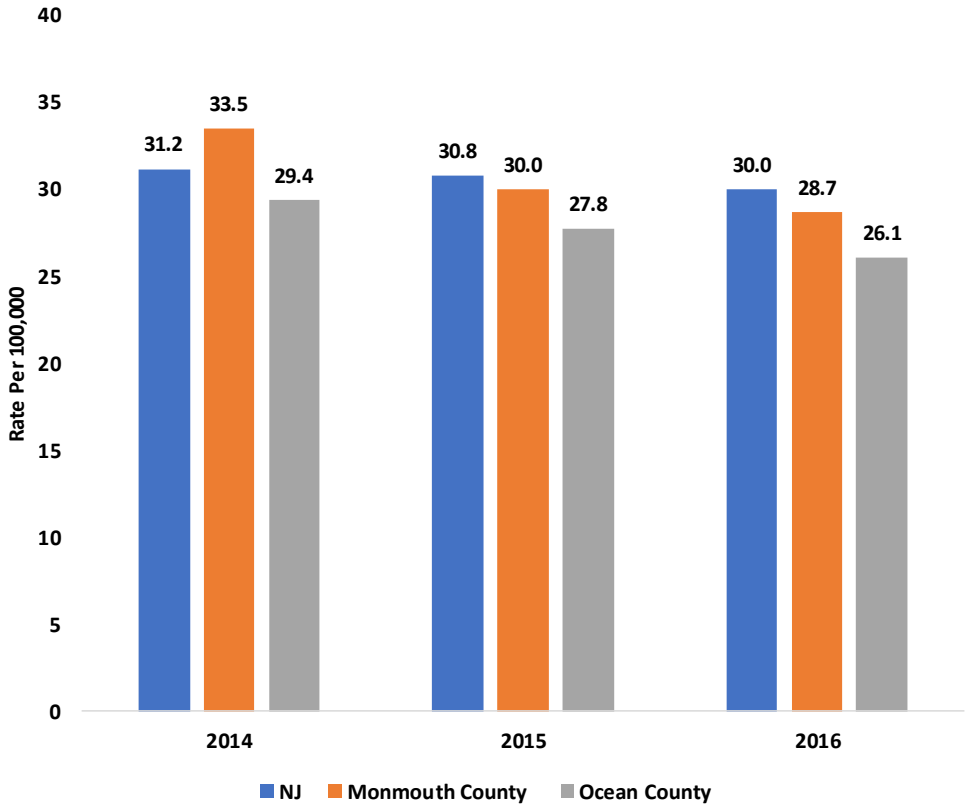
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Stroke (Cerebrovascular Diseases) (4)

A stroke occurs when a clot blocks blood supply to the brain or if a blood vessel within the brain bursts.

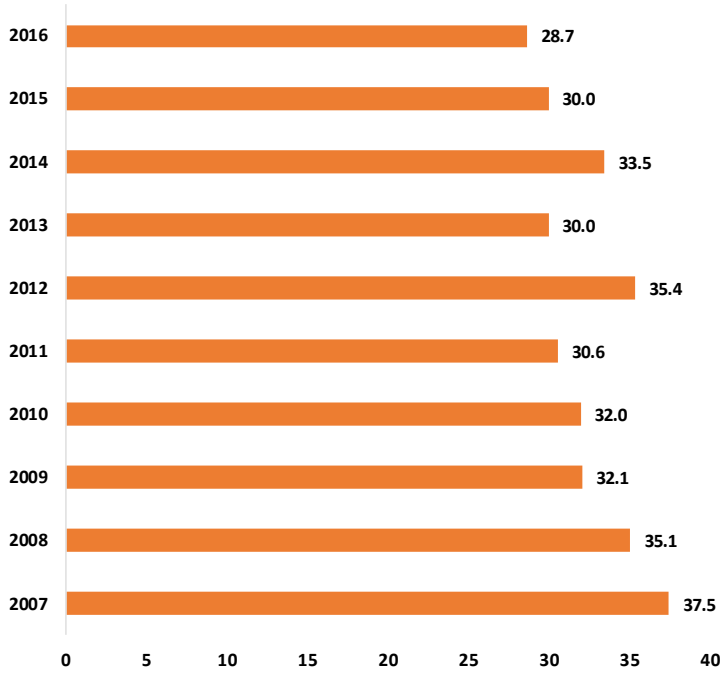
- The Monmouth County stroke AAMR decreased from 2014 (33.5/100,000) to 2016 (28.7/100,000). In 2016, the County AAMR was lower than the *Healthy People 2020* target (34.8/100,000).
- The 2016 Monmouth County stroke AAMR (28.7/100,000) was lower than the State (30.0/100,000) and ranks in the middle quartile statewide.
- Over the last 10 years, the stroke mortality rate ranged from a low of 28.7/100,000 in 2016, to a high of 37.5/100,000 in 2007.

Deaths Due to Stroke: Age-Adjusted Rate/100,000 Population
State & County Comparisons, 2014-2016



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Deaths Due to Stroke: Age-Adjusted Rate/100,000 Population
Monmouth County – Trend

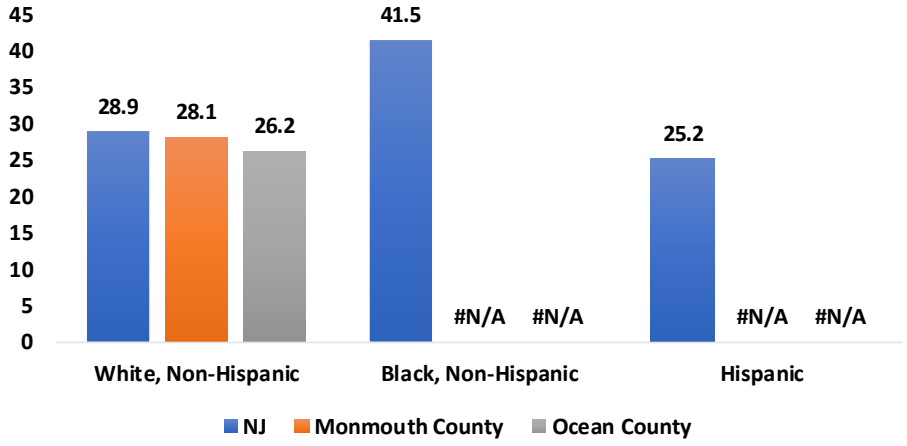


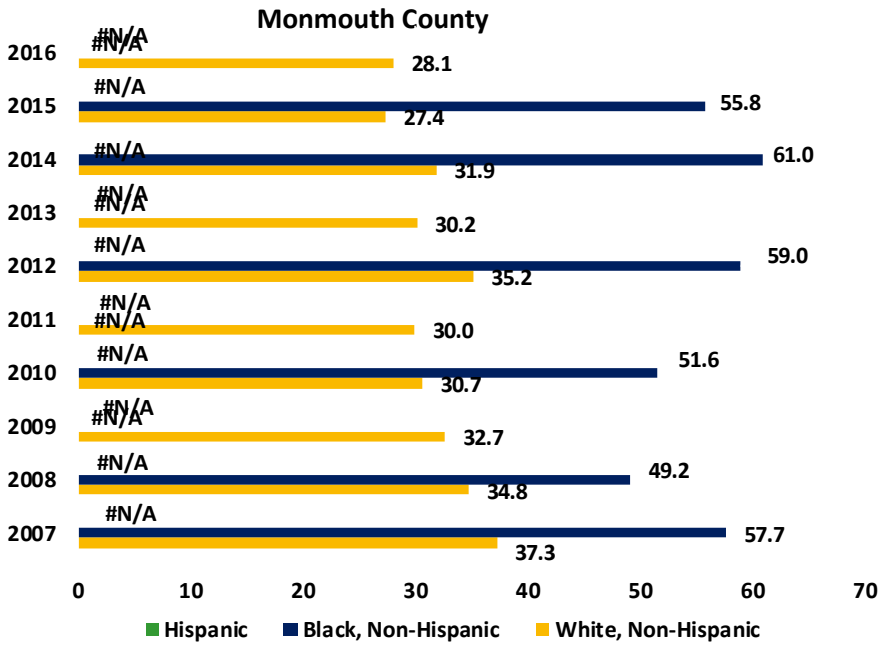
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Baseline: 43.5
Target: 34.8
Monmouth County 2016: 28.7

- Statewide, by race/ethnicity in 2016, Blacks (41.5/100,000) had the highest death rate due to stroke compared to Whites (28.9/100,000) and Hispanics (25.2/100,000). Data for 2016 was not reported for Blacks and Hispanics by county.

Deaths Due to Stroke: Age-Adjusted Rate/100,000 Population
By Race/Ethnicity
State & County Comparisons, 2014-2016





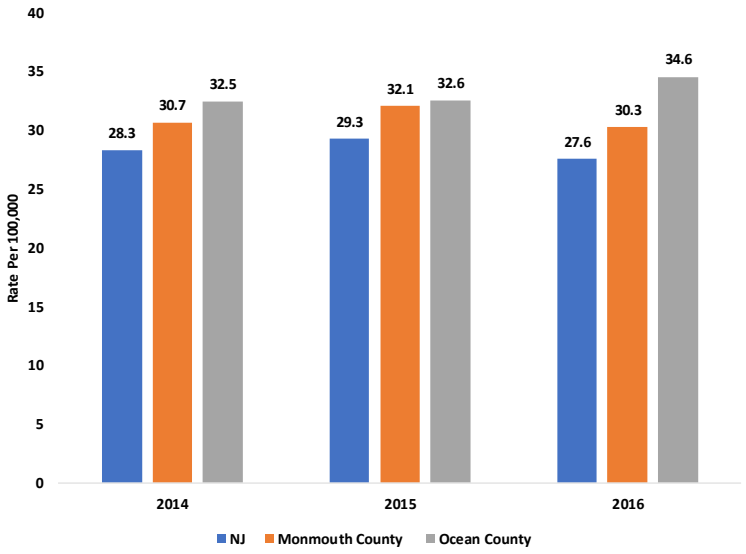
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Chronic Lower Respiratory Disease (5)

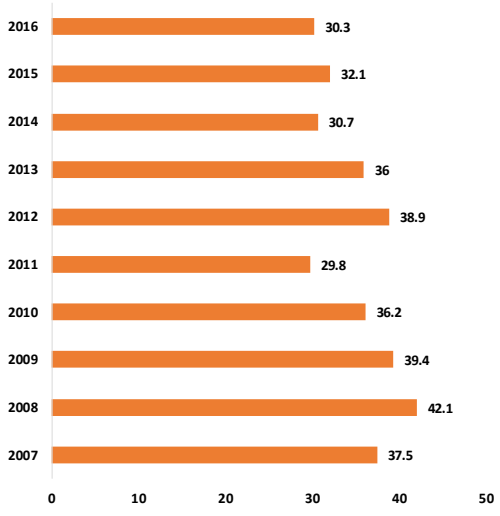
Chronic Lower Respiratory Diseases (CLRD) is the fifth leading cause of death in Monmouth County. CLRD includes chronic bronchitis, emphysema, and asthma, all characterized by shortness of breath caused by airway obstruction. The obstruction is irreversible in chronic bronchitis and emphysema and reversible in asthma.

- In 2016, the county-wide AAMR due to chronic lower respiratory disease in Monmouth County was higher than the statewide rate, and lower than the rate in Ocean County.
- Since 2014, the AAMR for chronic lower respiratory disease has fluctuated with an overall decrease of 0.4% of a percentage point.

Deaths Due to Chronic Lower Respiratory Disease
State & County Comparisons, 2014-2016



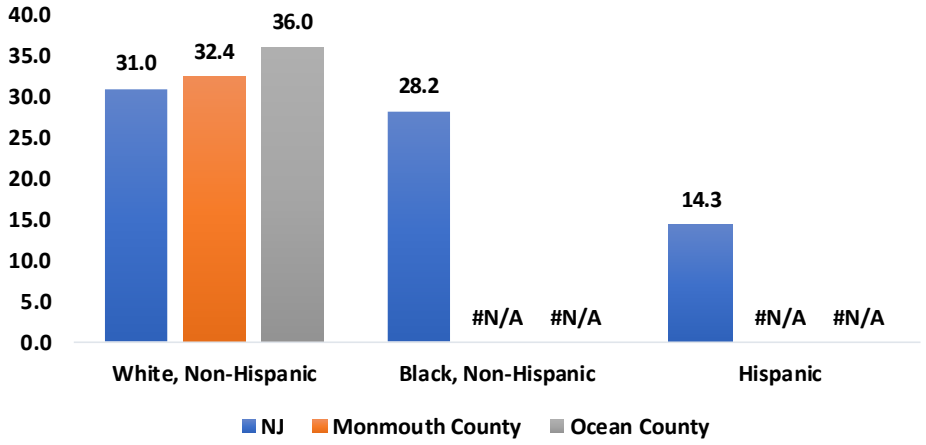
Monmouth County

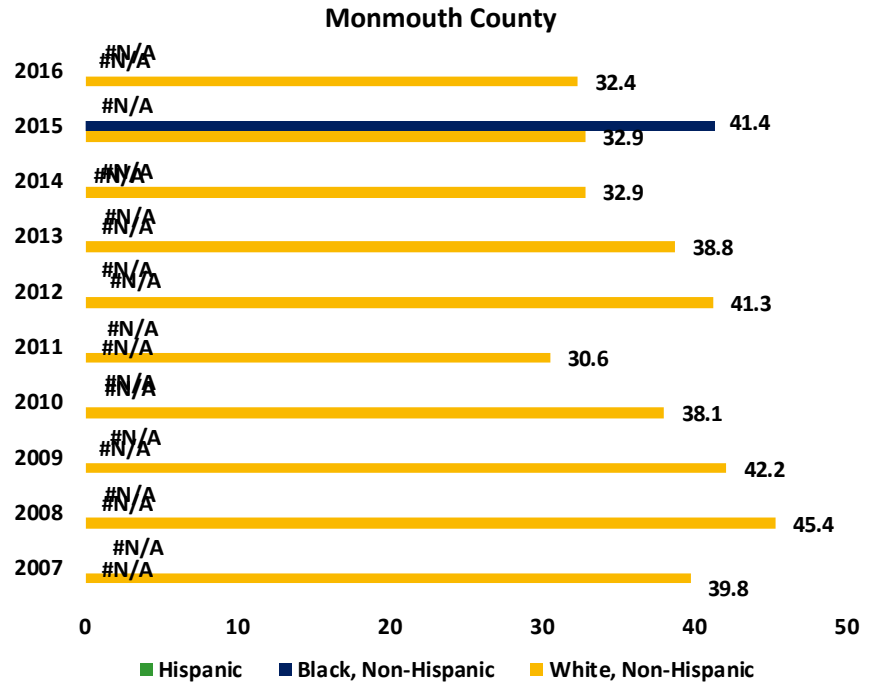


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

- Statewide, Whites had higher mortality rates due to CLRD than either Blacks or Hispanics. Data for 2016 was not reported for Blacks and Hispanics for Monmouth or Ocean Counties.

Deaths Due to Chronic Lower Respiratory Disease: Age-Adjusted Rate/100,000 Population
By Race/Ethnicity
State & County Comparisons, 2014-2016





Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Deaths Due to Diseases of The Heart *Age-Adjusted Rate/100000 Population*		N.A.	
Deaths Due to Diseases of The Heart (Black, Non-Hispanic) *Age-Adjusted Rate/100000 Population*	N.A.	N.A.	
Deaths Due to Malignant Neoplasms (Cancer) *Age-Adjusted Rate/100000 Population*		N.A.	
Deaths Due to Malignant Neoplasms (Cancer) (Black, Non-Hispanic) *Age-Adjusted Rate/100000 Population*	N.A.	N.A.	
Deaths Due to Cerebrovascular Disease (Stroke) *Age-Adjusted Rate/100000 Population*		N.A.	
Deaths Due to Cerebrovascular Disease (Stroke) (White, Non-Hispanic) *Age-Adjusted Rate/100000 Population*	N.A	N.A.	
Deaths Due to Unintentional Injuries *Age-Adjusted Rate/100000 Population*		N.A.	
Deaths Due to Unintentional Injuries (White, Non-Hispanic) *Age-Adjusted Rate/100000 Population*	N.A.	N.A.	
Deaths Due to Chronic Lower Respiratory Deaths *Age-Adjusted Rate/100000 Population*	N.A.	N.A.	
Deaths Due to Chronic Lower Respiratory Deaths (Whites , Non-Hispanic) *Age-Adjusted Rate/100000 Population*	N.A	N.A.	

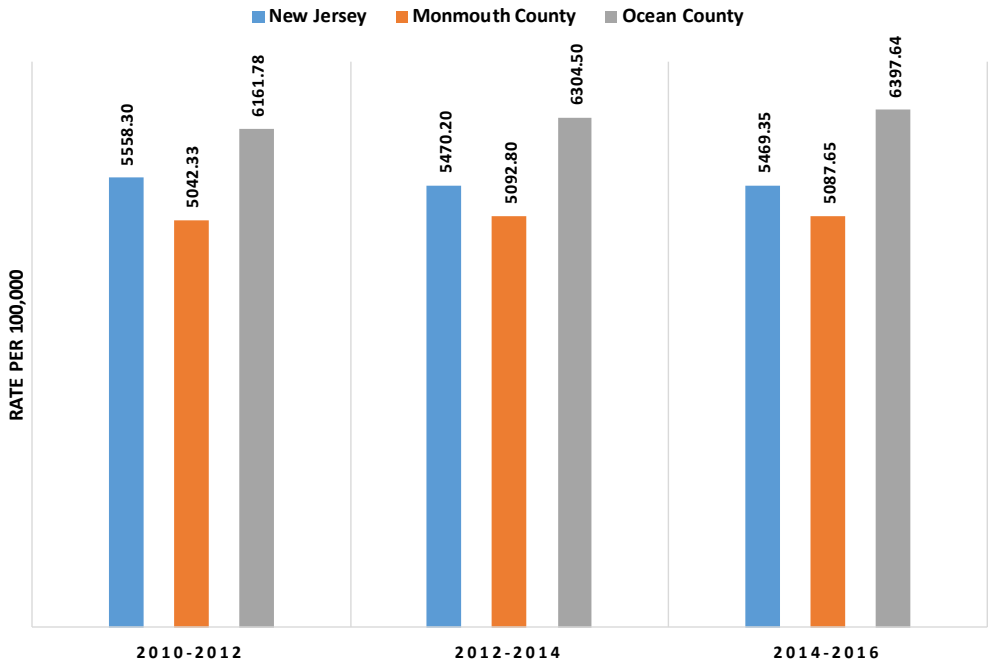
RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

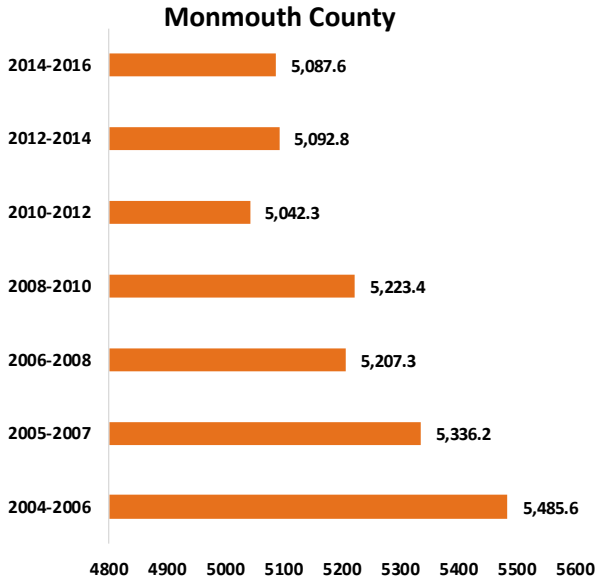
2. Premature Deaths

An alternate method to reviewing crude or age-adjusted death rates as a measure of premature mortality is assessing Years of Potential Life Lost (YPLL). YPLL calculates the number of years of potential life lost for each death occurring before a predetermined end point, in this case, age 75 per 100,000 population. Premature deaths are reviewed to highlight potentially preventable adverse outcomes.

- The Monmouth County YPLL rate increased from 5,042.33/100,000 for the period 2010-2012, to 5,087.65/100,000 for the period from 2014-2016. The Monmouth County YPLL rate (5,087.65/100,000) was lower than the statewide rate (5,469.35/100,000) and ranks in the middle performing statewide quartile.
- The 2014-2016 Monmouth County YPLL rate (5,087.65/100,000) outperformed the County Health Ranking benchmark (5,300/100,000) and was in the best performing quartile.

Premature Death: Years of Potential Life Lost Before Age 75: Age-Adjusted Rate/100,000 Population
State & County Comparisons, 2010-2016





Source: County Health Rankings; National Vital Statistics System
Note: Every death occurring before the age of 75 contributes to the total number of years of potential life lost

County Health Rankings & Roadmaps
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National Benchmark: 5300
Monmouth County 2014-2016: 5087.6

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Premature Death: Years of Potential Life Lost Before Age 75 *Age-Adjusted Rate/100000 Population*	N.A.		

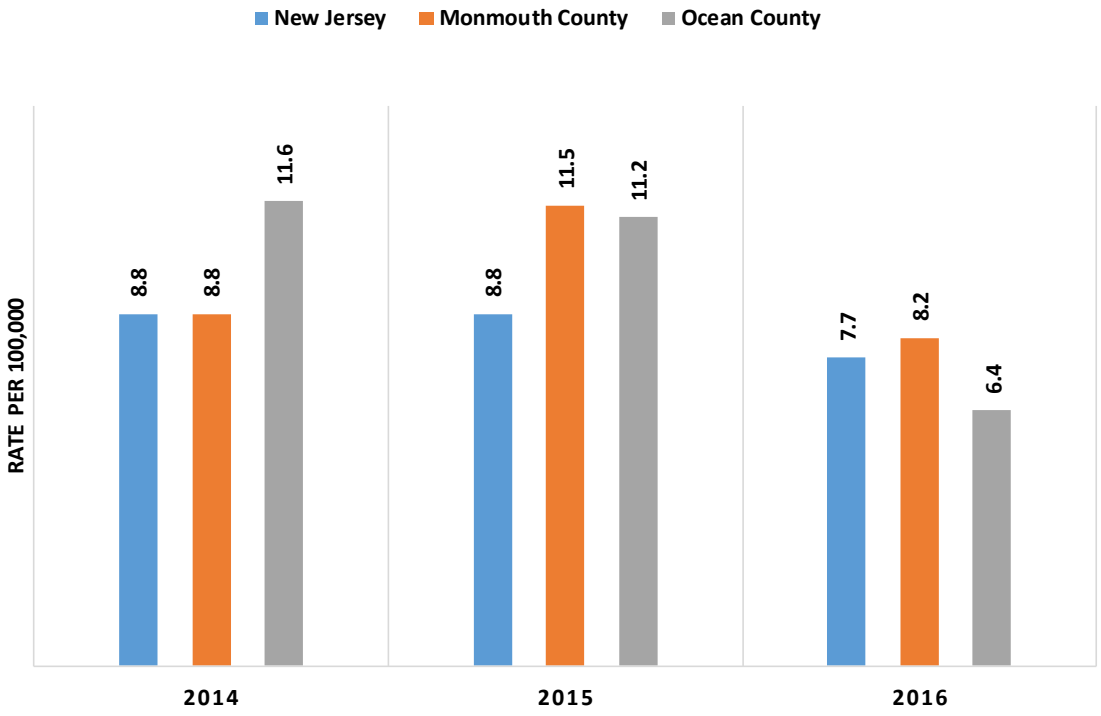
RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

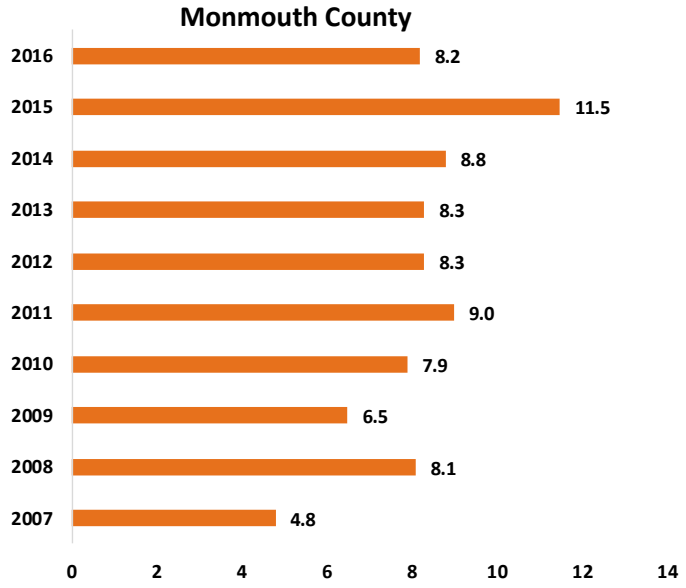
3. Behavioral Health-Related Deaths

Mental health is a state of well-being in which an individual realizes his or her own abilities, copes with normal life stresses, works productively, and is able to contribute to his or her community. Mental illness is diagnosable mental disorders or health conditions characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning. Depression, the most common type of mental illness, is associated with higher rates of chronic disease, increased health care utilization, and impaired functioning. However, rates of mental illness treatment remain low, and often the treatment received is inadequate.

- Statewide deaths due to suicide decreased from 2014 (8.8/100,000) to 2016 (7.7/100,000), or 12.5%, while Monmouth County's suicide rate declined from 8.8/100,000 to 8.2/100,000 for the same period.
- Monmouth County's 2016 suicide rate was higher than the rate statewide and for Ocean County.
- The 2016 Monmouth County suicide rate (8.2/100,000) was 19.6% lower than the *Healthy People 2020* target (10.2/100,000).

Deaths Due to Suicide: Age-Adjusted Rate/100,000 Population
State & County Comparisons, 2014-2016



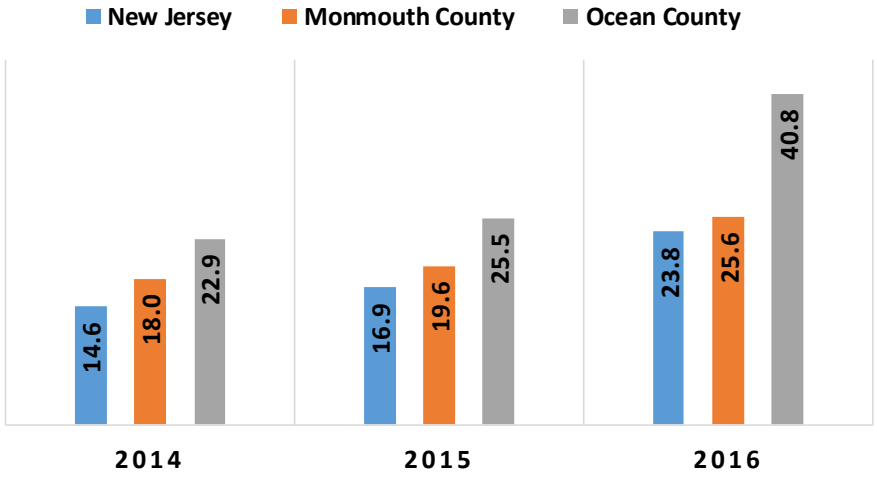


Source: NJDOH Center for Health Statistics; NJ State Health Assessment Data

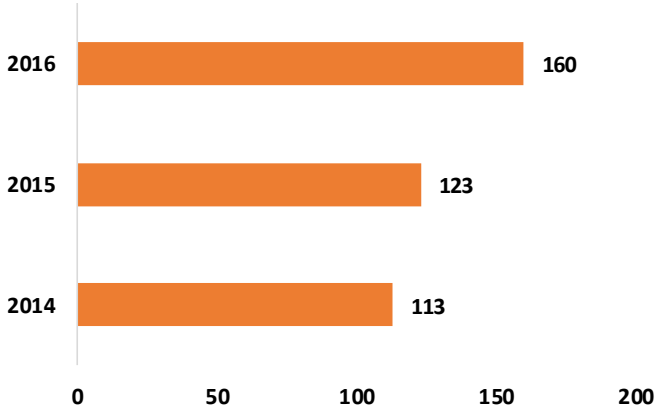
Baseline: 11.3
Target: 10.2
Monmouth County 2016: 8.2

- Between 2014 and 2016, the rate of drug overdose deaths in Monmouth County increased from 18.0/100,000 to 25.6/100,000.
- The number of drug overdose deaths in Monmouth County increased from 113 to 160.

Drug Overdose Deaths, Rate/100,000 Population
State & County Comparisons, 2016



Monmouth County



Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf

County Health Rankings & Roadmaps
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National Benchmark: 10
Monmouth County 2016: 25.6

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Deaths Due to Suicide *Age-Adjusted Rate/100,000 Population*		N.A.	
Drug overdose deaths	N.A.		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

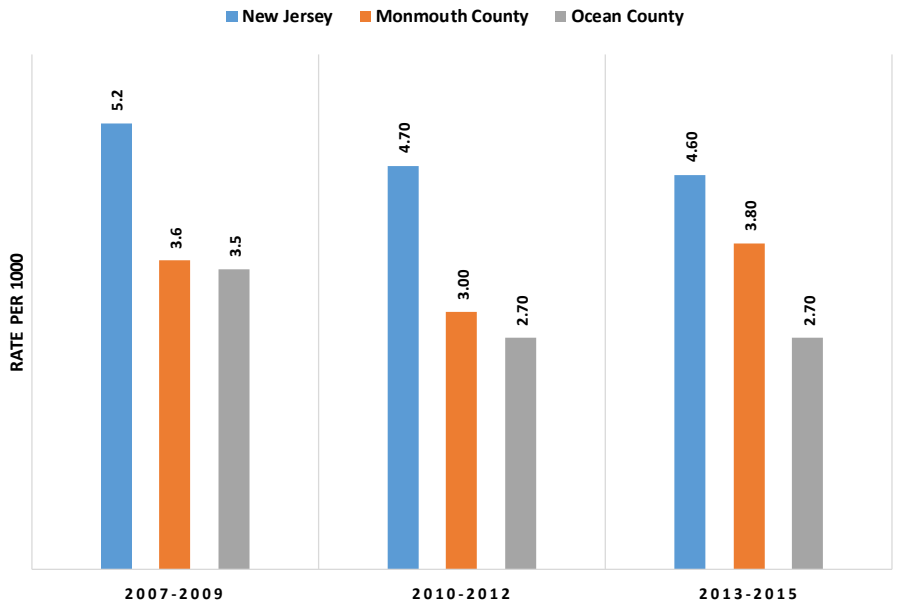
4. Infant Mortality

Infant mortality, the death of a baby prior to his or her first birthday, is t*raditionally* used as an indicator of the health and well-being of a nation. Infant mortality is calculated as the number of infant deaths under age 1 per 1,000 live births. Great disparities exist in infant mortality by age, race, and ethnicity. Most frequent causes are serious birth defect, preterm birth / low birth weight, Sudden Infant Death Syndrome (SIDS), maternal complications of pregnancy, and injury.[52]

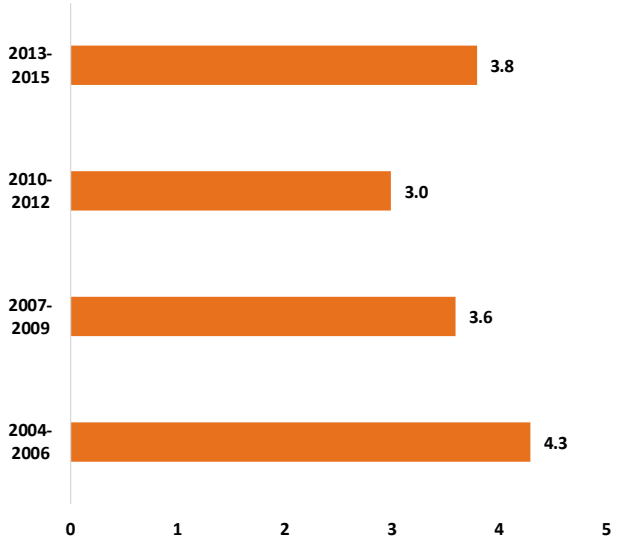
- The Monmouth County infant mortality rate increased from the period 2007-2009 (3.6/100,000) to 2013-2015 (3.8/100,000).
- Monmouth County ranks in the middle performing quartile among New Jersey counties for overall infant mortality in 2013-2015 but is in the best performing quartile for the *Healthy People 2020* target and the County Health Ranking benchmark.
- The White infant mortality rate decreased between 2007-2009 from 2.9/100,000 to 2.8/100,000 in 2013-2015 in Monmouth County.
- The Monmouth County Black infant mortality rate in 2007-2009, the only year reported, was 11.4/100,000 compared to 2.9/100,000 among Whites.

[52] http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm

Infant Mortality Rate: Rate of Infant (Under 1 Year) Deaths/1,000 Live Births
State & County Comparisons, 2007-2015



Monmouth County



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2015 is most recent year available.

Healthy People 2020

Baseline: 6.7
Target: 6.0
Monmouth County 2013-2015: 3.8

County Health Rankings & Roadmaps
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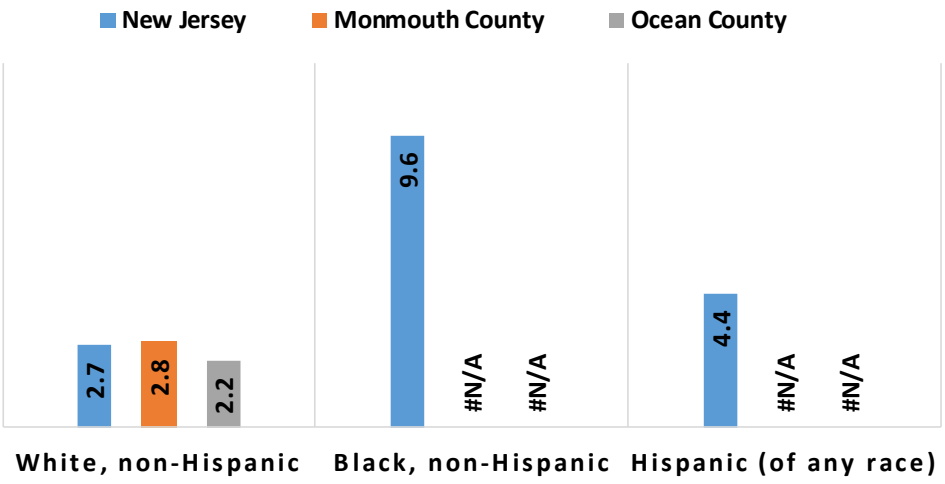
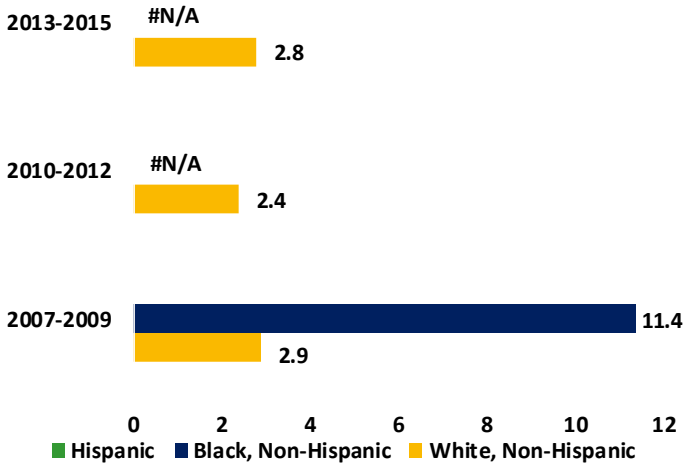
National Benchmark: 4.0
Monmouth County 2015: 3.8

Infant Mortality Rate: Rate of Infant (Under 1 Year) Deaths/1,000 Live Births by Race/Ethnicity
State & County Comparisons, 2013-2015



Monmouth County



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2015 is most recent year available.

5. Low and Very Low Birth Weight Infants

Birth weight is the most important factor affecting neonatal mortality and a significant determinant of post neonatal mortality. Low birth weight infants (less than 2,500 grams) are at an increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders.[53] Racial disparities in low birth weight babies persist; nationally, non-Hispanic, Black infants continue to die at nearly twice the rate of non-Hispanic Whites.

Low Birth Weight

- In 2016, Monmouth County had a lower percentage of low birth weight babies (7.4%) than the State (8.1%) but a higher percentage than Ocean County (6.4%).
- The 2016 percent of Monmouth County low birth weight babies was slightly lower than the *Healthy People 2020* target of 7.8%.
- The percentage of Monmouth County low birthweight babies was higher among Blacks (14.3%) than for Whites (6.5%) and Hispanics (6.4%) in 2016.

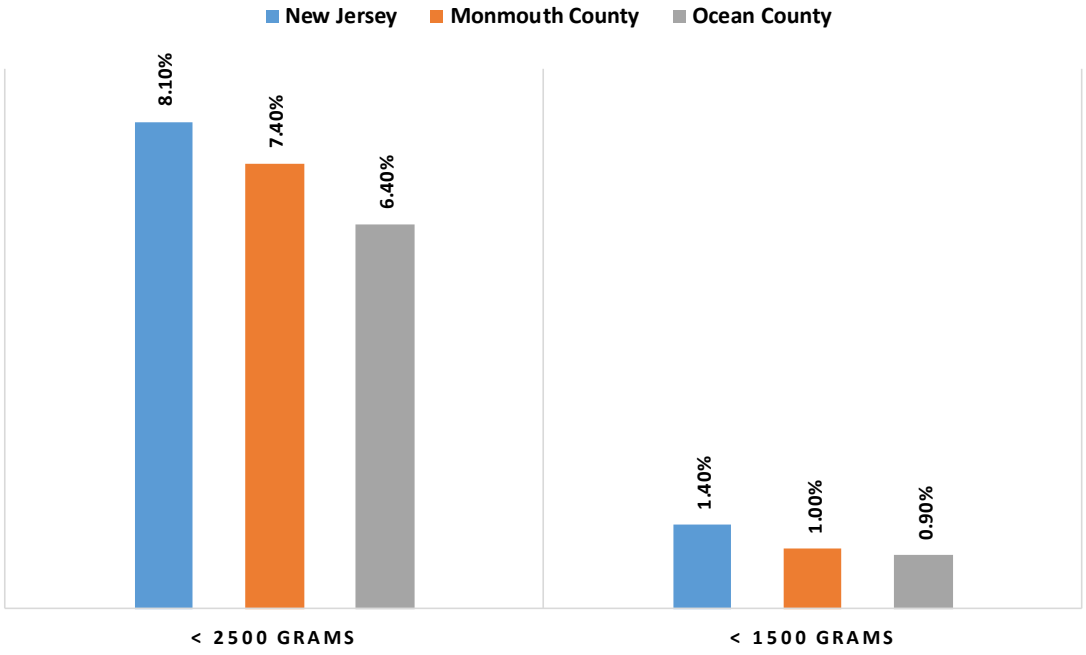
Very low birth weight babies (less than 1,500 grams) are at greater risk of adverse outcomes than low birth weight babies.

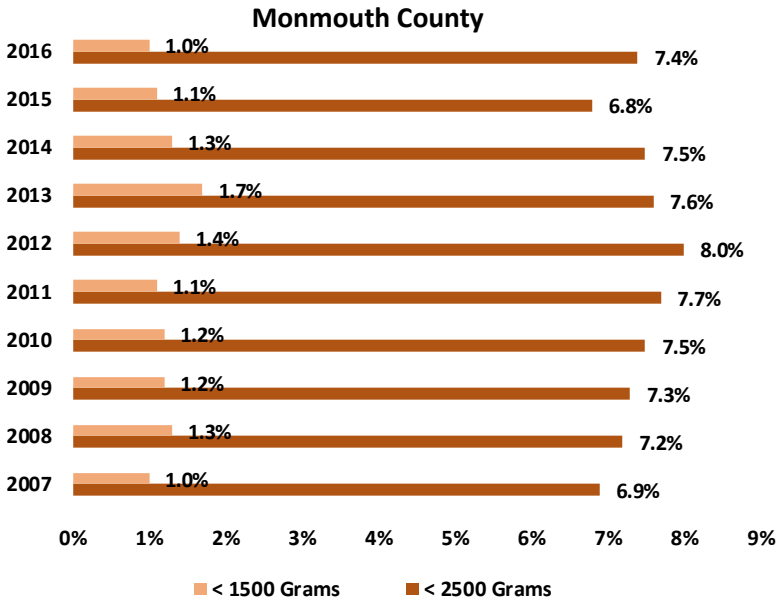
Very Low Birth Weight

- In 2016, 1.0% of Monmouth County babies were very low birth weight as compared to 1.4% statewide.
- The 2016 percent of very low birth weight babies in Monmouth County was higher than the rate in Ocean County (0.9%).
- By race, between 2011 and 2016, the percent of low birth weight babies decreased among Whites from 1.4% to 0.7%, decreased from 2.7% to 2.4% for Blacks, and decreased from 2.0% to 1.7% for Hispanics.

[53] http://www.cdc.gov/PEDNSS/how_to/interpret_data/case_studies/low_birthweight/what.htm

Birth Weight: Percent of Live Births with Low and Very Low Birth Weight
State & County Comparisons, 2016



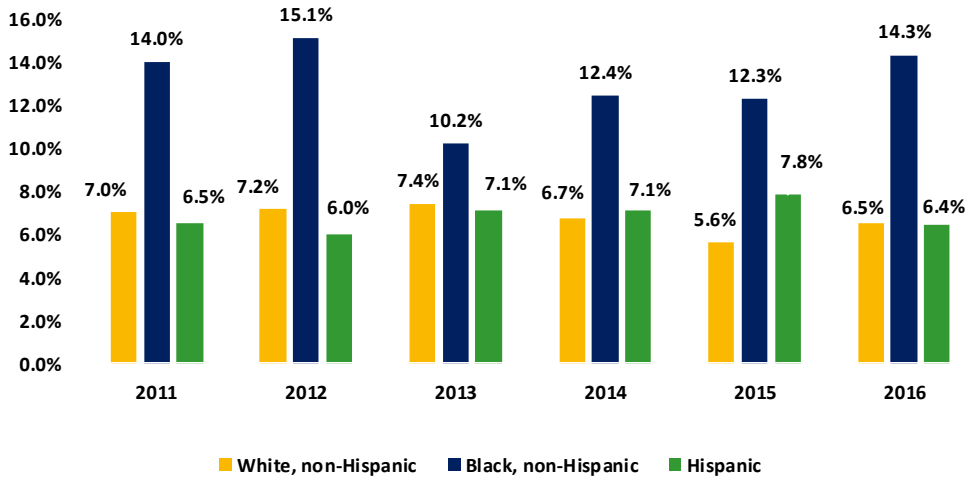


Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: Percentages are based on the total number of live births for the County and State

Healthy People 2020

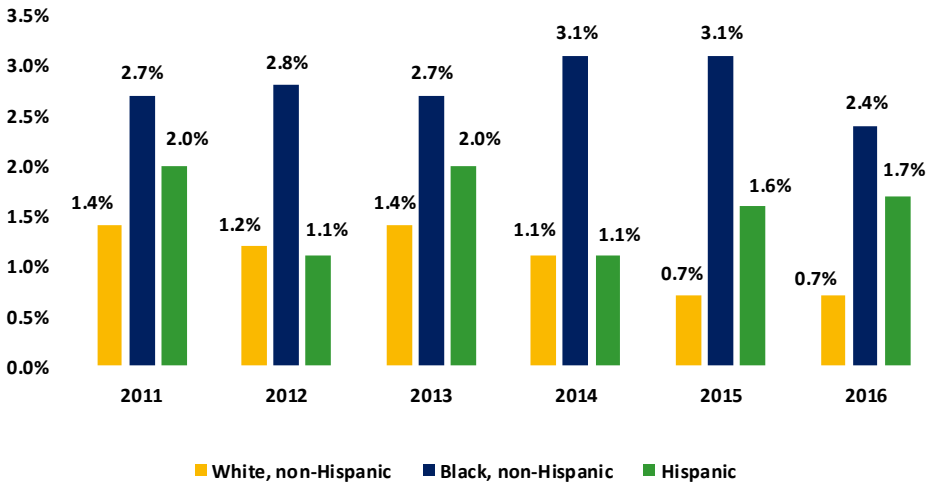
<1500/<2500
Baseline: 1.5% / 8.2%
Target: 1.4% / 7.8%
Monmouth County 2016: 1.00% / 7.40%

Low Birth Weight by Mother's Race/Ethnicity: Percent of Live Births with Low Birth Weight
Monmouth County, 2011-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: *Percentages are based on the total number of Low or Very Low Birth Weight Births / Live births for the County and State

Very Low Birth Weight by Mother's Race/Ethnicity: Percent of Live Births with Very Low Birth Weight
Monmouth County, 2011-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: *Percentages are based on the total number of Low or Very Low Birth Weight Births / Live births for the County and State

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Infant Mortality Rate *Rate of Infant (Under 1 Year) Deaths/ 1000 Live Births*			
Low Birthweight (<2500 Grams) *Percentage of Live Births*		N.A.	
Low Birthweight (<2500 Grams) (Black Non-Hispanic) *Percentage of Live Births*	N.A.	N.A.	
Very Low Birthweight (<1500 Grams) *Percentage of Live Births*		N.A.	
Very Low Birthweight (<1500 Grams) (Black Non-Hispanic) *Percentage of Live Births*	N.A.	N.A.	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

6. Health Status and Behavioral Health Status

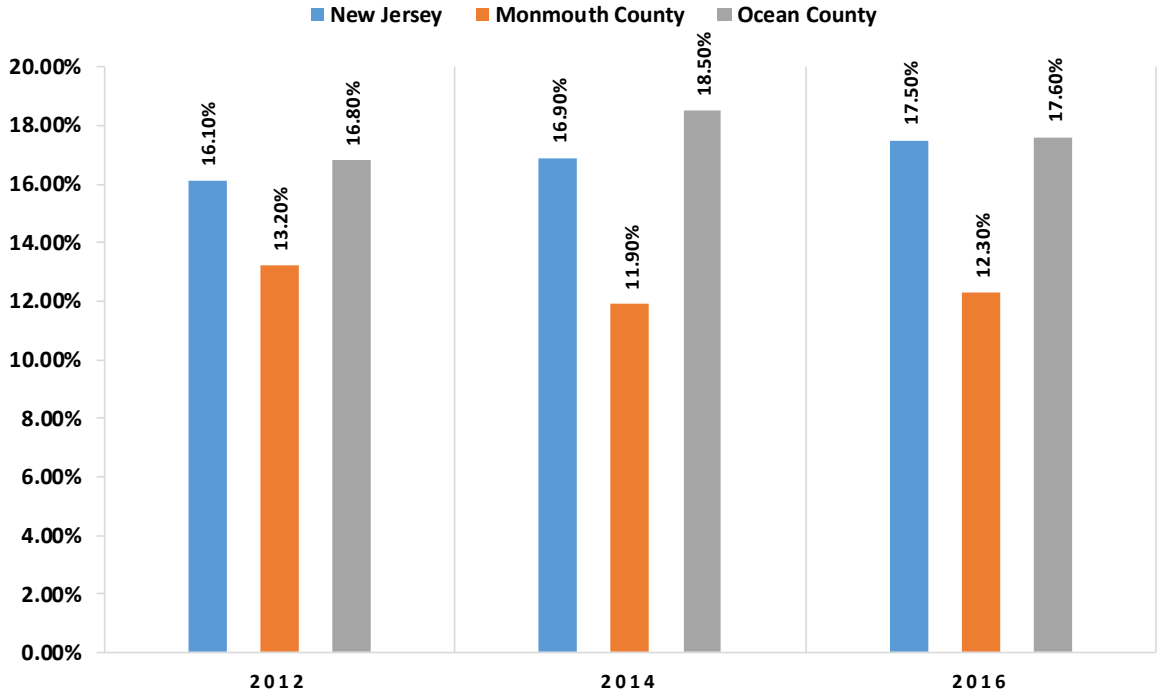
Health status and behavioral health status are broad multidimensional concepts including self-report measures of physical and mental health.

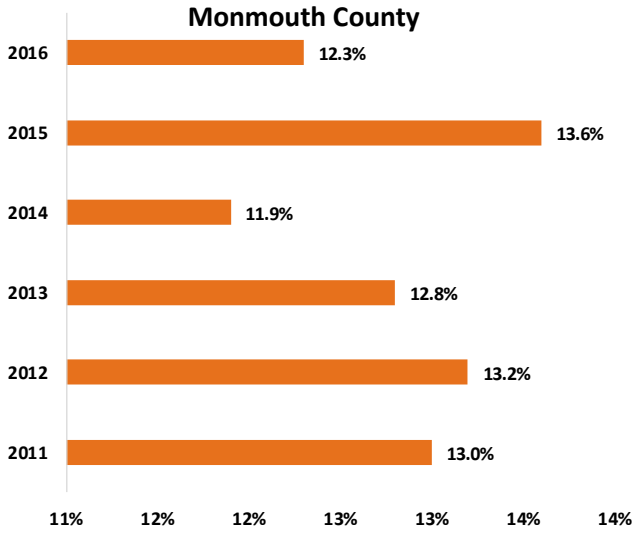
Behavioral Risk Factor Surveillance System (BRFSS), the nation's premier system of health-related telephone surveys, collects data about U.S. residents regarding health-related risk behaviors, chronic health conditions and use of preventive services. In 1984, the survey began collecting data in 15 states and is currently conducted in all states including Washington D.C. and three United States territories. The most recent data available are for the year 2016.

General Health Status

- Between 2012 and 2016, BRFSS data reported a decrease in the percent of Monmouth County residents who indicate their health as “poor or fair,” from 13.2% to 12.3%.
- In 2016, 17.5% of New Jersey respondents report that their health is “fair or poor,” higher than the rate among Monmouth County residents.
- As compared to all New Jersey counties, Monmouth County residents with “fair or poor” health rank in the middle performing quartile.
- As compared to the County Health Ranking, Monmouth County residents report with “fair or poor” health rank in the middle quartile.

Percent of Respondents Reporting Their Health as "Fair or Poor"
State & County Comparisons, 2012-2016





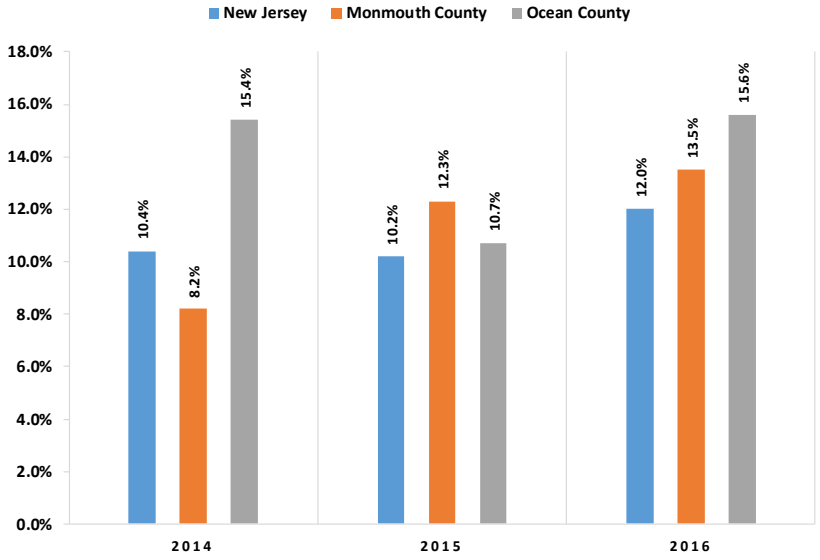
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

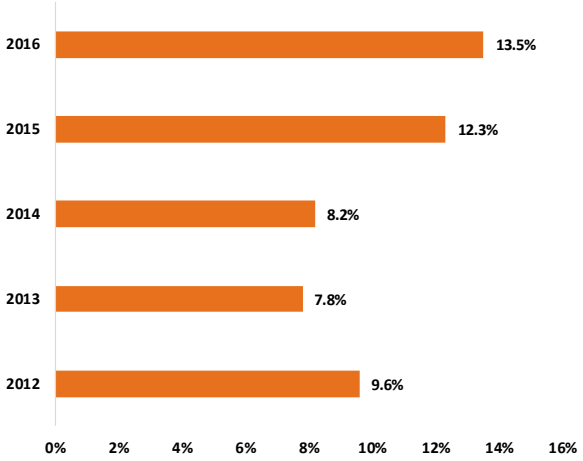
National Benchmark: 12%
Monmouth County 2016: 12.3%

- NJBRFSS reports that the number of Monmouth County adults with 14 or more physically unhealthy days (in the last 30 days) increased 5.3 percentage points between 2012 (8.2%) and 2016 (13.5%).
- Monmouth County residents with 14+/30 days of poor physical health rank in the middle quartile in New Jersey and in the poorest performing quartile compared to the County Health Ranking benchmark.

Percent Reporting 14 or More of the Past 30 Days Physical Health Not Good: Age-Adjusted State & County Comparisons, 2014-2016



Monmouth County



Source: New Jersey Behavioral Risk Factor Survey
Note: The physical health measure is based on response to the question: "Now thinking about your physical health which includes physical illness and injury for how many days during the past 30 days was your physical health not good?"

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 3.0%
Monmouth County 2016: 13.5%

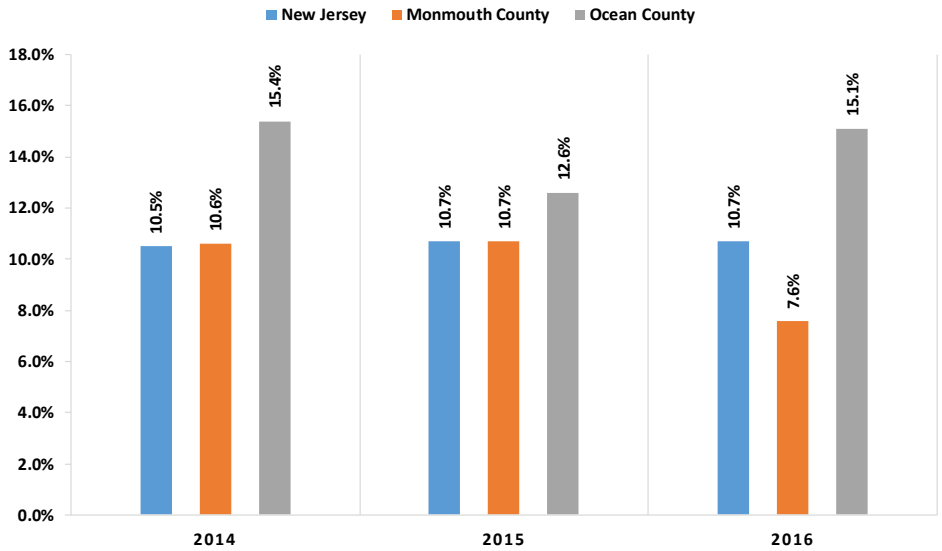
Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Reported "Fair" or "Poor" Health *Percentage of Respondents*	N.A.		
Physically Unhealthy Days Reported in the Past 30 Days *Average Age-Adjusted Number*	N.A.		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Behavioral Health Status

- County-wide, adults who report 14 or more of the past 30 days with "not good" mental health status decreased from 9.5% in 2012, to 7.6% in 2016. The 2016 Monmouth County report of 14+/30 days with "not good" mental health was lower than New Jersey at 10.7%.
- As compared to all New Jersey counties, Monmouth County residents with 14+/30 days in poor physical health ranks in the best performing quartile.
- As compared to County Health Ranking Monmouth County ranks in the bottom quartile.

Frequent Mental Distress
Percent Reporting 14 or More of the Past 30 Days Mental Health Not Good
State & County Comparisons, 2014-2016

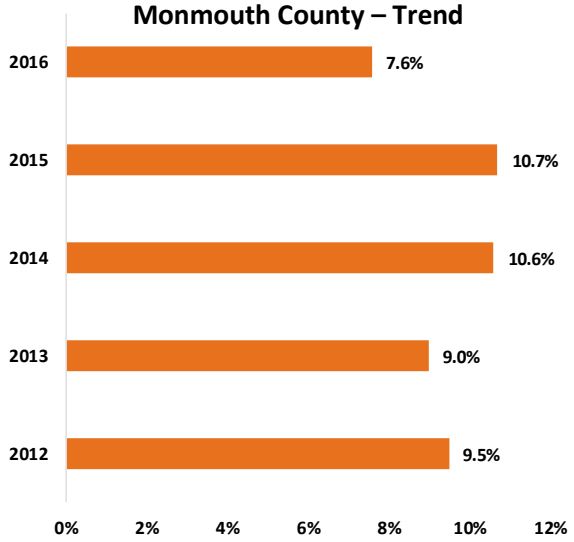


Source: New Jersey Behavioral Risk Factor Survey
Note: The physical health measure is based on response to the question: "Now thinking about your physical health which includes physical illness and injury for how many days during the past 30 days was your physical health not good?"

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 3.1%
Monmouth County 2016: 7.6%

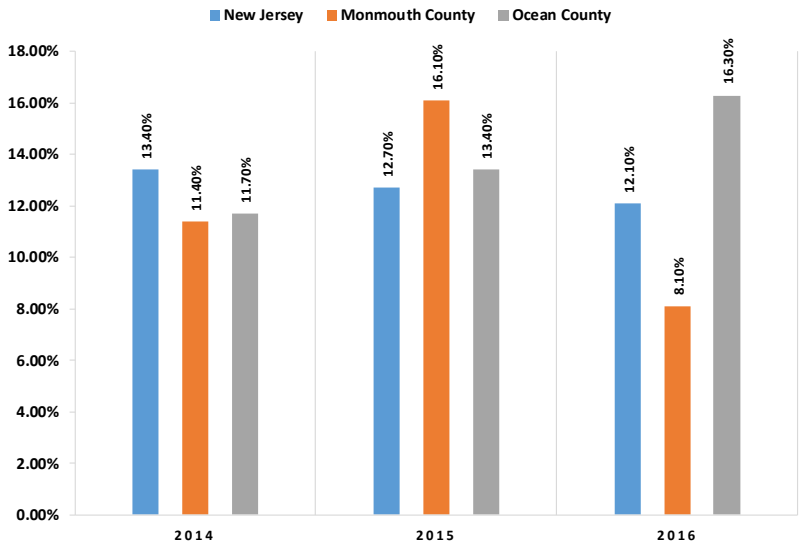
Frequent Mental Distress
Percent Reporting 14 or More of the Past 30 Days Mental Health Not Good
Monmouth County – Trend



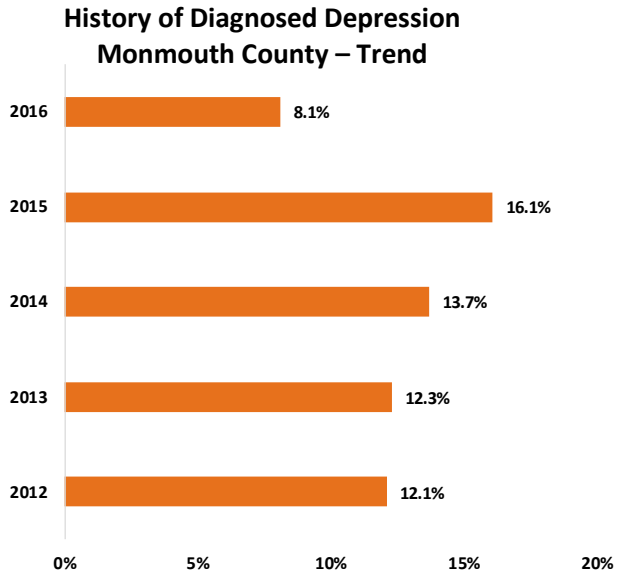
Source: New Jersey Behavioral Risk Factor Survey
Note: The physical health measure is based on response to the question: "Now thinking about your physical health which includes physical illness and injury for how many days during the past 30 days was your physical health not good?"

- Between 2012 and 2016, the percent of Monmouth County residents reporting a history of depression decreased from 12.1% to 8.1%.
- The Monmouth County rate for history of depression was lower than the statewide rate (12.1%) and ranked in the best performing quartile among New Jersey counties.

History of Diagnosed Depression
State & County Comparisons 2014-2016



Source: New Jersey Behavioral Risk Factor Survey
Note: The frequent mental distress health measure is based on response to the question: "Now thinking about your mental health which includes stress depression and problems with emotions for how many days during the past 30 days was your mental health not good?"



Source: New Jersey Behavioral Risk Factor Survey
Note: The frequent mental distress health measure is based on response to the question: "Now thinking about your mental health which includes stress depression and problems with emotions for how many days during the past 30 days was your mental health not good?"

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Mentally Unhealthy Days Reported in the Past 30 Days *Average Age-Adjusted Number*	N.A.		
History of Diagnosed Depression	N.A.	N.A.	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

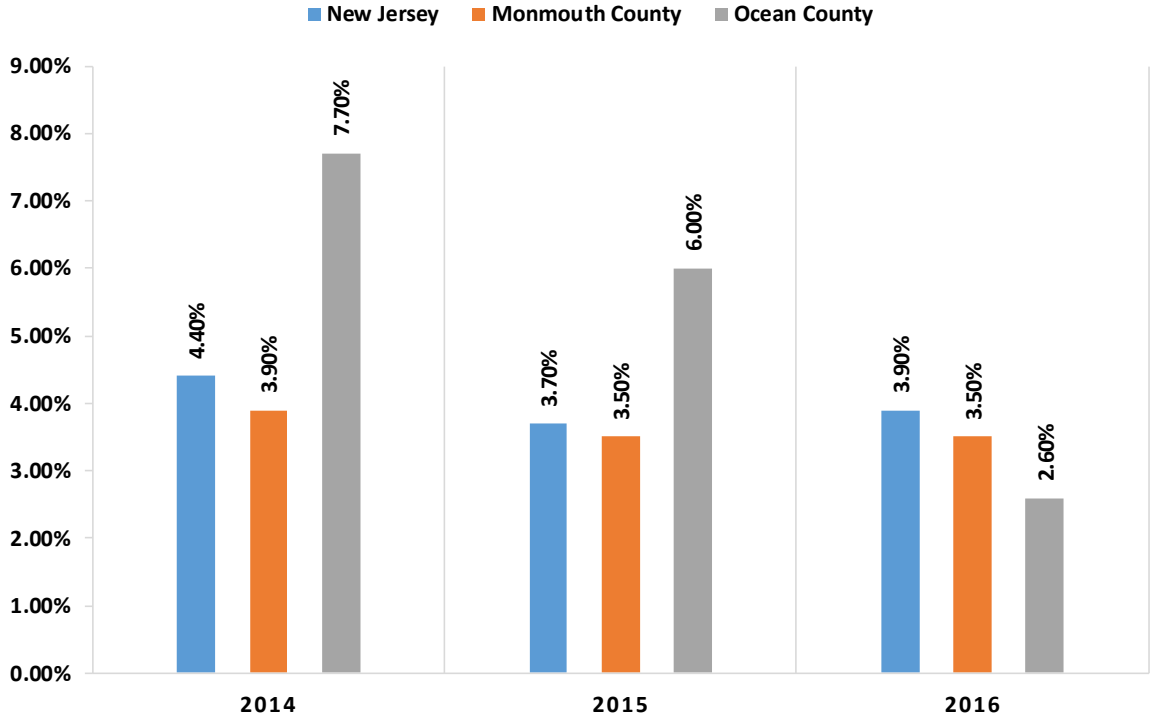
7. Morbidity

Morbidity, the rate of disease incidence, is a measure of quality of life and how healthy a population is in terms of being disease free.

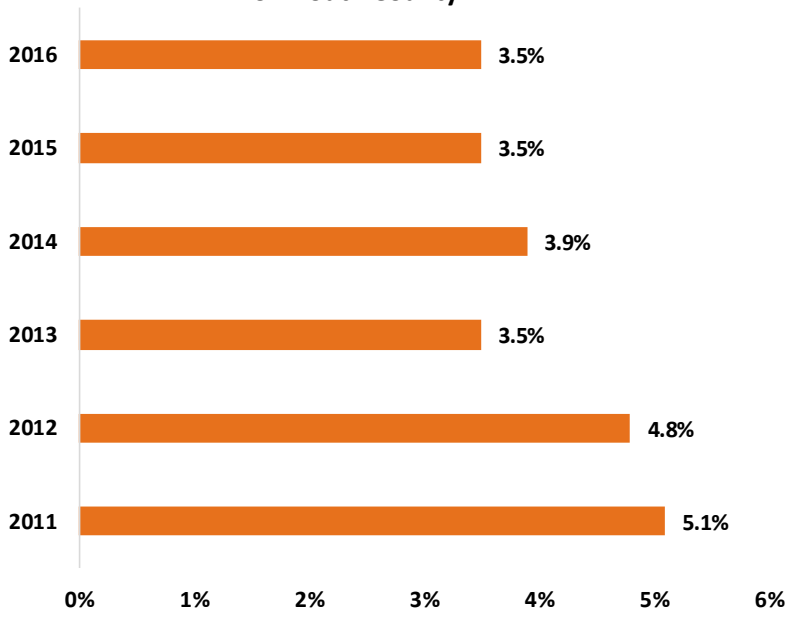
Heart Disease

- According to BRFSS, the percent of Monmouth County residents told they have angina or coronary heart disease decreased from 3.9% in 2011, to 3.5% in 2016. In 2016, BRFSS indicates 3.9% of New Jersey respondents have angina or coronary heart disease.
- As compared to New Jersey, Monmouth County residents reporting angina or coronary heart disease ranks in the middle performing quartile.

Cardiovascular Disease (Percent "Yes")
Were You Ever Told You Had Angina or Coronary Heart Disease?
State & County Comparisons, 2014-2016



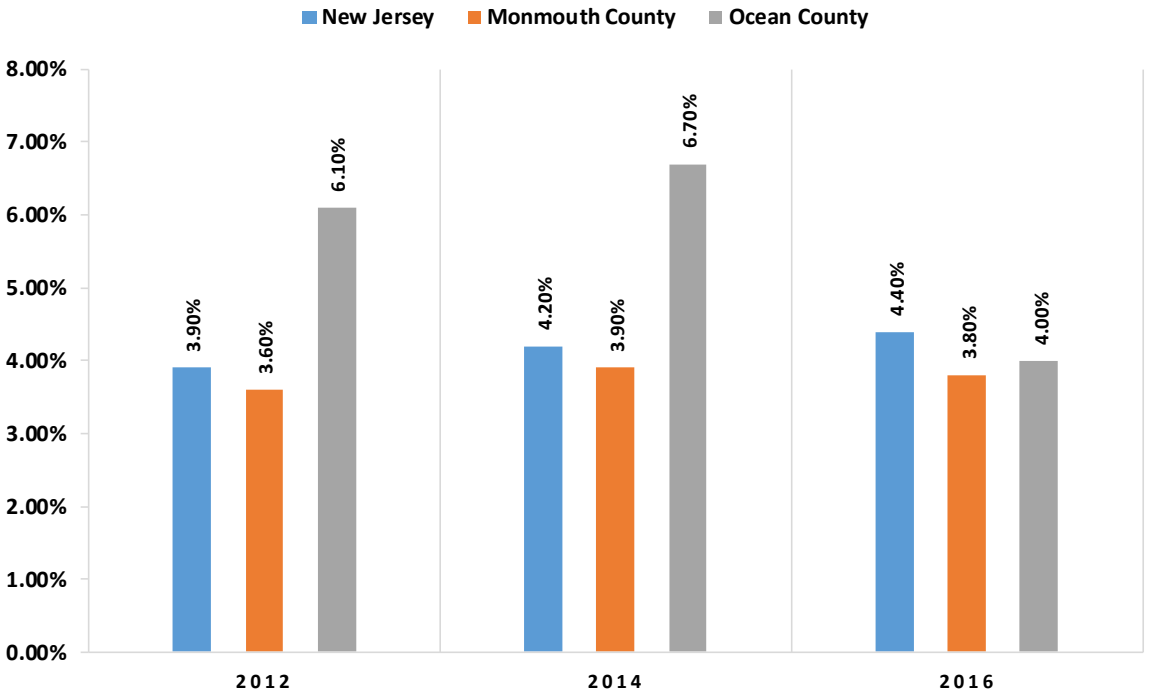
Monmouth County



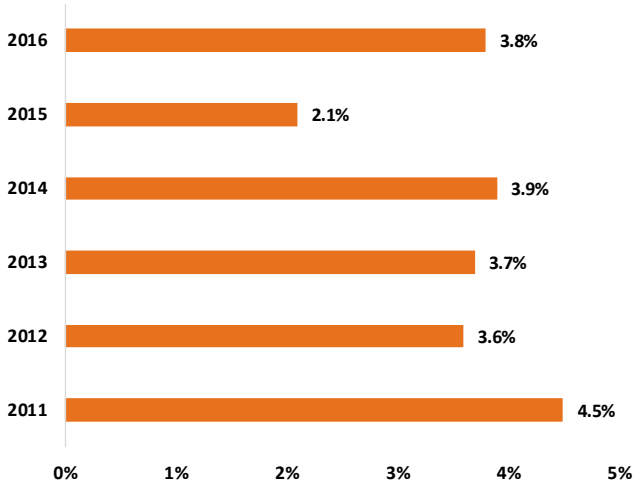
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

- According to BRFSS, the percent of Monmouth County residents told they have had a heart attack declined 0.7 percentage point from 4.5% in 2011 to 3.8% in 2016. In 2016, BRFSS indicated 4.4% of New Jersey respondents were told they had a heart attack.
- Monmouth County ranks in the middle performing quartile compared to all 21 New Jersey counties for residents who had a heart attack.

Cardiovascular Disease (Percent "Yes")
Were You Ever Told You Had a Heart Attack? (Myocardial Infarction)



Monmouth County

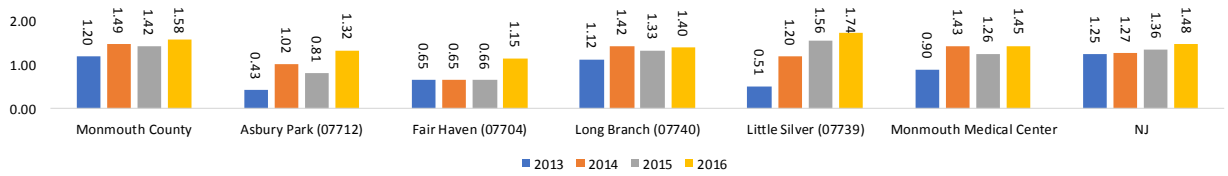


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Heart Disease Hospital Use Rates for County, MMC Service Area, and Selected Towns

- In 2016, the rate of Monmouth County residents using a hospital service with a heart attack diagnosis was higher than those in the State and the MMC Service Area.
- Little Silver had the highest rate of patients hospitalized with a diagnosis of a heart attack at 1.74/1,000 and Fair Haven residents reported the lowest rate of heart attack at 1.15/1,000.

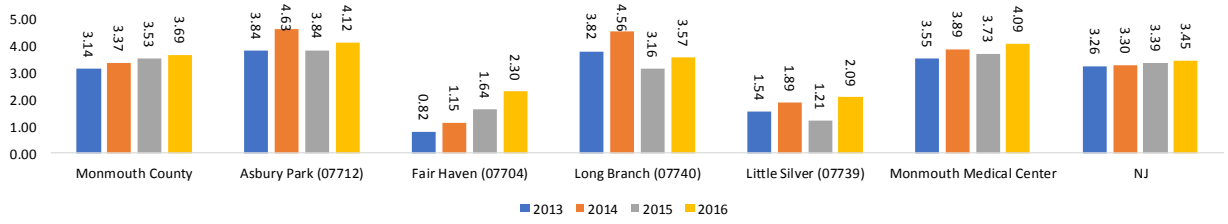
Heart Attack: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 280-285

- Between 2013 and 2016, the rate of patients hospitalized with a diagnosis of heart failure in Monmouth County was lower than MMC's Service Area.
- In 2016, Asbury Park residents exhibited the highest rate of patients hospitalized with a diagnosis of heart failure/CHF at 4.12/1,000 and Little Silver residents had the lowest rate at 2.09/1,000.

Heart Failure/CHF: Acute Care IP; Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016

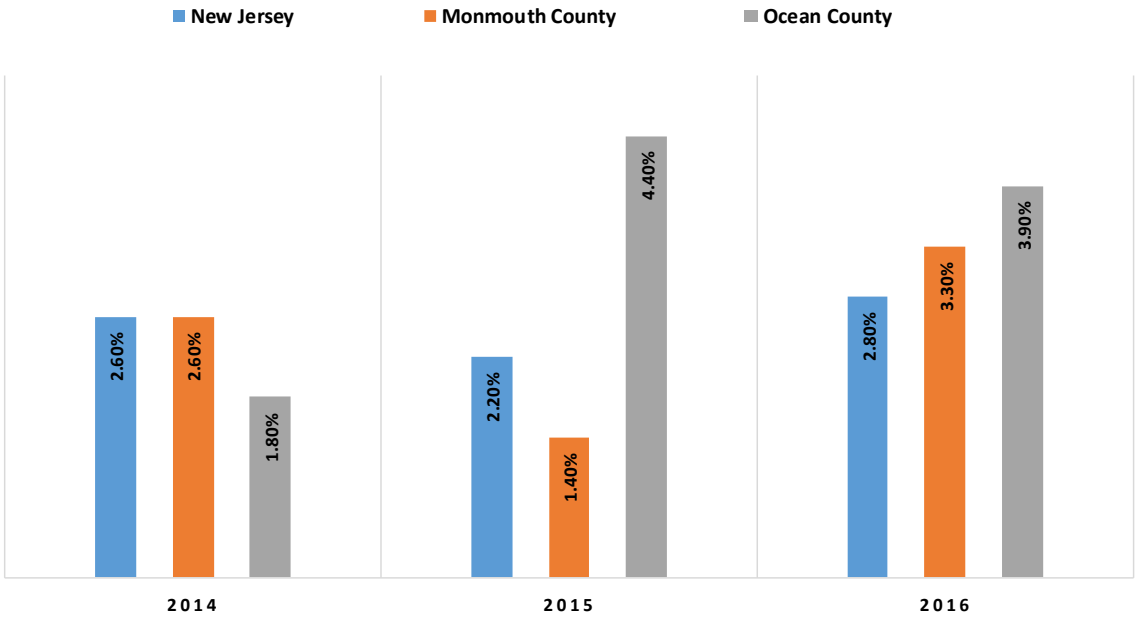


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 291-293

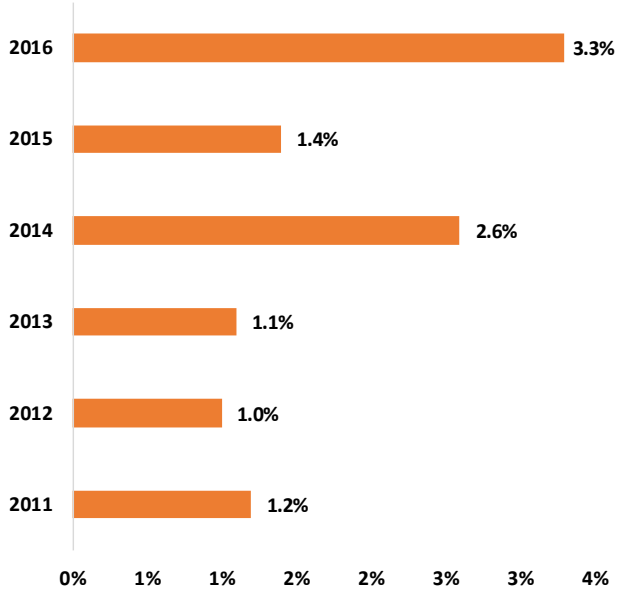
Stroke

- In 2016, BRFSS reported 3.3% of Monmouth County respondents indicated they had a stroke, up from 1.2% in 2011.
- In 2016, Monmouth County (3.3%) reported a higher rate of strokes than the State (2.8%).
- Monmouth County ranks in the middle quartile of New Jersey counties for percentage of the population that had a stroke.

Cardiovascular Disease (Percent "Yes"): Have You Ever Been Told You Had a Stroke?
State & County Comparisons, 2014-2016



Monmouth County

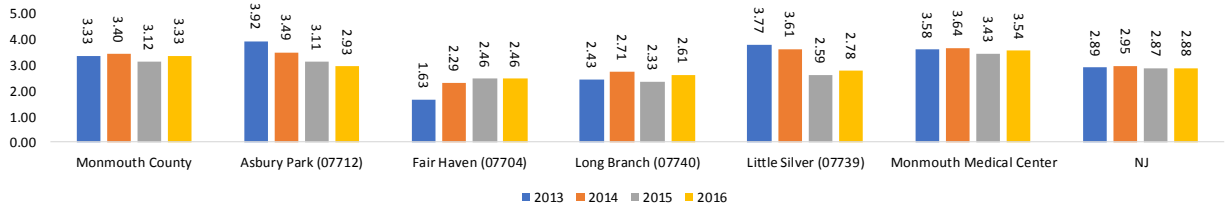


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Stroke Hospital Use Rates for County, MMC Service Area, and Selected Towns

- From 2013 through 2016, Monmouth County had a higher rate of patients using a hospital service with stroke/TIA diagnosis compared to the State.
- In 2016, MMC's Service Area (3.54/1,000) had a higher rate for patients hospitalized for stroke/TIA diagnosis than the State or County.

Stroke/TIA: Acute Care IP; Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



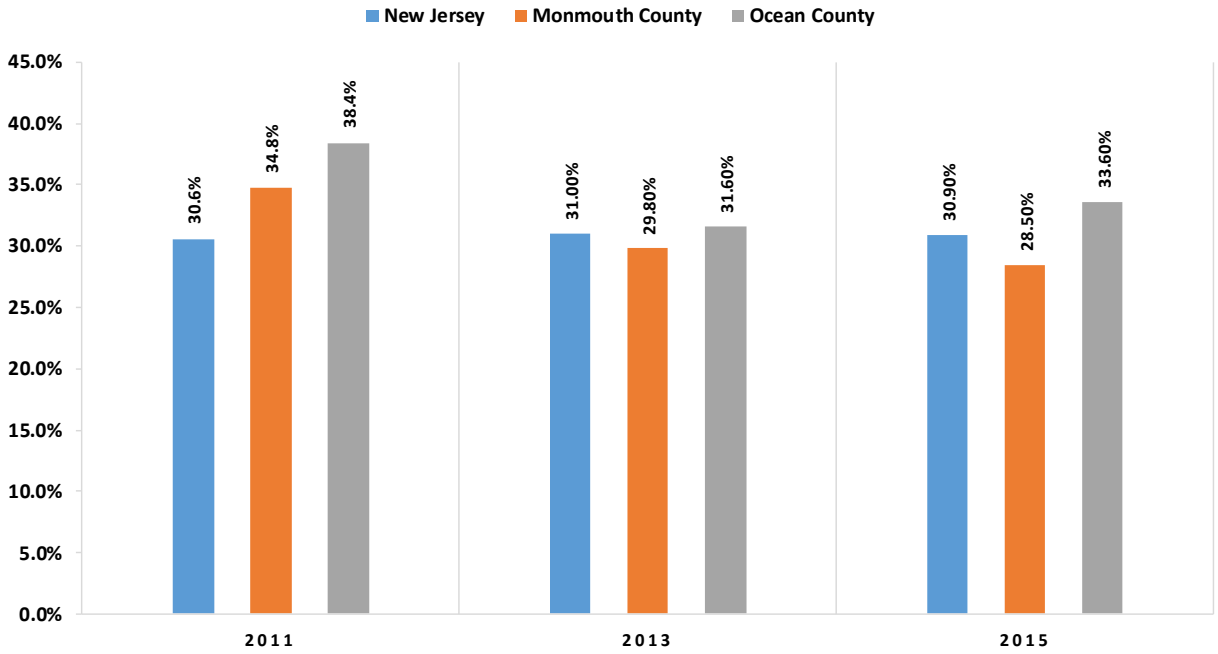
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 061-069

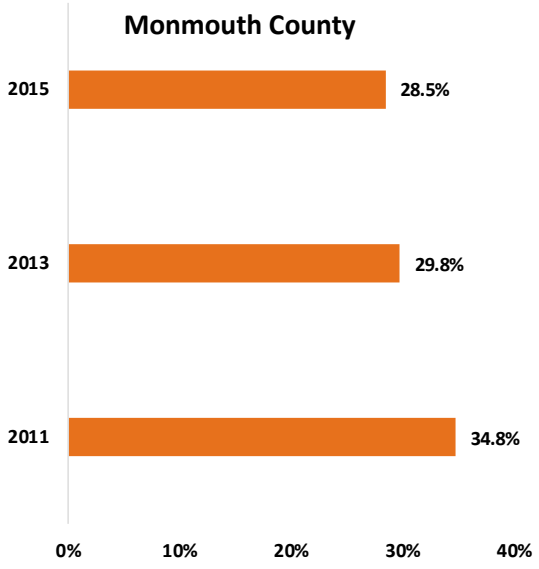
Hypertension and High Cholesterol

According to the American Heart Association, risk factors associated with developing cardiovascular disease include: high blood pressure, high cholesterol, cigarette smoking, physical inactivity, poor diet, overweight and obesity and Diabetes.

- In 2015, BRFSS reported 28.5% of Monmouth County adults were aware that they suffered from hypertension, less than New Jersey adults (30.9%), and adults in Ocean County (33.6%).
- Between 2011 and 2015, Monmouth County adults who were told they had high blood pressure decreased 6.3 percentage points.
- In 2015, Monmouth County (28.5%) was higher than the *Healthy People 2020* target (26.9%) for adults with high blood pressure.

Adults Who Have Been Told They Have Hypertension
State & County Comparisons, 2011-2015





Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

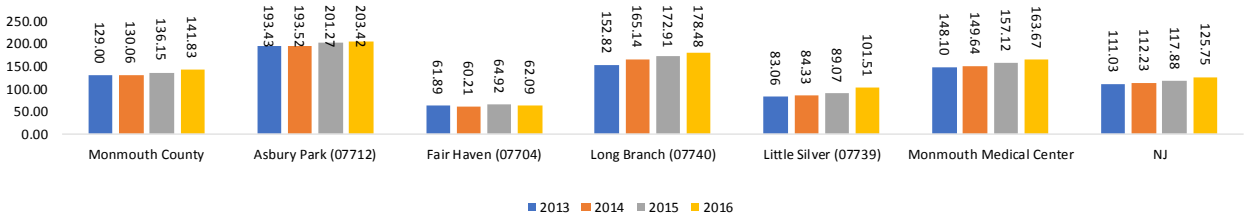
Healthy People 2020

Baseline: 29.7%
Target: 26.9%
Monmouth County 2015: 28.5%

Hypertension Hospital Use Rates for County, MMC Service Area, and Selected Towns

- Asbury Park had a higher rate of patients using a hospital service with a diagnosis of hypertension for each year from 2013 through 2016 than the MMC Service Area.
- In 2016, MMC's Service Area (165.67/1,000) had a higher rate of patients using a hospital service with a hypertension diagnosis than Monmouth County (141.83/1,000).

Hypertension: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016

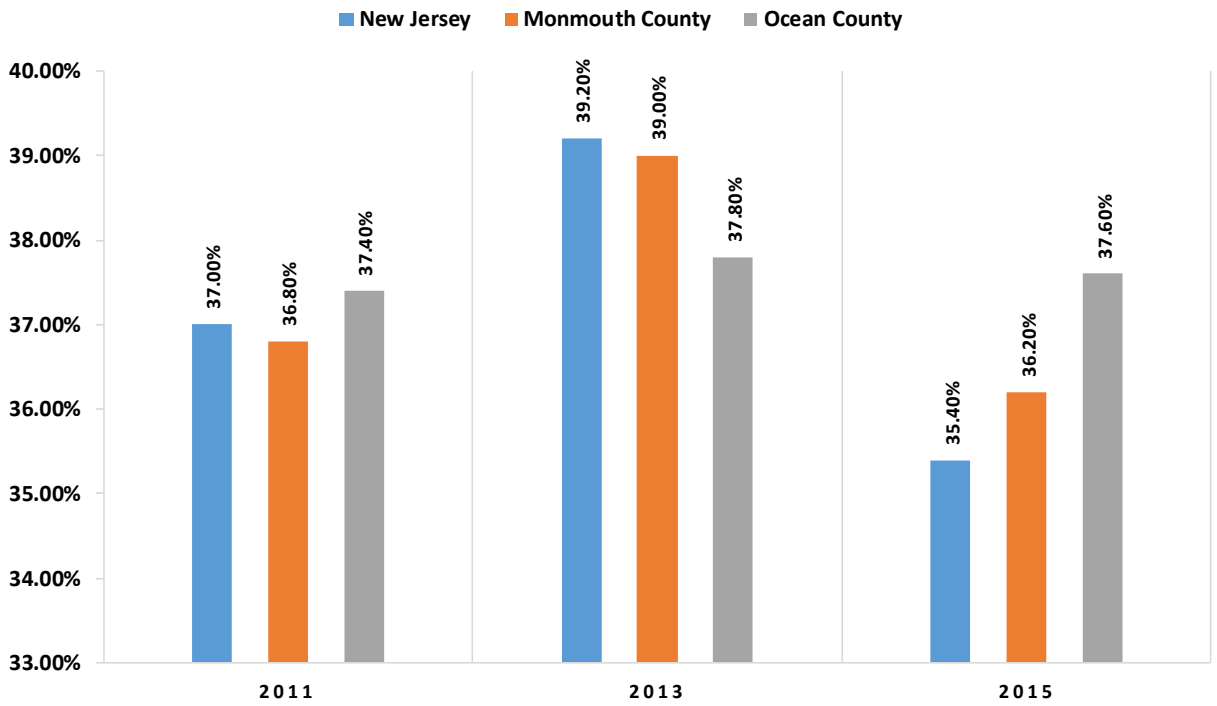


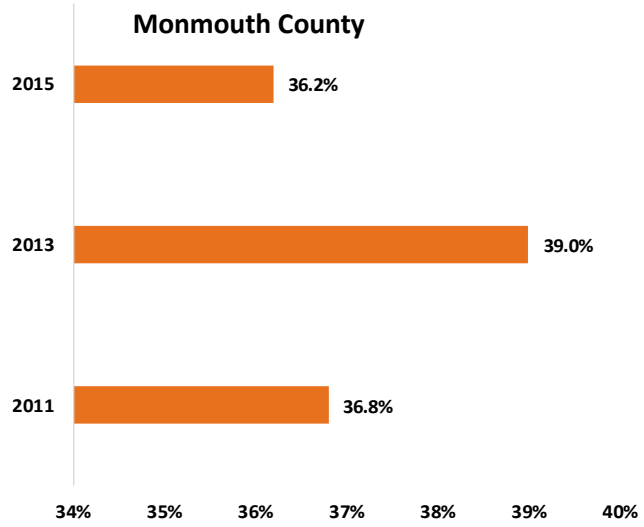
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes in Range 401-405.99 (Appearing Anywhere In First 13 DX Codes On Patient Record)

Cholesterol

- In the 2015 BRFSS, 36.2% of Monmouth County adults who had their cholesterol checked were told it was high, similar to New Jersey adults (35.4%).
- The percent of Monmouth County adults reporting high cholesterol fluctuated from a low of 36.2% in 2015 to a high of 39.0% in 2013.
- The 2015 Monmouth County percent of adults who had their cholesterol checked and were told it was high was more than double the *Healthy People 2020* target of 13.5%. Monmouth County is in the lowest performing quartile with respect to the *Healthy People 2020* target.

Adults Who Have Had Their Cholesterol Checked and Told It Was High
State & County Comparisons, 2011-2015





Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

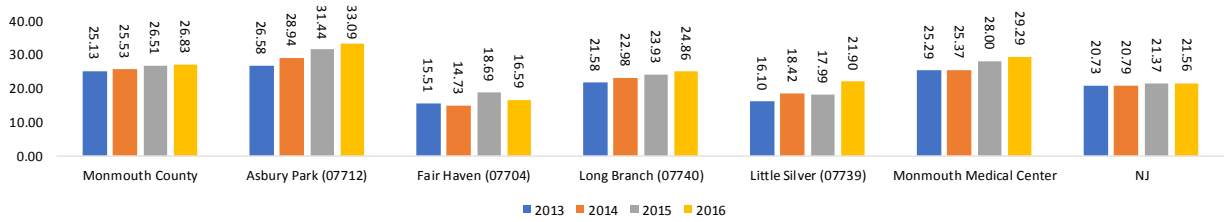
Healthy People 2020

Baseline: 15.0%
Target: 13.5%
Monmouth County 2015: 36.2%

High Cholesterol Hospital Use Rates for County, MMC Service Area, and Selected Towns

- The rate of patients using a hospital service with a diagnosis of high cholesterol was higher in MMC's Service Area than the State or County.
- In 2016, the rate of patients using a hospital service with a diagnosis of high cholesterol was highest in Asbury Park in comparison to the other geographies.

High Cholesterol: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016

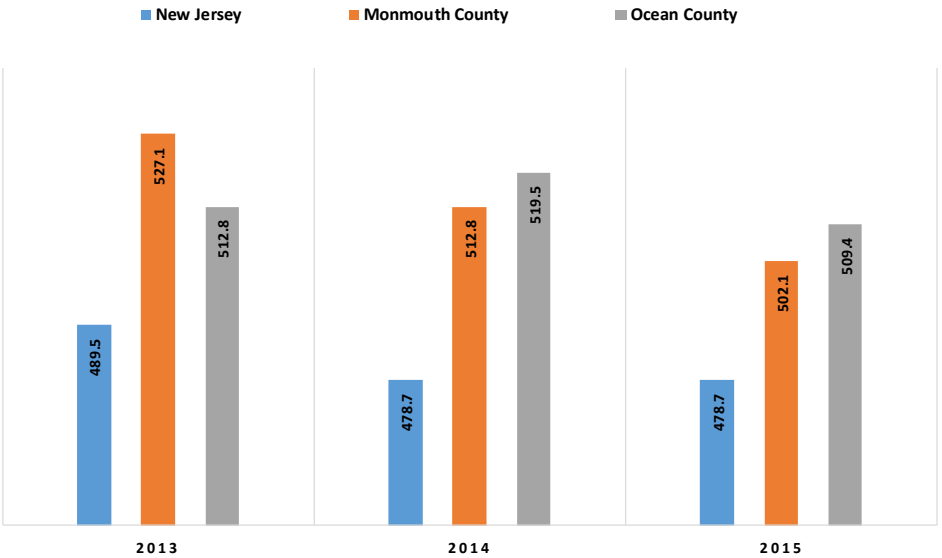


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes 272.0 or 272.2 (Appearing Anywhere In First 13 DX Codes On Patient Record)

Cancer

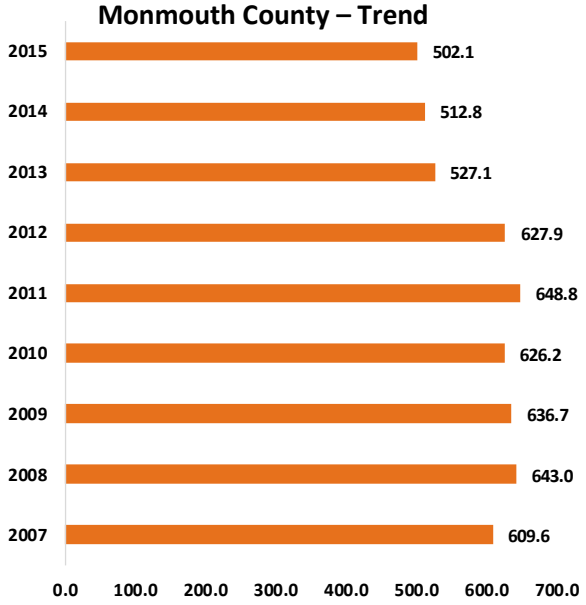
- Incidence of overall invasive cancer in Monmouth County decreased from 609.6/100,000 in 2007, to 502.1/100,000 in 2015.
- In 2015, the overall incidence of cancer in Monmouth County was higher than the State but lower than Ocean County.

Overall Invasive Cancer Incidence: Age-Adjusted Rate / 100,000 Population
State & County Comparisons, 2013-2015



Source: NJDOH New Jersey Cancer Registry
Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100000 for Breast Cancer is based on Females

Overall Invasive Cancer Incidence: Age-Adjusted Rate / 100,000 Population
Monmouth County – Trend

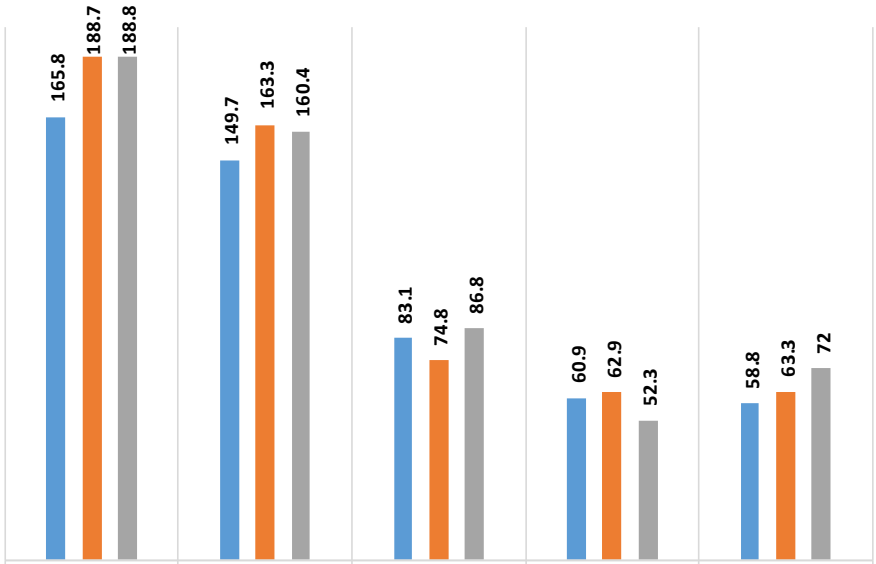


Source: NJDOH New Jersey Cancer Registry
Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100000 for Breast Cancer is based on Females

Incidence by Site

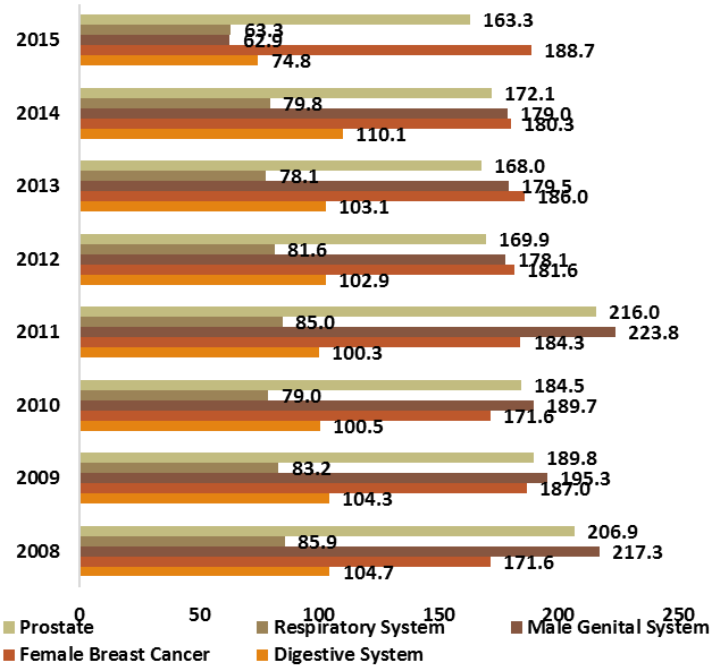
- In Monmouth County, breast (188.7/100,000) and prostate (163.3/100,000) cancers had the highest incidence rates among the top five cancers, followed by digestive system (74.8/100,000), male genital system (62.9/100,000), and respiratory system (63.3/100,000).
- In 2015, only digestive system cancer incidence rates in Monmouth County were lower than New Jersey.
- Between 2008 and 2015, incidence trends for Monmouth County by site were:
    - Breast increased 13.2%
    - Digestive System decreased 28.6%
    - Prostate declined 21.0%
    - Male Genital System increased 26.3%
    - Respiratory System decreased 26.8%
- Prostate, breast, digestive system, male genital system, and respiratory cancer incidence for Monmouth County perform in the middle quartile in comparison to all 21 New Jersey counties.

Invasive Cancer Incidence by Site: Age-Adjusted Rate / 100,000 Population
State & County Comparison, 2015



	Breast	Prostate	Digestive System	Male Genital System	Respiratory System
New Jersey	165.8	149.7	83.1	60.9	58.8
Monmouth County	188.7	163.3	74.8	62.9	63.3
Ocean County	188.8	160.4	86.8	52.3	72

Monmouth County

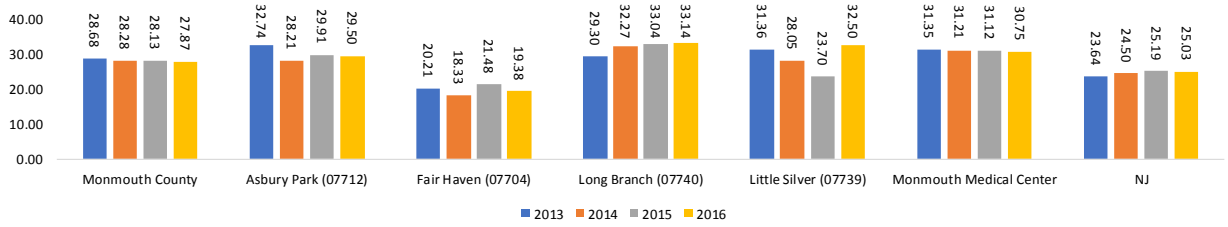


Source: NJDOH New Jersey Cancer Registry
Note: The Rate / 100000 for Prostate Cancer is based on Males and the Rate / 100000 for Breast Cancer is based on Females

Cancer Hospital Use Rates for County, MMC Service Area, and Selected Towns

- The 2016 rate of patients using a hospital service with a cancer diagnosis per 1,000 population was highest in Long Branch with respect to the comparative geographies.
- In 2016, the rate for patients discharged with a cancer diagnosis/1,000 population was lower in the County (27.87/1,000) than in the MMC Service Area (30.75/1,000).

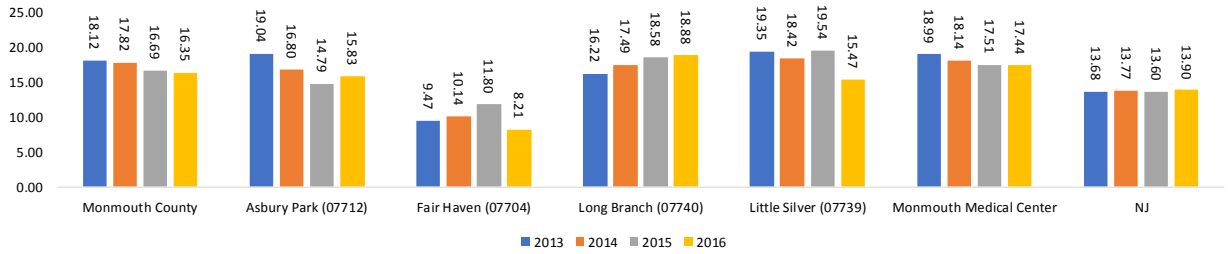
Cancer: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census Definition: Inpatient, Same Day Stay and ED Discharges – New Solution's Inc. Oncology Product Line (includes History of Cancer)

- The 2016 rate of residents using a hospital service that had a history of cancer diagnosis was highest in Long Branch (18.88/1,000) in terms of the comparison areas.
- In 2016, the rate of patients hospitalized with a history of cancer diagnosis/1,000 population was lowest in Fair Haven (8.21/1,000).

History of Cancer: Acute Care Inpatient, Same Day and ED Discharges; Rate / 1,000 Population



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census
Definition: Inpatient, Same Day Stay and ED Discharges – New Solution's Inc. Oncology Product Line (History of Cancer Only)

Asthma

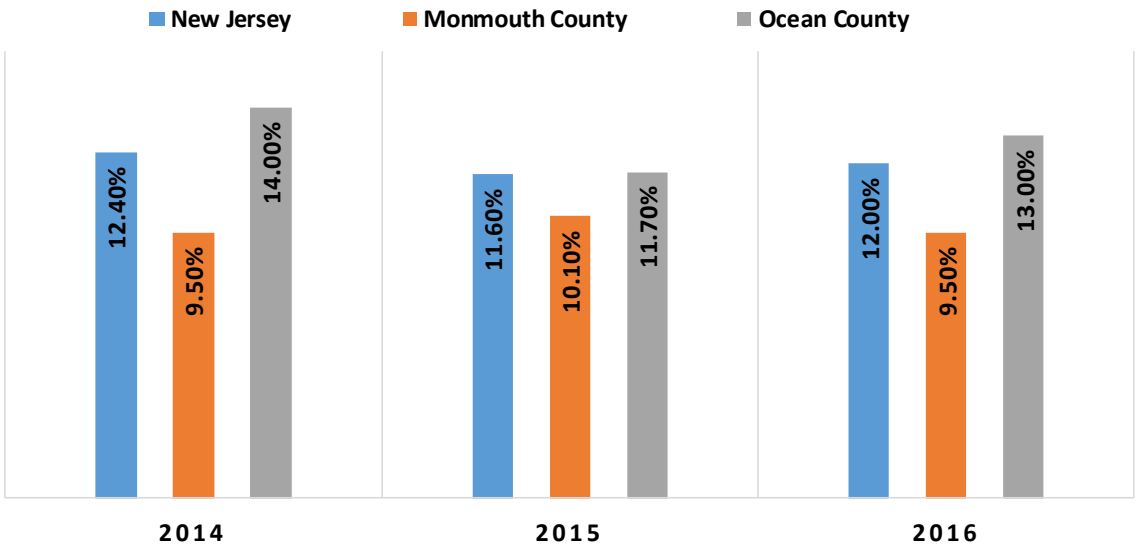
Asthma, a chronic lung disease often with childhood onset, inflames and narrows airways and causes recurring periods of wheezing, chest tightness, shortness of breath and coughing.[54] The exact cause of asthma is unknown; however, researchers believe genetic and environmental factors are involved. Factors may include: atopy, parents with asthma, certain respiratory infections during childhood and contact with

[54] http://www.nhlbi.nih.gov/health/health-topics/topics/asthma

some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing.[55]

- According to the 2016 BRFSS survey, 9.5% of Monmouth County adults reported ever being told they have asthma.
- The percent of Monmouth County residents with asthma (9.5%) is lower than the State (12.0%), and Ocean County. Compared to all 21 New Jersey counties, Monmouth County was in the best performing quartile.

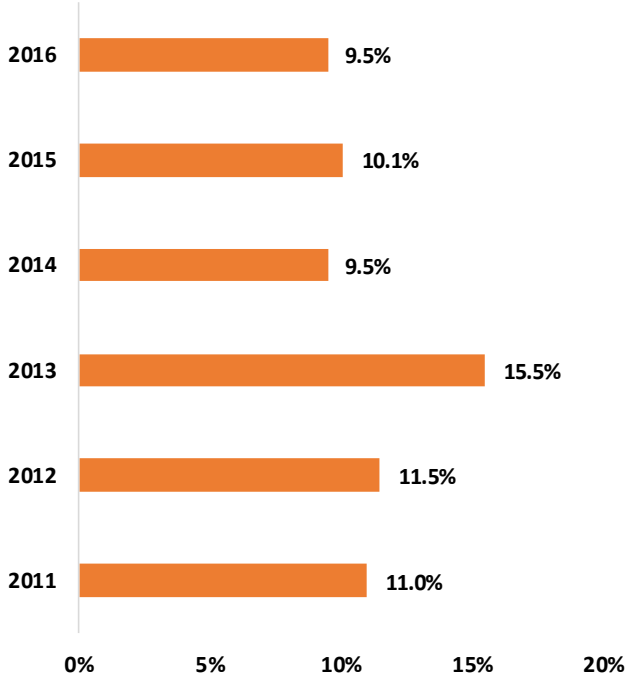
Asthma (Percent "Yes"): Adults Who Have Ever Been Told They Have Asthma
State & County Comparisons, 2014-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

[55] ibid

Asthma (Percent "Yes"): Adults Who Have Ever Been Told They Have Asthma
Monmouth County – Trend

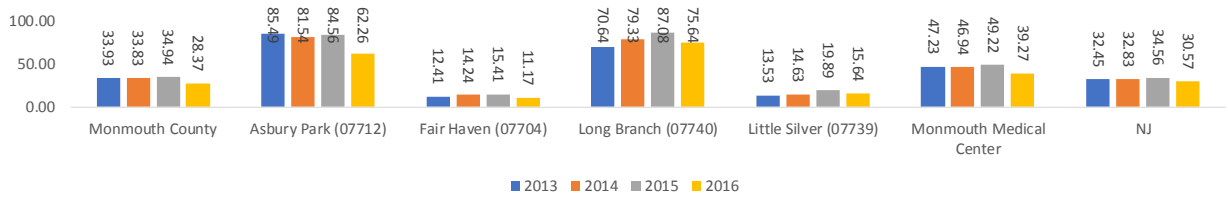


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

Asthma Hospital Use Rates for County, MMC Service Area, and Selected Towns

- Rates of residents using a hospital service with a diagnosis of asthma were highest in Long Branch in 2016 (75.64/1,000) of the comparative geographies.
- In 2016, the rate of MMC Service Area residents (39.27/1,000) using a hospital service with a diagnosis of asthma exceeded the New Jersey (30.57/1,000) rate and the Monmouth County rate (28.37/1,000).

Asthma: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



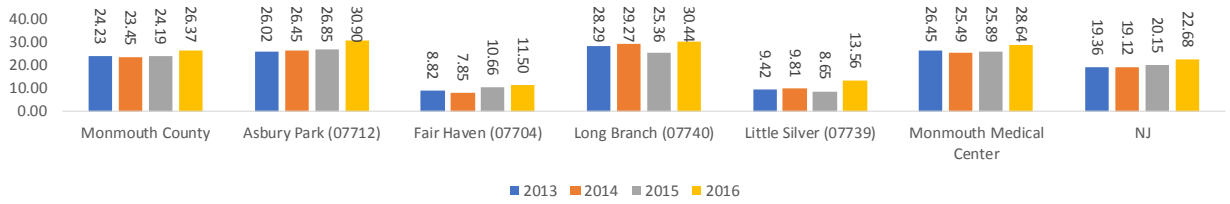
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Range 493-493.9 (Appearing Anywhere In First 13 DX Codes On Patient Record)

COPD (excluding Asthma)

Chronic Obstructive Pulmonary Disease (COPD) is a group of diseases that cause airflow blockage and breathing-related problems including emphysema, chronic bronchitis. In the United States, tobacco smoke is a key factor in the development and progression of COPD, although exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play roles.

- Rates of residents hospitalized with a diagnosis of COPD were higher in Asbury Park (30.9/1,000) in 2016 than in the MMC Service Area.
- In 2016, the rate of hospitalization for patients with a diagnosis of COPD was lowest in Fair Haven (11.17/1,000) compared to the other comparison areas.

COPD (excluding Asthma): Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Ranges 490-492 & 494-496 (Appearing Anywhere In First 13 DX Codes On Patient Record)

Diabetes

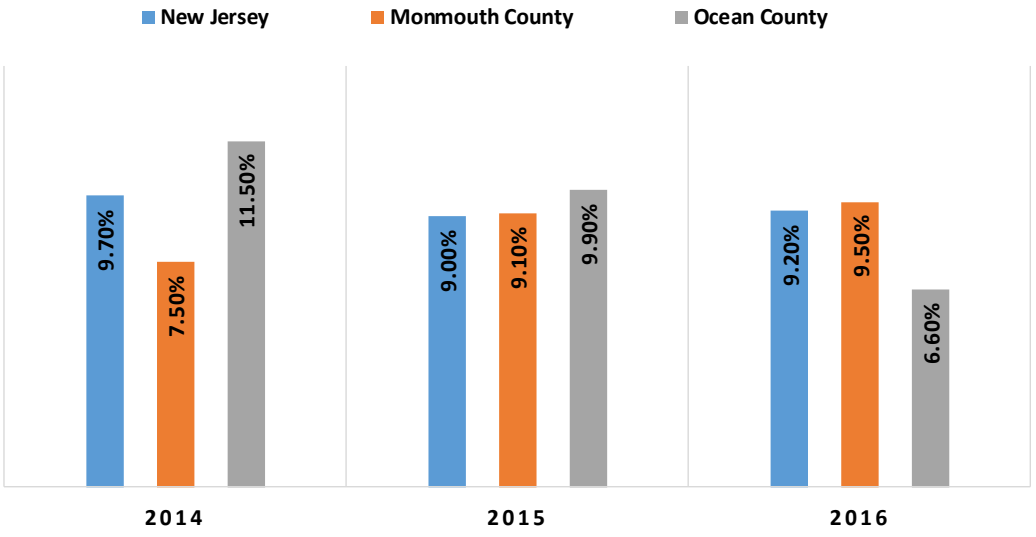
Diabetes is indicated by high levels of blood glucose as a result of problems in insulin production, effectiveness, or a combination of both. The three most common types of diabetes are Type 1, Type 2 and Gestational. Individuals with diabetes may develop serious health complications including heart disease, stroke, kidney failure, blindness, amputation and premature death.

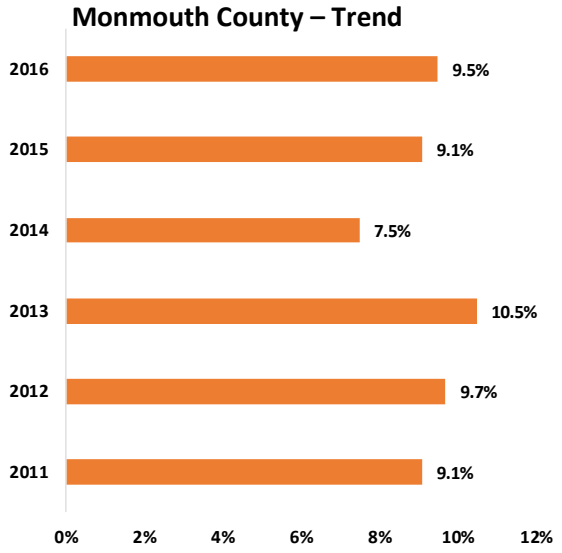
Type 1 develops when insulin producing cells located in the pancreas are destroyed. There is no known way to prevent Type 1 diabetes. In order to survive, Type 1 diabetics must have insulin delivered by injection or pump. Type 2 primarily onsets with insulin resistance disorder in which cells within the muscles, liver, and fat tissue are unable to properly use insulin. Higher risk for developing Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanics/Latinos, American Indians, some Asians, and Native Hawaiians or other Pacific Islanders are at particularly high risk for Type 2. Gestational diabetes is a form of glucose intolerance diagnosed during the second or third trimester of pregnancy. The risk factors for gestational diabetes are similar to those for type 2 diabetes.[56]

[56] http://www.cdc.gov/diabetes/pdfs/data/2014-report-generalinformation.pdf

- Diabetes is increasing among Monmouth County residents. Between 2014 (7.5%) and 2016 (9.5%), the rate increased by 2 percentage points.
- In 2016, Monmouth County had a higher percentage of patients reporting diabetes than the State and Ocean County. Monmouth County is in the middle performing quartile for diabetes as compared to all 21 counties statewide.

Diabetes (Percent "Yes"): Have You Ever Been Told by a Doctor That You Have Diabetes? State & County Comparison, 2014-2016





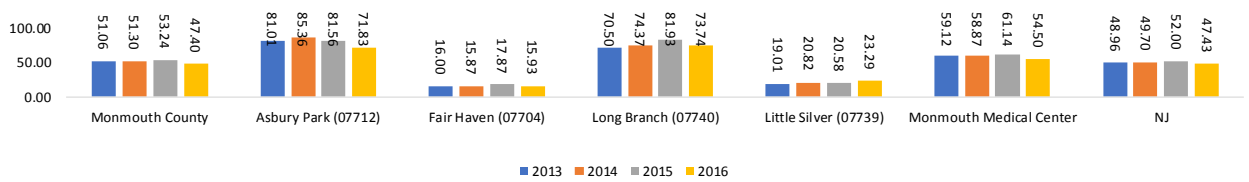
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 8%
Monmouth County 2016: 9.5%

- High rates of Long Branch (73.74/1,000) and Asbury Park (71.83/1,000) residents using a hospital service with a diabetes diagnosis were observed
- In 2016, the rate of patients using a hospital service with diabetes diagnosis was higher in the MMC Service Area (54.50/1,000) than in the County (47.40/1,000).

Diabetes: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population 2013-2016

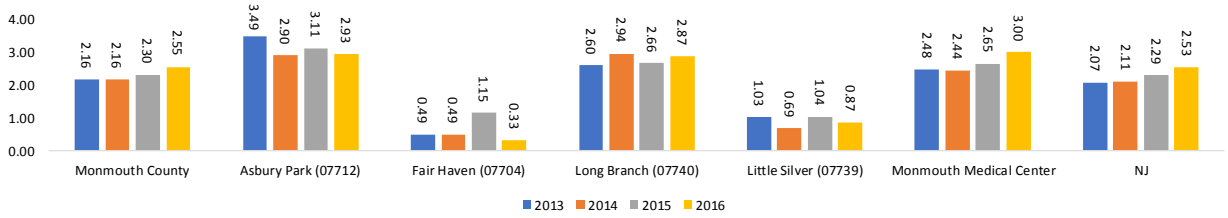


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In The Range 249.00-250.03 (Appearing Anywhere In First 13 DX Codes On Patient Record)

Diabetes is a contributing factor to renal failure. More than 35% of U.S. adults with diabetes have chronic kidney disease. High blood sugar and high blood pressure increase the risk that chronic kidney disease will eventually lead to kidney failure.[57]

- In 2016, the rate of Monmouth County residents using a hospital service with diagnosis of renal failure in MMC's Service Area (3.0/1,000) was higher than the State and County.
- The 2016 rate of Monmouth County (2.55/1,000) residents using a hospital service with diagnosis of renal failure was slightly higher than for New Jersey residents (2.53/1,000).

Renal Failure: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges For MS-DRGs In the Range 682-685

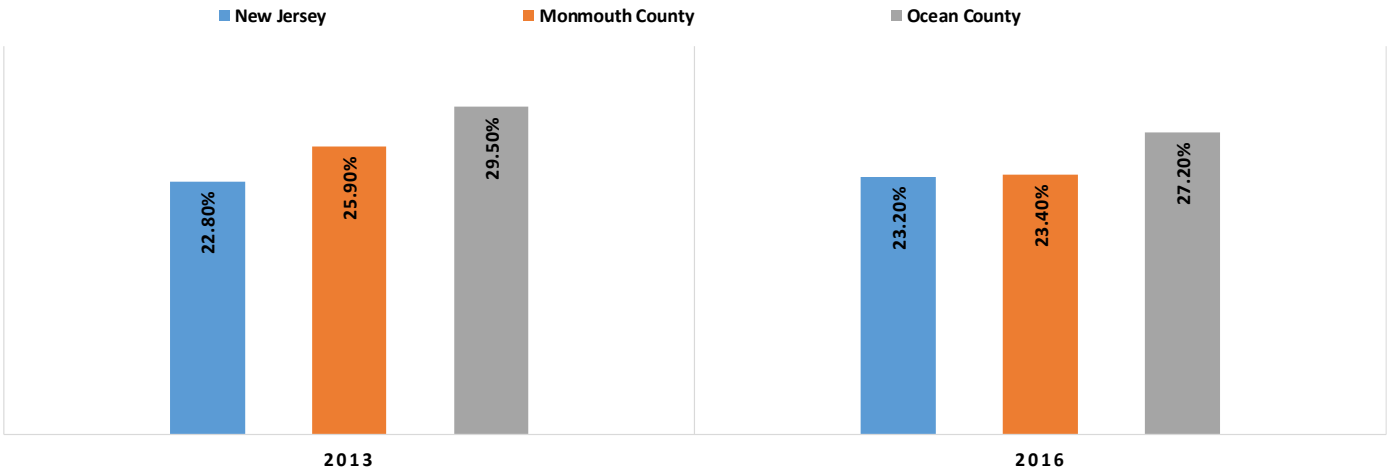
[57] http://www.cdc.gov/Features/WorldKidneyDay

Arthritis

Arthritis affects more than 1 in 5 adults and is the nation's most common cause of disability. A*rthritis* describes more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround the joint and other connective tissue. The pattern, severity and location of symptoms vary depending on the specific form of the disease. Typically, rheumatic conditions are characterized by pain and stiffness in and around one or more joints. The symptoms can develop gradually or suddenly.[58]

- Between 2013 and 2016, the percentage of Monmouth County residents reporting arthritis decreased from 25.9% to 23.4%.
- The percentage of Monmouth County residents reporting arthritis was slightly higher than the State (23.2%) but lower than Ocean County (27.2%). As compared to 21 counties statewide, Monmouth County ranks in the middle quartile.

Arthritis (Percent "Yes"): Adults Who Have Ever Been Told They Have Arthritis
State and County Comparison 2013-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

[58] http://www.cdc.gov/arthritis/basics.htm

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
Overall Cancer Incidence *Age-Adjusted Rate per 100,000 Population*	N.A	N.A.	
Prostate Cancer Incidence *Age-Adjusted Rate per 100,000 Population*	N.A.	N.A.	
Breast Cancer Incidence *Age-Adjusted Rate per 100,000 Population*	N.A.	N.A.	
Respiratory System Cancer Incidence *Age-Adjusted Rate per 100,000 Population*	N.A.	N.A.	
Digestive System Cancer Incidence *Age-Adjusted Rate per 100,000 Population*	N.A.	N.A.	
Male Genital System Cancer Incidence *Age-Adjusted Rate per 100,000 Population*	N.A.	N.A.	

Indicator	*Healthy People 2020* Target	County Health Rankings Benchmark	New Jersey
CARDIOVASCULAR DISEASE ***Were You Ever Told You Had Angina or Coronary Heart Disease?*** % Yes	N.A.	N.A.	
CARDIOVASCULAR DISEASE ***Were You Ever Told You Had a Heart Attack?*** % Yes	N.A.	N.A.	
STROKE ***Were You Ever Told You Had a Stroke?*** % Yes	N.A.	N.A.	
Hypertension Awareness *Adults Who Have Been Told They Have High Blood Pressure*		N.A.	
Cholesterol Awareness *Adults Who Have Had Their Cholesterol Checked and Told it Was High*		N.A.	
ASTHMA ***Adults Who Have Ever Been Told They Have Asthma*** % Yes	N.A	N.A.	
DIABETES ***Have You Ever Been Told by a Doctor That You Have Diabetes*** % Yes	N.A.		
ARTHRITIS ***Adults Who Have Ever Been Told They Have Arthritis*** % Yes	N.A.	N.A.	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

6. ASSETS AND GAPS ANALYSIS

The Assets and Gaps Analysis summarizes and highlights each component of the CHNA. Assets highlight Monmouth County's or Monmouth Medical Centers Service Area, indicating improvements over time in comparison to other counties and the State or in comparison to other races and genders. Gaps focus on disparities in Monmouth County's or in Monmouth Medical Center's Service Area_that have negative trends in comparison to other counties and the State or in comparison to other races or genders.

A. HEALTH DISPARITIES

Economic Status

ASSETS

- In 2016, the median household income of Monmouth County was $87,297, more than $13,000 above the statewide median of $73,702.
- The percent of people living in poverty in Monmouth County was 7.6% in 2016, lower than the State percentage of 10.9%.
- In 2016, the percent of unemployed people in Little Silver (2.1%) was lower than the County and State.
- Between 2015 and 2017, the percent of adults and children receiving TANF/WFNJ benefits in Monmouth County and State declined from .54% to .37%, respectively.
- 29.7% of Fair Haven residents earned a graduate or professional degree, higher than the State and County.

GAPS

- In 2016, Asbury Park (31.8%) had a higher percentage of children living below the poverty level than the County (10.1%) and State (15.6%).
- The percent of people living in poverty in Asbury Park (18.8%) is higher than the State and County.
- Monmouth County reported a 7-percentage point increase in the number of students eligible for free lunch between 2012-2013 and 2015-2016.
- In 2016, 16.4% of Long Branch residents did not complete high school, higher than the State and County.

Health and Health Care

ASSETS

- Between 2013-2015, the non-elderly population without health insurance in Monmouth County decreased from 12.4% to 7.9%.
- In 2015, the Monmouth County ratio for primary care providers was better than the CHR national benchmark.
- The adult ED ACSC rate for Monmouth County (50.45/1,000) was lower than the statewide rate.
- In 2016, the Monmouth County ACSC ED visits for children aged 0-17 was lower than the statewide rate.

GAPS

- The MMC Service Area had a higher ACSC ED visit rate for children than the State and County.
- Long Branch (246.1/1,000) had the highest ED visit rate for children in the MMC service area, higher than all other comparative figures.
- The 2016 inpatient ACSC for the MMC service area was higher than the State and County.

Neighborhood and Built Environment

ASSETS

- Monmouth County experienced a reduction in fine particulate matter between 2011 (11 PM2.5) and 2012 (9.5 PM2.5).
- Between 2013 and 2015, Monmouth County's food environment index increased to 8.7 out of 10, exceeding the national benchmark.
- Between 2010 and 2016, Monmouth County's motor vehicle crash deaths were lower than the national benchmark.
- In 2016, 19.7% of Monmouth County housing units were built before 1950, lower than New Jersey overall at 25.8%.
- The Monmouth County burglary rate decreased from 2.63/1,000 in 2014 to 1.89/1,000 in 2016.
- Between 2010 and 2015, the percent of Monmouth County residents with limited access to healthy foods increased.

GAPS

- Between 2013 and 2015, the percentage of children with elevated blood lead levels in Monmouth County increased from .4% to .6%.
- The violent crime rate in Monmouth County increased from 142/100,000 in 2014 to 149/100,000 in 2017.
- Between 2015 and 2016, the rate of deaths due to accidental poisoning and exposure to noxious substances in Monmouth County increased from 17.7/100,000 to 24.4/100,000, well above the national benchmark.

B. HEALTH FACTORS

Clinical Care Measures

ASSETS

- The percentage of VBACs in Monmouth County in 2016 were higher than the State rate.

GAPS

- Monmouth County's c-section rate in 2016 (28.3%) was higher than the State rate (25.2%).
- In 2016, MMC's Service Area inpatient use rate (180.72/1,000) was slightly higher than the State and County rates.
- In 2016, Long Branch's ED visit rate (634.85/1,000) was nearly double the State and County rates.

Health Behaviors

ASSETS

- In 2016, the Monmouth County rate for no prenatal care (0.6%) was lower than the State, and performed in the top quartile for New Jersey.
- The teen birth rate among Monmouth County residents (7.9/1,000) was lower than the State rate (15.3/1,000).
- In 2016, Monmouth County's chlamydia and gonorrhea rates were lower than the State rates.

GAPS

- In 2016, only 70.5% of Monmouth County women entered prenatal care in the first trimester, below the national benchmark.
- In 2016, the teen birth rate (15-19) for Ocean Grove was five times higher than the County rate.
- In 2015, the HIV prevalence rate in Monmouth County (322.6/100,000) was notably higher than the national benchmark (49/100,000).

Individual Behaviors

ASSETS

- In 2016, a lower percentage of Monmouth County residents were obese (25.4%) than the *Healthy People 2020* target (30.5%).

GAPS

- Between 2014 and 2016, smoking rates steadily rose in Monmouth County with an overall increase of 4.7 percentage points.
- Adults reporting binge drinking in Monmouth County increased from 17.5% in 2014, to 22.7% in 2016.
- Monmouth County had the highest percentage of residents reporting heavy drinking relative to the State and surrounding counties.
- From 2010-2014, the rate of alcohol impaired driving deaths in Monmouth County increased from 24.5% to 26.6% in 2012-2016.

Health Screenings and Immunizations

ASSETS

- In 2016, 79% of Monmouth County women over age 50 had a mammogram in the last two years, up 23.2 percentage points from 2012.
- In 2016, 84.94% of Monmouth County diabetic Medicare enrollees received HbA1c screening, higher than the State.
- In 2016, a higher percentage of Monmouth County adults over 50 (68.6%) participated in colon-rectal screenings than residents statewide (65.1%).

- In 2016, 95.1% of first grade students in Monmouth County received all required immunizations, higher than the State percentage.

GAPS

- The percent of Monmouth County women over 18 who had a pap smear within the past three years decreased from 77.3% in 2014 to 66.6% in 2016.
- Monmouth County had a lower percentage of adults receiving flu shots (54.9%) compared to the healthy people 2020 target (90%).
- Monmouth County adults 65+ who had a pneumonia vaccine (69.2%) were lower than the healthy people 2020 target (90%).

Behavioral Health Utilization

ASSETS

- In 2016, ED visit rates for substance use in Monmouth County (6.89/1,000) was lower than the State (7.86/1,000).
- ED visit rates for mental health conditions in the MMC Service Area was lower than the State rate.

GAPS

- In 2016, inpatient hospitalizations for mental/behavioral health in MMC's Service Area (9.01/1,000) exceeded the New Jersey rate (4.81/1,000) and were higher than the County rate (7.05/1,000).
- In 2016, Long Branch (14.5/1,000) had the highest rate of residents with an inpatient hospitalization for a mental health condition, compared to all comparative figures.
- In 2016, Asbury Park (15.78/1,000) had a higher ED visit rate for mental health conditions than all comparative figures.
- In 2016, Long Branch (4.11/1,000) had a higher use rate for residents with an inpatient admission for substance abuse than the State and other comparative figures.
- In 2016, Asbury Park (17.03/1,000) had a higher ED visit rate for substance abuse than the County and the State.
- Between 2015 and 2016, Naloxone administrations in Monmouth County increased from 453 to 714.

C. HEALTH OUTCOMES

Mortality

ASSETS

- Since 2013, six out of the top ten causes of death in Monmouth County declined with the greatest improvement in Chronic Lower Respiratory Diseases (15.8%).
- Heart disease mortality rates fluctuated in Monmouth County with an overall decrease from 210.4/100,000 in 2007 to 161.4/100,000 in 2016.
- The mortality rate for heart disease is lowest among Hispanics in Monmouth County was lower than the rate for Whites (167.4/100,000) and Blacks at (169.8/100,000).
- Mortality rates for cancer in Monmouth County fluctuated with an overall decrease since 2007 from a rate of 175/100,000 to 138/100,000 in 2016.
- The mortality rate for cancer in Monmouth County among Hispanics (94.8/100,000) is lower than rate for Whites (141.5/100,000) and Blacks (150/100,000).
- Over the last 10 years Monmouth county stroke mortality rates fluctuated with an overall decrease from 37.5/100,000 in 2007 to 28.7/100,000 in 2016.
- Over the last 10 years Chronic Lower Respiratory Diseases mortality rate per 100,000 fluctuated with an overall decrease from 37.5/100,000 in 2007 to 30.3/100,000 in 2016.
- The years of potential life lost in Monmouth County (5,087.6/100,000) were less than the rate statewide (5,469.4/100,000).
- From 2015 to 2016 suicide mortality rate in Monmouth County decreased from 11.5/100,000 in 2015 to 8.2/100,000 in 2016.

GAPS

- Deaths caused by Unintentional Injuries increased 42% from 2013 to 2016 in Monmouth County.
- The death rate for unintentional injuries in Monmouth County fluctuated with an overall increase from 28.7/100,000 in 2007 to 42.6/100,000 in 2016.
- The rate of drug overdose deaths in Monmouth County increased from 18/100,000 in 2014 to 25.6/100,000 in 2016.

Maternal and Child Health

ASSETS

- In 2016, the percent of very low birthweight babies in Monmouth County (1.0%) was lower than the Healthy People 2020 target of 1.4%.

GAPS

- The infant mortality rate for Whites (2.8/1,000) in Monmouth County continues to be higher than for Blacks and Hispanics.
- The infant mortality rate in Monmouth County increased from 3.6/1,000 between 2007-2009, to 3.8/1,000 between 2013-2015.

- Monmouth County rates of low birth weight and very low birth weight babies rose from 6.9% in 2007 to 7.4% in 2016.
- The percentage of low birth weight babies in Monmouth County were higher among Blacks (14.3%) than for Whites (6.5%) or Hispanics (6.4%).
- The percentage of very low birth weight babies in Monmouth County were notably higher among Blacks (2.4%) than for Whites (0.7%) or Hispanics (1.7%).

Health Status and Behavioral Health Status

ASSETS

- Monmouth County adults reporting their health as "fair or poor" decreased from 13.2% in 2014, to 12.3% in 2016.
- County-wide, Monmouth County adults who reported 14 or more of the past 30 days with "not good" mental health decreased from 10.6% in 2014, to 7.6% in 2016.
- The percent of Monmouth County residents reporting a history of depression decreased from 11.4% in 2014, to 8.1% in 2016.

GAPS

- County-wide, Monmouth County adults who reported 14 or more of the past 30 days with "not good" physical health increased from 8.2% in 2014, to 13.5% in 2016.

Morbidity

ASSETS

- The percent of Monmouth County residents told they had angina or coronary heart disease decreased from 3.9% in 2014, to 3.5% in 2016.
- Fair Haven residents had the lowest rate of patients hospitalized with a heart attack in 2016 in the MMC Service Area.
- Little Silver had the lowest rate of residents hospitalized with heart failure in 2016.
- Adults who have been told they have hypertension in Monmouth County decreased from 34.8% in 2011 to 28.5% in 2015.
- Fair Haven residents had the lowest use rate of patients using a hospital service with high cholesterol in the MMC service area.
- Between 2008 and 2015, digestive system, prostate and respiratory system cancers all decreased in Monmouth County.
- In 2016, Fair Haven had a lower rate of patients using a hospital service with a diagnosis of cancer than all comparative figures.
- Monmouth County adults who have been told they have asthma decreased from 11% in 2011 to 9.5% 2016.
- In 2016, Fair Haven (11.5/1,000) adults had the lowest rate of COPD in the MMC service area.
- Between 2013 and 2016, the percentage of Monmouth County residents reporting arthritis decreased from 25.9% to 23.4%.

GAPS

- The percent of Monmouth County residents told they had a heart attack increased from 3.6% in 2012, to 3.8% in 2016.
- Monmouth County residents had a higher rate of residents hospitalized with a heart attack in 2016 than residents of the State and the Service Area.
- In 2016, Asbury Park (4.12/1,000) and the MMC Service Area (4.08/1,000) reported a higher rate of heart failure than the State (3.45/1,000).
- In 2016, Monmouth County (3.3/1,000) reported a higher rate of strokes than the State (2.8/1,000).
- Asbury Park residents had the highest rate of hospital usage for hypertension from 2013 to 2016.
- In 2016, Asbury Park (33.09/1,000) residents with high cholesterol had the highest hospital use rate in the MMC Service Area.
- In 2016, the rate of patients using a hospital with a cancer diagnosis was highest in Long Branch (33.14/1,000).
- The percent of Monmouth County residents reporting diabetes increased from 7.5% in 2014 to 9.5% in 2016.

APPENDICES

APPENDIX A: MMC CHNA IMPLEMENTATION PLAN RESULTS

Community Health Needs Assessment

Monmouth Medical Center

RWJBarnabas HEALTH

Let's be healthy together.

Introduction

In 2017, Monmouth Medical Center (MMC) conducted and adopted its Community Health Needs Assessment (CHNA) which consisted of a community health needs survey of residents in our service area, a detailed review of secondary source data and a survey of local health officials and community agencies. The Plan can be accessed at www.rwjbh.org/monmouth-medical-center/about/community-health-needs-assessment/

Through the CHNA process, health need priorities were chosen based on the Medical Center's capacity, resources, competencies, and the needs specific to the populations it serves. The Implementation Plan addresses the manner in which MMC will address each priority need and the expected outcome for the evaluation of its efforts. The implementation plan which follows is based on the four selected priority areas*:

- Prevention and Treatment of Cardiovascular Disease, Obesity & Diabetes
- Cancer Care and Prevention
- Medical Needs of Behavioral Health Patients
- Reduce Disparities re: Access to Care

MMC participates in the Health Improvement Coalition of Monmouth County which is made up of key stakeholders in the county (government, civic, community-based organizations and healthcare providers) who are focused on improving the health of community members. MMC will continue to work with the Health Improvement Coalition of Monmouth County, other providers and community organizations to improve the health and welfare of our communities.

**The four focus areas do not represent the full extent of the Medical Center's community benefit activities or its support of the community's health needs. Other needs identified through the CHNA may be better addressed by other agencies/organizations or deferred to another timeframe.*

Goal #1: Prevention and Treatment of Cardiovascular Disease, Obesity and Diabetes

Key CHNA Findings:

- Cardiovascular disease is the leading cause of death for both men and women of most ethnicities. Diabetes is a growing problem that is currently the fifth leading cause of death in Monmouth County.
- Overweight and obesity are risk factors for a number of chronic diseases, which lead to premature death and disability.
- Healthy NJ 2020, Monmouth County CHIP, Regional Health Commission (21 towns) and FQHC surveys also identified cardiovascular disease, obesity and diabetes as chronic diseases/conditions as top health issues.

Strategy/Initiative 1.1

Evaluate and improve care transitions for patients with chronic cardiovascular disease through the use of multidisciplinary team rounding, APN assessment during hospital admission, and standardized clinical pathway order sets.

Indicator/Metric

• Medicare 30-day readmission rate/100 people for:
AMI to 15.70 - Heart Failure to 20.20 - COPD to 18.50 - PN to 15.40

Tracking/Outcome

2016 Results: AMI = 18.18; HF = 14.04; COPD = 11.43; PN = 19.72
2017 Results: AMI = 16.67; HF = 15.24; COPD = 23.30; PN = 13.86

Strategy/Initiative 1.2

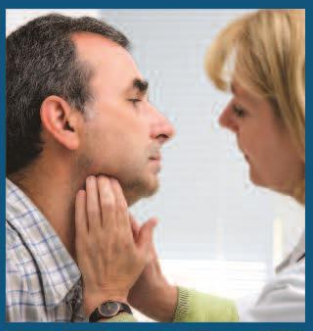
Partner with VNAHG to provide ongoing communication, education, and monitoring of patients to identify early changes in health status.

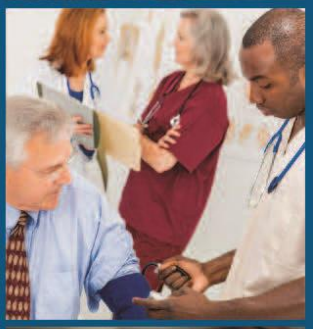
Indicator/Metric

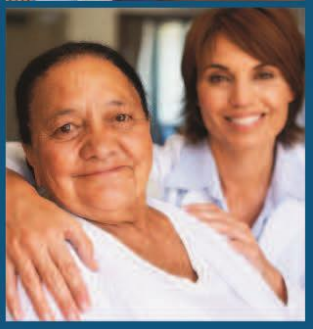
• Increase number of new patients enrolled in Healthy Lives Program
• Increase number of completed patient follow-up appointments

Tracking/Outcome

2016 YTD June Baseline: New Patients - 104; Follow-up appointments - 2,024
2017 Results: New Patients - 107; Follow-up appointments - 2,368







Strategy/Initiative 1.3

In collaboration with community partners provide health education and screenings for cardiovascular disease to ensure early diagnosis and treatment.

Indicator/Metric

- Increase number and type of screenings provided
- Increase number of positive identified and referred for follow-up care for elevated blood pressure; cholesterol level.

Tracking/Outcome

2016 Results: 1,369 cardiac screenings; 20 follow-up referrals for BP, 76 follow-up referrals for cholesterol level

2017 Results: 1,171 cardiac screenings; 129 follow-up referrals for BP, 56 follow-up referrals for cholesterol level

Strategy/Initiative 1.4

Increase BMI screening and nutrition and weight management education for community members at risk for diabetes and obesity.

Indicator/Metric

- Increase number of individuals screened for BMI
- Increase number of educational events and number served

Tracking/Outcome

2016 Results: 142 BMI; 44 programs serving 1,409 people

2017 Results: 165 BMI; 54 programs serving 3,734

Strategy/Initiative 1.5

Improve participation and outcomes for patients taking part in the Outpatient Diabetic Self Management Program.

Indicator/Metric

- Increase number of patient consults, 80 % of participants will achieve within a six-month period
- A1c reduction of 1% or > Weight reduction of 3.5% or >
- Participation in 10 hours of comprehensive diabetic management education

Tracking/Outcome

2016 Results: 1,117 patient consults; A1c 70%, Weight reduction 65%, Class Participation 70%
2017 Results: 1,284 patient consults; A1c 71.5%, Weight reduction 64%, Class Participation 60%

Goal #2: Cancer Care and Prevention

Key CHNA Findings:

- Cancer is the second leading cause of death in the nation, New Jersey and Monmouth County.
- Monmouth County rates of breast, prostate, melanoma, lung and colon/rectum cancers higher than statewide figures.

Strategy/Initiative 2.1

Develop Thoracic Program to address needs of individuals with lung cancer through surgeon recruitment, increasing participation in the Lung Nodule program, increasing research and enhancing our smoking cessation programing.

Indicator/Metric

- Added thoracic surgeon to staff
- Increase number of new participants in Lung Nodule program, and lung cancer detected
- Increase number of I-ELCAP and total number of cancers detected
- Increase number of staff members trained/certified as tobacco specialist for on site counseling

Tracking/Outcome

2016 Results: Lung Nodule program new participants = 47; New cancers detected = 2; I-ELCAP new participants = 8; Currently no certified smoking cessation trainers
2017 Results: Lung Nodule program new participants = 8; New cancers detected = 0; I-ELCAP new participants = 29; 4 certified smoking cessation trainers

Strategy/Initiative 2.2

Expand access to MMC's Cancer Support Community.

Indicator/Metric

- Relocate Cancer Support Community to a new space within easy access to local highways by December 2017
- Increase number of visits in Cancer Support Community Programs

Tracking/Outcome

• Design phase completed: 2016 visits = 4,280; 2017 visits = 2,934

Strategy/Initiative 2.3

Increase community outreach for breast cancer, lung cancer, skin cancer, colorectal cancer.

Indicator/Metric

• Increase number of participants in community events
• Increase number of mammograms scheduled at community events
• Increase number of free screening mammograms completed for uninsured women

Tracking/Outcome

2016 Baseline: 5,892 participants, 67 mammograms

2017 Results: 6,428 participants; 52 mammograms scheduled; 141 free mammograms; 88 through Komen grant; 53 through Spirits Unlimited donation

Goal #3: Address the Medical Needs of Behavioral Health Patients

Key CHNA Findings:

- In Monmouth County and New Jersey, age-adjusted drug-induced deaths increased between 2007 and 2013.
- The average life expectancy for a person with serious mental illness is at least 25 years less than those without an illness.

Strategy/Initiative 3.1

Expand Monmouth Medical Center's Opioid Overdose Recovery Program (OORP) beyond those individuals reversed from an opioid overdose to include any individuals who accept follow-up care to address drug addiction.

Indicator/Metric

- Increase number and percentage of individuals who receive emergency care for opioid overdose who subsequently accept follow-up care through the OORP

Tracking/Outcome

2016 Results: 51% (34 out of 67 individuals)
2017 Results: 79% (65 out of 82 individuals)

Strategy/Initiative 3.2

Expand Integrated Health Home (IHH) for the seriously mentally ill wait time and first appointment adherence in the outpatient setting.

Indicator/Metric

- Increase number of patients screened and enrolled in IHH program by 15% in 2017
- Increase percentage of patients seen within seven days of IHH referral
- Increase percentage of patients first appointment adherence/no-show rate

Tracking/Outcome

2016 Results: 162 active patients enrolled, 97% adherence to first appointment, 92.1% Patients seen within seven days of referral
2017 Results: 150 active patients enrolled, 98% adherence to first appointment, 93.5% Patients seen within seven days of referral

Strategy/Initiative 3.3

Reduce readmission within 30 days of IHH enrollment through focused patient management and navigation.

Indicator/Metric

- Decrease percentage of patients readmitted within 30 days of IHH program

Tracking/Outcome

2016 Results: 9.4% Re-admissions within 30 days of IHH program
2017 Results: 7.7% Re-admissions within 30 days of IHH program

Strategy/Initiative 3.4

Improve patient satisfaction with IHH program.

Indicator/Metric

- Increase patient satisfaction scores

Tracking/Outcome

2016 Results: 95.1% patient satisfaction with program
2017 Results: 98% patient satisfaction with IHH program

Goal #4: Reduce Disparities regarding Access to Care

Key CHNA Findings:

- Racial and ethnic minorities are at risk for receiving lower quality of care than non-minorities, even when access-related issues such as insurance status and income are controlled.
- In 2014, 24.3% of Long Branch residents were Hispanic/Latino, more than double Monmouth County and 22.7% of Asbury Park's population was African-American, more than triple Monmouth County.

Strategy/Initiative 4.1

Continue and expand collaborative partnerships within Long Branch and Asbury Park to positively impact the health of these communities. Some examples include initiatives with Health Improvement Coalition of Monmouth County, Mayor's initiatives, Asbury Park HUD Choice Neighborhood grant, Long Branch FQHC.

Indicator/Metric

- Within Long Branch and Asbury Park; increase number of community events and increase number of participants

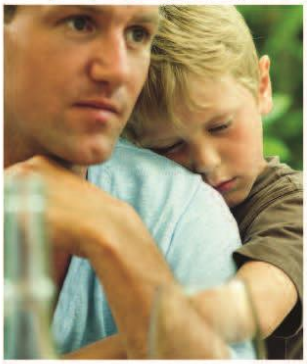
Tracking/Outcome

2016 Results: Long Branch – 78 programs, 1,242 participants; Asbury Park – 9 programs, 740 participants
2017 Results: Long Branch – 51 events, 3,890 participants; Asbury Park – 4 events, 641 participants


MONMOUTH MEDICAL CENTER | COMMUNITY HEALTH NEEDS ASSESSMENT | 9

Strategy/Initiative 4.2

Create a tracking mechanism for participation rates by specific ethnic populations in community health screening (BP and cholesterol) programs.



Indicator/Metric

- Establish baseline number and percentage of African American participants; Hispanic/Latino participants

Tracking/Outcome

2017 Results: African American - 134/941 = 14.24%; Hispanic/Latino - 125/941 = 13.28%

Strategy/Initiative 4.3

Eliminate racial/ethnic disparities in 30-day readmissions.

Indicator/Metric

- Percentage of 30-day readmissions with no exclusions

Tracking/Outcome

2017 Results: Black or African American, Non-Hispanic = 11.2%; White, Non-Hispanic = 5.2%; Hispanic = 5.7%

Strategy/Initiative 4.4

Eliminate racial/ethnic disparities in patient satisfaction.

Indicator/Metric

- HCAHPS "overall rating of hospital" top-box scores

Tracking/Outcome

New program in 2017 [1,2]: Black African American, Non-Hispanic = 8.8 score; White, Non-Hispanic = 8.9 score; Hispanic = 9 score

[1]Sample sizes for patient satisfaction surveys are too small to report quarterly by race/ethnicity.

[2]Race/ethnicity is self-reported on patient satisfaction surveys.

Strategy/Initiative 4.5

Improve access to primary care services for individuals insured under Charity Care and/or Management Medicaid between the MMC (Emergency Department and inpatient discharges) and the Long Branch FQHC.

Indicator/Metric

- Number of patients navigated to FQHC

Tracking/Outcome

2016 Results: 526 patients
2017 Results: 583 patients

Strategy/Initiative 4.6

Establish a Special Needs Ambassador Program (SNAP), recruit ambassadors from the employee pool and increase awareness of the program through community outreach.

Indicator/Metric

- Number of employees recruited to become Special Needs Ambassadors
- Number of medical residents educated
- Number of presentations and education sessions provided within the community

Tracking/Outcome

2016 Results: 44 Ambassadors trained; 0 Medical Residents educated;
3 Presentations/Education sessions held
2017 Results: 11 Ambassadors trained; 2 Medical Residents educated;
10 Presentations/Education sessions held

300 SECOND AVENUE | LONG BRANCH, NEW JERSEY 07740 | **rwjbh.org/monmouth**

6587-12/17mmc

APPENDIX B: SECONDARY DATA SOURCES

Source	
Advocates for Children of New Jersey	http://acnj.org
Agency for Healthcare Research and Quality	http://www.ahrq.gov
Alcohol Retail Density and Demographic Predictors of Health Disparities: A Geographic Analysis	http://www.ncbi.nlm.nih.gov/
American Cancer Society Guidelines for Early Detection of Cancer	http://www.cancer.org
American Nutrition Association	http://americannutritionassociation.org
Annals of Family Medicine, Inc.	http://www.annfammed.org
Asthma and Allergy Foundation of America	www.aafa.org
BRFSS and Youth BRFSS	www.cdc.gov
Bruno and Ridgway Community Health Assessment Study	
Bureau of Labor Statistics	http://data.bls.gov
CDC	http://www.cdc.gov
CDC Community Health Indicators Service	http://wwwn.cdc.gov/CommunityHealth
CDC Division of Nutrition, Physical Activity, and Obesity	http://www.cdc.gov/obesity
CDC National Center for Environmental Health	http://www.cdc.gov/nceh
CDC National Center for Health Statistics	http://www.cdc.gov/nchs/fastats/
CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	https://www.cdc.gov/std
CDC NCIRD	http://www.cdc.gov/vaccines
CDC Preventing Chronic Disease	http://www.cdc.gov/pcd
CDC WONDER	http://wonder.cdc.gov
Centers for Medicare and Medicaid Services (CMS)	https://www.cms.gov
Child Trends	http://www.childtrends.org
County Health Rankings	http://www.countyhealthrankings.org
Department of Numbers	http://www.deptofnumbers.com
Do Something	https://www.dosomething.org
Enroll America	https://www.enrollamerica.org
Free Clinic Directory	http://freeclinicdirectory.org
Gallup	http://www.gallup.com
Health Care Decision Analyst	New Solutions, Inc.
Healthgrades	https://www.healthgrades.com
Health Grove	http://www.healthgrove.com
Health Indicators Warehouse (BRFSS)	www.healthindicators.gov
Health Resources and Services Administration Data Warehouse	https://datawarehouse.hrsa.gov
Healthy People 2020	https://www.healthypeople.gov
Home Facts	http://www.homefacts.com
Institute of Medicine	http://www.nap.edu
Kaiser Family Foundation	http://kff.org
Kaiser Health News	http://khn.org
Kids Count	http://www.datacenter.kidscount.org
March of Dimes	http://www.marchofdimes.org
NJ Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment	http://www.state.nj.us/humanservices/dmhas/home/
NJ Department of Health and Senior Services, Center for Health	http://www.nj.gov/health/chs/
National Association for Convenience and Fuel Retailing	http://www.nacsonline.com
National Center for Biotechnology Information	http://www.ncbi.nlm.nih.gov
National Center for Health Statistics CDC	http://www.cdc.gov/nchs/data
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention	http://www.cdc.gov/hiv
National Highway Traffic Safety Administration	http://www-nrd.nhtsa.dot.gov
National Institute for Mental Illness	http://www.nami.org
National Institute of Diabetes, Digestive & Kidney Diseases	http://www.niddk.nih.gov
National Institutes of Health Medline Plus Health Screening	https://www.nlm.nih.gov/medlineplus
National Poverty Center University of Michigan	http://www.npc.umich.edu

Source	
Neighborhood Scout	http://www.neighborhoodscout.com/nj/crime/
New Jersey Council of Teaching Hospitals	http://njcth.org
New Jersey Death Certificate Database, Office of Vital Statistics and Registry	http://www.nj.gov/health/vital/
New Jersey State Health Assessment Data Complete Indicator Profile of Risk Factor for Childhood Lead Exposure: Pre-1950 Housing	https://www26.state.nj.us/doh-shad
NIH Medline Plus	https://www.nlm.nih.gov/medlineplus
NJ Department of Education	http://www.state.nj.us/education
NJ DOH Family Health	http://www.nj.gov/health/fhs
NJ DOH, Division of Communicable Disease Services	http://www.nj.gov/health/cd/
NJ DOH, New Jersey Cancer Registry	http://www.cancer-rates.info/nj/
NJ DOH Division of HIV, STD, and TB Services	http://www.nj.gov/health/hivstdtb/
NJ Department of Labor and Workforce Development	http://lwd.dol.state.nj.us/labor
NJ Department of Law and Public Safety, Uniform Crime Reporting Unit, US Census Bureau, American Community Survey	http://www.njsp.org/ucr/crime-reports.shtml
NJ State Police Uniform Crime Reporting Unit	http://www.njcedv.org
NJ Substance Abuse Monitoring System	https://njsams.rutgers.edu/njsams
NJ.Com	http://www.nj.com
NJ State Health Assessment Data (SHAD)	https://www26.state.nj.us/doh-shad/home/Welcome.html
Pro Publica	https://propublica.org
Rutgers Center for Health Policy	http://www.cshp.rutgers.edu
Substance Abuse and Mental Health Services Administration	http://www.samhsa.gov
The Annie E. Casey Foundation Kids Count Data Center Children Receiving TANF (Welfare)	http://www.datacenter.kidscount.org
United States Department of Agriculture Economic Research Service	http://www.ers.usda.gov
United States Department of Health and Human Services	http://www.hhs.gov/healthcare
United States Department of Health and Human Services, Agency for Healthcare Research and Quality Understanding Quality Measurement 2016	http://www.ahrq.gov
United Way	http://www.unitedwaynj.org/ourwork/alicenj.php
University of Nevada	https://www.unce.unr.edu
US Department of Education	http://www.ed.gov
US Department of Health and Human Services, Maternal and Child Health Bureau	http://mchb.hrsa.gov
US DHHS Administration for Children and Families	http://www.acf.hhs.gov
Washington Post	https://www.washingtonpost.com
World Health Organization	http://www.who.int

APPENDIX C1: CANCER INCIDENCE RATE REPORT: CANCER PATIENT ORIGIN MONMOUTH COUNTY 2017

Over sixty-six percent of MMC's cancer inpatients, and over 67% of the hospital's cancer outpatients originated from the hospital's Primary Service Area. In total, 79.5% of inpatients and 79.9% of outpatients served in the hospital's cancer programs resided in Monmouth County. Long Branch (07740) and Eatontown (07724) represent the largest segment of MMC's inpatient cancer patients. Long Branch (07740) and Asbury Park (07712) represent the largest segments of MMC's outpatient cancer patients. The health factors and outcomes explored in this CHNA bear relevance to the oncology services and its review of specific cancer needs for the community.

CANCER PATIENT ORIGIN	2017 MMC IP PATIENTS	%	2017 MMC OP PATIENTS	%
Monmouth County	1,168	79.5%	908	79.9%
Primary Service Area	978	66.5%	769	67.7%
Secondary Service Area	149	10.1%	131	11.5%
Out of Service Area (NJ)	331	22.5%	231	20.3%
Out of State	12	0.8%	5	0.4%
TOTAL	**1,470**	**100.0%**	**1,136**	**100.0%**
Long Branch (07740)	281	19.1%	185	16.3%
Eatontown (07724)	144	9.8%		
Asbury Park (07712)			155	13.6%

Source; Decision Support; IP volume includes cases with ICD10 principal or secondary codes C00 thru D49.9 (Neoplasms); OP volume includes cases with ICD10 principal or secondary codes Z51.0 or Z51.11 (Chemo and Radiation Therapy).

APPENDIX C2: CANCER INCIDENCE RATE REPORT: MONMOUTH COUNTY 2011-2015

INCIDENCE RATE REPORT FOR MONMOUTH COUNTY 2011-2015				
Cancer Site	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend
All Cancer Sites	511.5	3950	falling	-1.6
Bladder	25.8	202	stable	-0.2
Brain & ONS	7.3	54	stable	0.5
Breast	144.1	594	stable	-0.1
Cervix	6.9	26	falling	-2.6
Colon & Rectum	41.9	326	falling	-3.7
Esophagus	4.6	36	stable	-0.4
Kidney & Renal Pelvis	16.7	131	rising	1.3
Leukemia	15.7	118	rising	1.1
Liver & Bile Duct	6.8	56	rising	1.9
Lung & Bronchus	61.6	478	falling	-2.5
Melanoma of the Skin	31.6	237	rising	2
Non-Hodgkin Lymphoma	23.4	177	stable	-0.6
Oral Cavity & Pharynx	11.9	96	stable	0.2
Ovary	12.3	53	falling	-1.9
Pancreas	14.2	113	stable	0.5
Prostate	144.9	544	falling	-1.8
Stomach	6.1	49	falling	-2.3
Thyroid	24.4	166	stable	0.2
Uterus (Corpus & Uterus, NOS)	30	131	stable	-5

The Source for D, and the following tables C3, C4, C5 and C6 is:
Source: https://statecancerprofiles.cancer.gov

APPENDIX C3: CANCER INCIDENCE DETAILED RATE REPORT: MONMOUTH COUNTY 2011-2015
SELECT CANCER SITES: RISING INCIDENCE RATE

		Kidney & Renal Pelvis	Leukemia	Liver & Bile Duct	Melanoma of the Skin
INCIDENCE RATE REPORT FOR MONMOUTH COUNTY 2011-2015 All Races (includes Hispanic), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	16.7	15.7	6.8	31.6
	Average Annual Count	131	118	56	237
	Recent Trend	rising	rising	rising	rising
	Recent 5-Year Trend in Incidence Rates	1.3	1.1	1.9	2
White Non-Hispanic, All Ages	Age-Adjusted Incidence Rate - cases per 100,000	17	15.1	6.5	36.1
	Average Annual Count	110	94	44	222
	Recent Trend	rising	rising	rising	rising
	Recent 5-Year Trend in Incidence Rates	1.5	0.9	1.8	2.1
Black (includes Hispanic), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	19.4	8.9	8.3	*
	Average Annual Count	10	5	5	3 or fewer
	Recent Trend	stable	stable	*	*
	Recent 5-Year Trend in Incidence Rates	1.3	0.4	*	*
Asian or Pacific Islander (includes Hispanic), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	*	*	*	*
	Average Annual Count	3 or fewer	3 or fewer	3 or fewer	3 or fewer
	Recent Trend	*	*	*	*
	Recent 5-Year Trend in Incidence Rates	*	*	*	*
Hispanic (any race), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	16.3	16.5	12.5	9
	Average Annual Count	7	7	4	4
	Recent Trend	*	stable	*	*
	Recent 5-Year Trend in Incidence Rates	*	-0.2	*	*
MALES	Age-Adjusted Incidence Rate - cases per 100,000	23.9	20.2	11.5	39.6
	Average Annual Count	87	67	42	136
	Recent Trend	rising	rising	rising	rising
	Recent 5-Year Trend in Incidence Rates	1.3	1	2.6	1.9
FEMALES	Age-Adjusted Incidence Rate - cases per 100,000	10.6	12.1	3.1	25.8
	Average Annual Count	44	50	14	102
	Recent Trend	stable	stable	stable	stable
	Recent 5-Year Trend in Incidence Rates	0.8	0.8	1.2	-0.7

** Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).*

APPENDIX C4: CANCER MORTALITY RATE REPORT: MONMOUTH COUNTY 2011-2015

MORTALITY RATE REPORT FOR MONMOUTH COUNTY 2011-2015					
Cancer Site	Met Healthy People Objective	Age-Adjusted Death Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend
All Cancer Sites	Yes	157	1225	falling	-2.8
Bladder	***	4.8	38	stable	-0.2
Brain & ONS	***	3.6	28	stable	0.3
Breast	No	24.4	108	falling	-2.3
Cervix	Yes	1.9	8	falling	-2.9
Colon & Rectum	Yes	13.7	108	falling	-3.6
Esophagus	***	3.9	30	falling	-1.1
Kidney & Renal Pelvis	***	3.3	25	falling	-2
Leukemia	***	6.7	51	stable	-0.9
Liver & Bile Duct	***	5.5	44	stable	0.7
Lung & Bronchus	Yes	38.9	301	falling	-3.6
Melanoma of the Skin	No	2.7	21	falling	-1.4
Non-Hodgkin Lymphoma	***	5.5	42	falling	-4.2
Oral Cavity & Pharynx	Yes	1.8	14	falling	-3.6
Ovary	***	8	36	falling	-2
Pancreas	***	11.4	89	stable	-0.3
Prostate	Yes	17	52	falling	-4.1
Stomach	***	2.3	17	falling	-4.5
Thyroid	***	0.6	5	stable	0
Uterus (Corpus & Uterus, NOS)	***	5.3	23	stable	0.5

**** No Healthy People 2020 Objective for this cancer.*

** Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).*

APPENDIX C5: CANCER MORTALITY DETAILED RATE REPORT FOR RISING RATES: MONMOUTH COUNTY 2011-2015

		Breast	Colon & Rectum	Lung & Bronchus
MORTALITY RATE REPORT FOR MONMOUTH COUNTY 2011-2015 All Races (includes Hispanic), All Ages	Met Healthy People Objective	No	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	24.4	13.7	38.9
	Average Annual Count	108	108	301
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-2.3	-3.6	-3.6
White Non-Hispanic, All Ages	Met Healthy People Objective	No	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	24.7	14.1	41.2
	Average Annual Count	93	95	272
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-2.3	-3.6	-3.3
Black (includes Hispanic), All Ages	Met Healthy People Objective	No	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	34.2	13.7	42.1
	Average Annual Count	10	7	21
	Recent Trend	stable	stable	falling
	Recent 5-Year Trend in Death Rates	-1	-2.1	-2.6
Asian or Pacific Islander (includes Hispanic), All Ages	Met Healthy People Objective	*	*	Yes
	Age-Adjusted Death Rate - cases per 100,000	*	*	17.4
	Average Annual Count	3 or fewer	3 or fewer	5
	Recent Trend	*	*	*
	Recent 5-Year Trend in Death Rates	*	*	*
Hispanic (any race), All Ages	Met Healthy People Objective	*	*	*
	Age-Adjusted Death Rate - cases per 100,000	*	*	*
	Average Annual Count	3 or fewer	3 or fewer	3 or fewer
	Recent Trend	*	*	*
	Recent 5-Year Trend in Death Rates	*	*	*
MALES	Met Healthy People Objective	n/a	No	Yes
	Age-Adjusted Death Rate - cases per 100,000	n/a	16	43.9
	Average Annual Count	n/a	53	144
	Recent Trend	n/a	falling	falling
	Recent 5-Year Trend in Death Rates	n/a	-3.9	-4.2
FEMALES	Met Healthy People Objective	No	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	24.4	11.9	35.6
	Average Annual Count	108	55	156
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-2.3	-3.3	-2.9

APPENDIX C6: CANCER INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
ALL SITES: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	441.2	1,580,653	falling	-1.4
New Jersey	477.5	49,332	falling	-0.9
Atlantic County	490.9	1,646	falling	-0.6
Bergen County	462	5,311	falling	-1.1
Burlington County	521.7	2,845	stable	-1
Camden County	513.9	2,982	stable	-1.4
Cape May County	557.2	864	stable	-0.1
Cumberland County	502.9	862	stable	0.1
Essex County	452.1	3,717	falling	-1.2
Gloucester County	529.7	1,753	stable	-1.7
Hudson County	391.1	2,429	falling	-1.5
Hunterdon County	481.7	762	stable	-0.2
Mercer County	498.1	2,058	falling	-0.4
Middlesex County	455.8	4,118	falling	-1
Monmouth County	511.5	3,950	falling	-1.6
Morris County	470.4	2,848	falling	-1.7
Ocean County	515.9	4,370	falling	-0.7
Passaic County	441.4	2,378	falling	-0.9
Salem County	534.1	443	stable	0.1
Somerset County	461.1	1,761	falling	-1.4
Sussex County	489.7	863	falling	-0.5
Union County	451.9	2,692	falling	-1.2
Warren County	497.8	665	falling	-0.5
Bladder: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	20.3	72,640	falling	-1.7
New Jersey	23.6	2,449	falling	-1.5
Atlantic County	27.9	94	stable	0.2
Bergen County	23	272	falling	-0.8
Burlington County	26.7	147	stable	0
Camden County	25.3	146	stable	0
Cape May County	35	58	rising	1.3
Cumberland County	26.4	45	stable	1
Essex County	19.1	153	stable	-0.4

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	28.4	91	rising	0.7
Hudson County	17.5	102	falling	-1.5
Hunterdon County	28.2	44	rising	1.4
Mercer County	22.1	91	stable	-0.5
Middlesex County	23.1	205	stable	-0.3
Monmouth County	25.8	202	stable	-0.2
Morris County	24.3	149	stable	-0.3
Ocean County	24.4	230	falling	-3.5
Passaic County	21.2	113	stable	-0.6
Salem County	29.5	25	stable	0.3
Somerset County	21.3	81	stable	0.3
Sussex County	26.6	45	stable	-0.3
Union County	20.1	119	falling	-3.7
Warren County	27.6	37	stable	-0.6
Brain & ONS: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	6.5	22,226	falling	-0.9
New Jersey	6.9	669	falling	-0.3
Atlantic County	7.3	22	stable	0.3
Bergen County	7.7	81	stable	-0.4
Burlington County	7.2	36	stable	0.5
Camden County	7.2	39	stable	0
Cape May County	7.1	9	stable	0
Cumberland County	7.1	12	stable	-0.8
Essex County	5.1	42	falling	-1.4
Gloucester County	7.3	23	stable	-0.3
Hudson County	5.7	37	falling	-1.2
Hunterdon County	7.8	10	stable	-0.5
Mercer County	7.1	27	stable	-0.5
Middlesex County	6.3	55	falling	-1
Monmouth County	7.3	54	stable	0.5
Morris County	7.9	43	stable	0.1
Ocean County	7.7	54	stable	0.4
Passaic County	6.7	35	falling	-0.9
Salem County (7)	7.3	5	*	*
Somerset County	6.1	22	stable	-0.5
Sussex County	7.7	12	stable	-0.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Union County	6.2	36	falling	-1
Warren County	10.4	13	stable	1.6
Breast: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	124.7	234,445	stable	0.2
New Jersey	133.4	7,357	rising	0.4
Atlantic County	132.5	236	stable	-0.1
Bergen County	135.5	822	falling	-0.6
Burlington County	139.6	405	stable	-0.1
Camden County	140.1	440	stable	0.4
Cape May County	129.9	100	falling	-0.7
Cumberland County	113.9	101	falling	-0.8
Essex County	133.5	610	rising	5.7
Gloucester County	142.6	257	stable	0
Hudson County	104.4	356	falling	-0.5
Hunterdon County	155.1	133	stable	-0.1
Mercer County	140	309	stable	-0.4
Middlesex County	129.2	625	falling	-0.5
Monmouth County	144.1	594	stable	-0.1
Morris County	144.4	465	stable	-0.3
Ocean County	130.8	567	falling	-0.6
Passaic County	117	344	falling	-0.5
Salem County	126.1	55	stable	-0.5
Somerset County	140.4	290	stable	0.4
Sussex County	134.3	125	stable	-0.2
Union County	133.4	433	falling	-0.4
Warren County	127.7	91	stable	-0.3
Cervix: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	7.5	12,529	stable	0.2
New Jersey	7.6	380	falling	-2.6
Atlantic County	9.8	15	falling	-3.6
Bergen County	6.7	36	falling	-2
Burlington County	6.1	15	stable	-9.4
Camden County	7.8	22	falling	-2.4
Cape May County	10.2	5	stable	-0.4
Cumberland County	12	9	falling	-3.8
Essex County	9.5	42	falling	-3.7

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	6.9	11	falling	-2.5
Hudson County	10.1	35	falling	-2.7
Hunterdon County	5.3	4	falling	-2.3
Mercer County	5.5	11	falling	-3.3
Middlesex County	6.1	28	falling	-2.3
Monmouth County	6.9	26	falling	-2.6
Morris County	5.9	18	falling	-2.2
Ocean County	8.7	28	falling	-2.1
Passaic County	7.9	21	falling	-2.2
Salem County(7)	*	3 or fewer	*	*
Somerset County	8.3	15	stable	-1.3
Sussex County	5.8	5	falling	-3.1
Union County	8.5	26	falling	-1.9
Warren County	7.8	5	falling	-3.1
Colon & Rectum: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	39.2	139,950	falling	-1.7
New Jersey	41.9	4,346	falling	-1.6
Atlantic County	42.1	143	falling	-2.7
Bergen County	38.3	447	stable	0.4
Burlington County	46.8	256	falling	-2.1
Camden County	45.5	263	falling	-2.9
Cape May County	46.2	72	falling	-2.8
Cumberland County	49.3	84	falling	-1.4
Essex County	43.3	355	stable	0.4
Gloucester County	44.1	144	falling	-2.2
Hudson County	41.4	254	falling	-2.5
Hunterdon County	41	65	falling	-2.8
Mercer County	39.5	164	falling	-4.4
Middlesex County	41.6	375	falling	-2.5
Monmouth County	41.9	326	falling	-3.7
Morris County	36.5	224	falling	-3
Ocean County	45.5	406	falling	-3
Passaic County	40	215	falling	-3.6
Salem County	47.4	40	falling	-2.1
Somerset County	35.9	139	falling	-2.4
Sussex County	42.5	71	falling	-2.9

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Union County	40.4	241	falling	-2.5
Warren County	46.3	62	falling	-2.9
Esophagus: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	4.6	16,795	falling	-0.9
New Jersey	4.4	465	falling	-1
Atlantic County	4.4	15	falling	-2.5
Bergen County	3.3	39	falling	-1.8
Burlington County	5.3	30	stable	-0.1
Camden County	5.2	31	stable	-1
Cape May County	5.5	8	stable	-0.8
Cumberland County	5.6	10	stable	0.6
Essex County	3.9	32	falling	-3.1
Gloucester County	6.3	22	stable	1.1
Hudson County	3	18	falling	-2.9
Hunterdon County	4.6	8	stable	-0.4
Mercer County	4.7	19	stable	-1.3
Middlesex County	4	37	falling	-1.1
Monmouth County	4.6	36	stable	-0.4
Morris County	4.6	29	stable	0.3
Ocean County	5.7	51	stable	5.5
Passaic County	4.4	24	stable	-1.1
Salem County	5.4	5	stable	-2
Somerset County	3.2	12	falling	-1.6
Sussex County	5.5	10	stable	0.2
Union County	3.6	22	falling	-1.7
Warren County	5.8	8	stable	1.4
Kidney & Renal Pelvis.: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	16.4	58,599	rising	0.8
New Jersey	16	1,655	stable	0.2
Atlantic County	17.2	58	rising	1.4
Bergen County	16.1	186	rising	1
Burlington County	19.9	108	rising	2.6
Camden County	19.5	112	rising	2
Cape May County	18.1	29	rising	1.9
Cumberland County	22.6	38	rising	4.2
Essex County	13	108	rising	0.8

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	19.2	65	rising	2
Hudson County	12.4	79	stable	0.7
Hunterdon County	13.4	22	rising	1.6
Mercer County	16.2	68	rising	2.1
Middlesex County	14.8	135	rising	0.9
Monmouth County	16.7	131	rising	1.3
Morris County	13.7	83	stable	0.9
Ocean County	17.7	144	rising	1.7
Passaic County	15.9	85	rising	1.6
Salem County	18.1	15	stable	1
Somerset County	13.8	54	rising	1.7
Sussex County	14.1	27	stable	0.1
Union County	15.1	90	rising	1
Warren County	16.3	21	rising	1
Leukemia: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	13.6	47,270	falling	-1.6
New Jersey	15.2	1,523	rising	0.6
Atlantic County	14.5	47	stable	0.5
Bergen County	16.1	182	rising	0.8
Burlington County	15.3	80	rising	1.2
Camden County	15.2	86	rising	0.9
Cape May County	15.9	24	rising	1.2
Cumberland County	15.3	26	rising	2
Essex County	13.1	104	stable	-0.3
Gloucester County	17.3	55	rising	1.6
Hudson County	12.1	73	falling	-0.7
Hunterdon County	13.2	20	stable	-0.8
Mercer County	15.8	65	stable	0.6
Middlesex County	15	133	rising	0.6
Monmouth County	15.7	118	rising	1.1
Morris County	16	94	stable	0.6
Ocean County	16	132	stable	0.3
Passaic County	15.1	78	stable	0.1
Salem County	12.9	10	stable	0.8
Somerset County	15.3	56	stable	0.6
Sussex County	16.5	28	stable	1

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Union County	16	92	rising	1.2
Warren County	15.6	20	stable	0.1
Liver & Bile Duct: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	8.1	30,492	rising	2.2
New Jersey	7.5	808	rising	2.2
Atlantic County	8.2	30	rising	2.9
Bergen County	6.8	81	rising	1.6
Burlington County	7.4	42	rising	3.2
Camden County	9.1	55	rising	3.8
Cape May County	8.8	15	rising	5.4
Cumberland County	10.7	19	rising	6.8
Essex County	7.7	67	rising	1.8
Gloucester County	8.6	30	rising	4
Hudson County	7.8	49	rising	2.2
Hunterdon County (7)	5.8	10	*	*
Mercer County	8.4	36	rising	4.1
Middlesex County	7.4	68	rising	3
Monmouth County	6.8	56	rising	1.9
Morris County	5.7	36	rising	1.3
Ocean County	8.1	71	rising	4.3
Passaic County	8.2	46	rising	2.9
Salem County	10.9	9	rising	4.6
Somerset County	6.6	27	rising	3.2
Sussex County	7.2	13	rising	1.9
Union County	6	37	rising	2.4
Warren County	7.4	10	stable	1
Lung & Bronchus: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	60.2	217,545	falling	-2.1
New Jersey	57.3	5,940	falling	-2.2
Atlantic County	68.2	232	falling	-2.8
Bergen County	50.9	596	falling	-1.3
Burlington County	63.1	344	falling	-0.9
Camden County	71.4	415	falling	-0.6
Cape May County	79.3	131	stable	-0.2
Cumberland County	70.9	122	falling	-2.7
Essex County	48.7	392	falling	-2.4

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	76	249	falling	-0.5
Hudson County	46.3	274	falling	-2
Hunterdon County	52.1	80	falling	-1.5
Mercer County	58.9	242	falling	-1
Middlesex County	52.3	466	falling	-1.6
Monmouth County	61.6	478	falling	-2.5
Morris County	48	291	falling	-1.5
Ocean County	70.3	647	falling	-1.6
Passaic County	49.6	266	stable	-5.7
Salem County	76.5	66	stable	-0.6
Somerset County	47.1	177	falling	-1.2
Sussex County	62.4	109	falling	-1.1
Union County	47.5	275	falling	-1.6
Warren County	63.4	87	falling	-1
Melanoma of the Skin: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	21.3	74,467	rising	2.1
New Jersey	22.1	2,251	stable	0.2
Atlantic County	25.5	85	stable	-1.5
Bergen County	17.8	203	falling	-2.3
Burlington County	26.6	145	stable	0.8
Camden County	20.7	120	stable	-0.3
Cape May County	45	68	rising	3.9
Cumberland County	16.2	28	rising	1.9
Essex County	13.1	106	stable	0.8
Gloucester County	26.9	86	stable	0.1
Hudson County	7.9	50	stable	-0.6
Hunterdon County	39.1	61	rising	5
Mercer County	23.4	95	stable	-8.1
Middlesex County	17.9	161	rising	1.8
Monmouth County	31.6	237	rising	2
Morris County	26.5	159	stable	-0.4
Ocean County	34.3	277	rising	3.7
Passaic County	14	74	rising	1.8
Salem County	36.8	28	rising	5.3
Somerset County	24.1	91	stable	-1.2
Sussex County	28.7	49	rising	2.7

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Union County	15.3	91	rising	1.1
Warren County	26	33	rising	1.7
Non-Hodgkin Lymphoma: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	18.9	66,509	falling	-1
New Jersey	21.6	2,188	stable	-0.2
Atlantic County	20.9	67	stable	-0.3
Bergen County	22.4	255	stable	-0.1
Burlington County	21.8	116	rising	0.6
Camden County	19.8	114	stable	0.1
Cape May County	20.2	31	stable	-0.2
Cumberland County	21.7	37	stable	0.4
Essex County	19.4	157	stable	0
Gloucester County	22.2	71	stable	0.7
Hudson County	17.7	110	stable	-0.4
Hunterdon County	23.4	36	stable	0.6
Mercer County	21.7	88	stable	0.4
Middlesex County	22.4	199	rising	0.6
Monmouth County	23.4	177	stable	-0.6
Morris County	22.7	134	stable	-0.7
Ocean County	22.6	195	stable	0.6
Passaic County	19.5	101	stable	0.4
Salem County	20.7	17	stable	0.6
Somerset County	21	80	stable	0.8
Sussex County	22.2	38	stable	0.3
Union County	22.4	134	stable	-0.3
Warren County	23.2	30	stable	0.6
Oral Cavity & Pharynx: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	11.6	42,585	stable	0.4
New Jersey	10.6	1,118	stable	0.6
Atlantic County	14.1	49	stable	0.3
Bergen County	9.4	109	stable	0.1
Burlington County	11.4	63	stable	0
Camden County	11.6	69	stable	0.4
Cape May County	13	20	stable	0.4
Cumberland County	13.1	23	stable	0.6
Essex County	8.9	75	falling	-2.1

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	11.1	39	stable	0.8
Hudson County	7.9	50	falling	-2.4
Hunterdon County	9.4	17	stable	0.6
Mercer County	9.3	40	falling	-1.6
Middlesex County	10.4	95	stable	0.1
Monmouth County	11.9	96	stable	0.2
Morris County	10.5	66	stable	0.3
Ocean County	11.8	100	stable	0.2
Passaic County	9.9	55	falling	-1.1
Salem County	14	11	stable	1.5
Somerset County	10.1	41	rising	1
Sussex County	13.3	24	stable	0.5
Union County	9.5	59	stable	-0.3
Warren County	11.3	16	stable	0.5
Ovary: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	11.3	21,476	falling	-1.6
New Jersey	12.3	692	falling	-1.9
Atlantic County	11.5	20	falling	-1.7
Bergen County	12.1	75	falling	-2.5
Burlington County	14.1	42	falling	-1.2
Camden County	13	41	falling	-1.4
Cape May County	15.2	12	stable	-0.8
Cumberland County	8.4	8	falling	-2.5
Essex County	12.2	56	falling	-2
Gloucester County	13.3	25	stable	-1.2
Hudson County	11.4	39	falling	-2
Hunterdon County	11	10	falling	-3.1
Mercer County	14.3	32	stable	-0.6
Middlesex County	11.8	57	falling	-2
Monmouth County	12.3	53	falling	-1.9
Morris County	12.1	40	falling	-1.9
Ocean County	12.6	57	falling	-1.8
Passaic County	12.1	36	falling	-1.9
Salem County	13.6	6	stable	0
Somerset County	12.3	26	falling	-1.1
Sussex County	13.8	13	stable	-1.4

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Union County	10.7	36	falling	-2.6
Warren County	12.6	9	stable	-1.2
Pancreas: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	12.6	45,703	rising	0.6
New Jersey	14	1,465	rising	1.2
Atlantic County	13.3	45	stable	-0.2
Bergen County	13.8	164	stable	0.2
Burlington County	15.7	87	rising	3
Camden County	13.6	79	stable	0.6
Cape May County	13.9	23	stable	0.9
Cumberland County	14.5	25	rising	1.6
Essex County	14.6	117	stable	0
Gloucester County	13.8	46	rising	1.6
Hudson County	13.1	78	rising	3.8
Hunterdon County	15.1	24	rising	1.4
Mercer County	17.1	70	rising	2.4
Middlesex County	13.3	120	stable	0.2
Monmouth County	14.2	113	stable	0.5
Morris County	13.4	83	rising	1.5
Ocean County	15.2	140	rising	1.1
Passaic County	13.2	72	stable	0.4
Salem County	12.6	11	stable	1.3
Somerset County	12.9	49	rising	1.3
Sussex County	13.1	22	stable	0.2
Union County	12.9	77	stable	0
Warren County	15	21	rising	1.5
Prostate: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	109	190,639	falling	-7.3
New Jersey	134.7	6,575	falling	-6
Atlantic County	120.7	199	falling	-3
Bergen County	131.1	714	falling	-4
Burlington County	147.8	390	falling	-6.3
Camden County	141.7	385	stable	-0.7
Cape May County	161.5	126	falling	-1.5
Cumberland County	127.2	103	falling	-1.2
Essex County	158.8	580	falling	-4.8

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	136.8	219	falling	-7.5
Hudson County	111.8	297	falling	-4.4
Hunterdon County	103	83	falling	-2.1
Mercer County	147	285	falling	-1.7
Middlesex County	127.3	542	falling	-3.4
Monmouth County	144.9	544	falling	-1.8
Morris County	135.5	397	falling	-7.8
Ocean County	125.8	506	falling	-2.9
Passaic County	137.1	342	falling	-1.4
Salem County	138.9	57	stable	-1
Somerset County	125.2	228	falling	-2.3
Sussex County	122.5	115	falling	-6.8
Union County	138.4	378	falling	-6
Warren County	125.2	84	falling	-8.3
Stomach: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	6.6	23,501	falling	-1.2
New Jersey	8	827	falling	-1.6
Atlantic County	7.5	25	falling	-1.5
Bergen County	9.1	107	falling	-1.1
Burlington County	6.4	36	falling	-1.6
Camden County	8.9	51	stable	-0.5
Cape May County	5.8	9	stable	-0.4
Cumberland County	7.4	12	falling	-1.7
Essex County	9.3	75	falling	-2
Gloucester County	6.7	22	falling	-1.5
Hudson County	10	61	falling	-0.9
Hunterdon County	5	8	falling	-3.4
Mercer County	8.2	33	falling	-2.2
Middlesex County	7.4	67	falling	-1.8
Monmouth County	6.1	49	falling	-2.3
Morris County	7.1	43	falling	-1.2
Ocean County	7.6	68	falling	-1.6
Passaic County	9.8	53	stable	-0.8
Salem County	6.6	5	stable	-1.3
Somerset County	6.9	26	falling	-1.7
Sussex County	6.8	11	falling	-2.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Union County	9.4	55	falling	-1.5
Warren County	6.8	9	falling	-2.6
Thyroid: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	14.5	47,777	stable	0.6
New Jersey	19.2	1,833	stable	0.8
Atlantic County	14.9	44	stable	-2.3
Bergen County	19.6	201	stable	-2.1
Burlington County	21.4	105	stable	2.1
Camden County	22.2	119	rising	3.2
Cape May County	16.9	18	rising	6
Cumberland County	17.2	28	stable	-7.2
Essex County	12.6	103	rising	5.1
Gloucester County	21.7	67	rising	4.9
Hudson County	14.8	105	stable	-0.3
Hunterdon County	16.5	23	rising	4.5
Mercer County	24.1	96	rising	7.2
Middlesex County	19.1	167	rising	5.8
Monmouth County	24.4	166	stable	0.2
Morris County	20.6	111	stable	-1.9
Ocean County	23.1	142	stable	-2.8
Passaic County	17	87	rising	6.7
Salem County	19.2	13	rising	7.3
Somerset County	22.6	83	stable	-4.5
Sussex County	17.1	28	rising	6.6
Union County	18.1	105	stable	-7.1
Warren County	17.3	21	rising	4.9
Uterus (Corpus & Uterus, NOS): All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	26.2	51,560	rising	1.2
New Jersey	31.3	1,822	rising	0.7
Atlantic County	30.5	57	stable	0.6
Bergen County	29.8	193	stable	0.4
Burlington County	33.4	102	rising	1.1
Camden County	34.3	113	stable	-0.8
Cape May County	32.5	28	rising	1.3
Cumberland County	36.1	34	stable	1
Essex County	31.8	151	rising	1.3

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Gloucester County	33.1	62	rising	1.1
Hudson County	23.9	84	stable	0
Hunterdon County	32.7	30	stable	-0.2
Mercer County	34.5	79	rising	0.8
Middlesex County	31.7	161	rising	0.8
Monmouth County	30	131	stable	-5
Morris County	32.9	111	stable	0.5
Ocean County	31.7	144	stable	0.3
Passaic County	26.8	82	stable	0.3
Salem County	37.4	17	stable	1.2
Somerset County	33.7	73	stable	0.8
Sussex County	35.5	35	stable	-0.1
Union County	32.2	107	stable	0.4
Warren County	35.9	27	stable	-0.5

APPENDIX C7: MONMOUTH MEDICAL CENTER - TUMOR REGISTRY SUMMARY

In 2016, MMC's tumor registry data showed that 11.8% and 14.2% of overall cases were Stage 3 and Stage 4 respectively. The following primary sites were made up of more than 25% of Stage 4 cases: Oral Cavity and Pharynx (48.3%), Respiratory System (53.6%), Soft Tissue (66.7%), and Lymphoma (30.8%).

Compared to 2015, there was an increase of 6 cases (+0.2%) in 2016. The three biggest increases in overall cases occurred in Digestive System (+14, +8.1%), followed by Respiratory System (+13, +13.7%), and Male Genital System (+10, +9.1%) and Myeloma (+10, 91%). Please note that case volume counts smaller than 10 are suppressed. Staging percentages are calculated on analytic cases only.

	Cases (both analytic and non-analytic)		2015			2016			2015 - 2016			
	2015	2016	% Stage III	% Stage IV	Total % Stage III & IV	% Stage III	% Stage IV	Total % Stage III & IV	Change in Case Volume	Change in % points for Stage III	Change in % points for Stage IV	Change in % points for Stage III & IV
ORAL CAVITY & PHARYNX	39	37	15.2%	39.4%	54.5%	17.2%	48.3%	65.5%	(2)	2.1	8.9	11.0
DIGESTIVE SYSTEM	172	186	21.9%	20.4%	42.3%	26.5%	23.8%	50.3%	14	4.6	3.4	8.0
RESPIRATORY SYSTEM	95	108	30.4%	46.4%	76.8%	11.9%	53.6%	65.5%	13	(18.5)	7.2	(11.3)
BONES AND JOINT			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(1)	0.0	0.0	0.0
SOFT TISSUE			100.0%	0.0%	100.0%	33.3%	66.7%	100.0%	1	(66.7)	66.7	0.0
SKIN EXCLUDING BASAL & SQUAMOUS	32	25	4.8%	14.3%	19.0%	7.1%	0.0%	7.1%	(7)	2.4	(14.3)	(11.9)
BASAL & SQUAMOUS SKIN	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0	0.0	0.0	0.0
BREAST	323	325	9.1%	1.8%	10.9%	10.5%	4.4%	14.9%	2	1.4	2.5	4.0
FEMALE GENITAL SYSTEM	115	118	9.6%	12.8%	22.3%	16.3%	7.6%	23.9%	3	6.7	(5.2)	1.6
MALE GENITAL SYSTEM	111	121	8.5%	7.3%	15.9%	8.5%	7.0%	15.5%	10	(0.1)	(0.3)	(0.4)
URINARY SYSTEM	61	59	6.1%	2.0%	8.2%	1.9%	9.6%	11.5%	(2)	(4.2)	7.6	3.4
BRAIN & OTHER NERVOUS SYSTEM	85	90	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5	0.0	0.0	0.0
ENDOCRINE SYSTEM	63	55	2.3%	4.7%	7.0%	4.8%	2.4%	7.1%	(8)	2.4	(2.3)	0.2
LYMPHOMA	59	33	7.3%	43.9%	51.2%	7.7%	30.8%	38.5%	(26)	0.4	(13.1)	(12.8)
MYELOMA	11	21	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10	0.0	0.0	0.0
LEUKEMIA	38	31	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(7)	0.0	0.0	0.0

	Cases (both analytic and non-analytic)		2015			2016			2015 - 2016			
	2015	2016	% Stage III	% Stage IV	Total % Stage III & IV	% Stage III	% Stage IV	Total % Stage III & IV	Change in Case Volume	Change in % points for Stage III	Change in % points for Stage IV	Change in % points for Stage III & IV
MESOTHELIOMA			0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0	0.0	(100.0)	(100.0)
KAPOSI SARCOMA			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(1)	0.0	0.0	0.0
MISCELLANEOUS	31	34	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3	0.0	0.0	0.0
Total	**1,241**	**1,247**	**11.5%**	**13.0%**	**24.5%**	**11.8%**	**14.2%**	**26.0%**	**6**	**0.2**	**1.2**	**1.4**

APPENDIX D: MONMOUTH MEDICAL CENTER RESOURCE INVENTORY

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Adult Day Health Care	Neptune Adult Day Health Center, Inc	3405 Route 33	Neptune	07753	(609) 396-8760
Adult Day Health Care	We Care Adult Care, Inc	552a Highway 35 South	Red Bank	07701	(732) 741-7363
Adult Day Health Care	Active Day Adult Services	20 Jackson Street 1-A	Freehold	07728	(732) 845-3332
Adult Day Health Care	All In A Day Medical Daycare Center	104 Pension Road	Englishtown	07726	(732) 732-2273
Adult Day Health Care	Allaire Care	1979 Route 34 South	Wall	07719	(732) 974-7666
Adult Day Health Care	Caring Tree Adult Medical Daycare	51 James Way	Eatontown	07724	(732) 542-0363
Adult Day Health Care	Golden Age Care	209 Commercial Court	Morganville	07751	(732) 583-9999
Adult Day Health Care	Golden Years Care	108 Woodward Road	Manalapan	07726	(732) 851-6640
Adult Day Health Care	Jersey Shore Adult Day Health Care Center	600 Main Street	Asbury Park	07712	(732) 745-4451
Adult Day Health Care	Matawan Adult Day Care	3996 County Road 516	Matawan	07747	(732) 809-4905
Adult Day Health Care	Monroe Adult Day Care	24 Dugan's Grove Road,	Millstone Twp.	08535	(732) 851-6720
Adult Day Health Care	Royal Senior Care	1041 (500) Highway 36	Atlantic Highlands	07716	(732) 291-0710
Adult Day Health Care	Young At Heart Of Eatontown	139 Grant Avenue	Eatontown	07724	(732) 578-1888
Ambulatory Care Facility	Advanced Endoscopy and Surgical Center	142 Route 35, Suite 101	Eatontown	07724	(732) 935-0031
Ambulatory Care Facility	Atlantic Artificial Kidney Center	6 Industrial Way West Bldg.-B	Eatontown	07724	(732) 460-1414
Ambulatory Care Facility	Atlantic Medical Imaging Wall Township	2399 North Highway 34	Manasquan	08736	(732) 292-9980
Ambulatory Care Facility	Atrium Diagnostic Imaging. L.L.C.	224 Taylors Mills Road, Suite 108	Manalapan	07726	(732) 431-7600
Ambulatory Care Facility	Beacon of LIFE	1075 Stephenson Avenue	Oceanport	07757	(732) 592-3400
Ambulatory Care Facility	Center for Ambulatory and Minimally Invasive Surgery L.L.C.	234 Industrial Way West	Eatontown	07724	(732) 440-4900
Ambulatory Care Facility	Center for Bone and Joint Surgery	195 Route 9 South, Suite 210	Manalapan	07726	(732) 358-6500
Ambulatory Care Facility	Center for Outpatient Surgery, The	1 Executive Drive, Suite 10	Tinton Falls	07701	(732) 212-1991
Ambulatory Care Facility	Central Jersey Surgery Center, L.L.C.	97 Corbett Way	Eatontown	07724	(732) 460-2777
Ambulatory Care Facility	Coastal Surgery Center LLC	3700 Route 33, Ll01	Neptune	07753	(732) 280-5055
Ambulatory Care Facility	Dialysis Clinic Inc. at CentraState Medical Center	901 West Main Street	Freehold	07728	(732) 677-5200

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Ambulatory Care Facility	Dialyze Direct NJ	3297 State Route 66	Neptune	07753	(732) 806-9990
Ambulatory Care Facility	Endoscopy Center of Monmouth County	222 Schanck Road, Suite 100	Freehold	07728	(732) 845-0990
Ambulatory Care Facility	Freehold Dialysis	300 Craig Road	Manalapan	07726	(732) 303-1589
Ambulatory Care Facility	Her Space Women's Health	300 State Route 35 South	Eatontown	07724	(732) 571-9100
Ambulatory Care Facility	Holmdel Dialysis	668 North Beers Street, Suite 201	Holmdel	07733	(732) 739-6676
Ambulatory Care Facility	Holmdel Imaging, LLC	100 Commons Way, Suite 110	Holmdel	07733	(732) 671-6618
Ambulatory Care Facility	Hudson Lithotripsy LLC	331 Newman Springs Rd – Bldg. 1, 4th Floor	Red Bank	07701	(800) 852-5695
Ambulatory Care Facility	Jersey Shore Imaging LLC	2100 Corlies Avenue	Neptune	07753	(732) 988-1234
Ambulatory Care Facility	Keystone Cardiovascular Center	2414 Highway 35 North	Manasquan	08736	(732) 292-1008
Ambulatory Care Facility	Madison Dialysis Center of Matawan	625 Highway 34	Matawan	07747	(732) 566-0471
Ambulatory Care Facility	Manalapan Surgery Center, Inc.	50 Franklin Lane	Manalapan	07726	(732) 617-5990
Ambulatory Care Facility	Matawan Dialysis	764 Highway 34, Suite A	Matawan	07747	(732) 583-1085
Ambulatory Care Facility	Memorial Sloan Kettering Monmouth	480 Red Hill Road	Middletown	07748	(908) 394-7730
Ambulatory Care Facility	Meridian-Fresenius Dialysis at Neptune	2441 State Hwy 33 At Fortunato Place	Neptune	07753	(732) 776-4274
Ambulatory Care Facility	Meridian-Fresenius Dialysis at Red Bank	48 East Front Street	Red Bank	07701	(732) 530-2239
Ambulatory Care Facility	Middletown Dialysis Center	500 Route 35 South	Red Bank	07701	(732) 576-9900
Ambulatory Care Facility	Middletown Medical Imaging	1275 Route 35 North	Middletown	07748	(732) 275-0999
Ambulatory Care Facility	Monmouth Family Health Center, Inc	270 Broadway	Long Branch	07740	(732) 923-7145
Ambulatory Care Facility	Neptune Dialysis Center	2180 Bradley Avenue	Neptune	07753	(732) 775-2725
Ambulatory Care Facility	Nottingham Surgical Services LLC	331 Newman Springs Rd – Bldg. 1, 4th Floor, Ste 143	Red Bank	07701	(800) 852-5695
Ambulatory Care Facility	Ocean Health Initiatives, Inc	20 Jackson Street, Suite E	Freehold	07728	(732) 363-6655
Ambulatory Care Facility	Open MRI and Diagnostic Imaging of Wall	1975 Highway 34, Building D	Wall	07719	(732) 974-8060
Ambulatory Care Facility	Personal Care Molecular Imaging	1514 Highway 138	Wall	07719	(732) 681-2700
Ambulatory Care Facility	Planned Parenthood of NCSNJ	69 East Newman Springs Road	Shrewsbury	07702	(732) 842-9300
Ambulatory Care Facility	Princeton Radiology Associates, PA	176 Route 9 North	Englishtown	07726	(732) 577-2750

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Ambulatory Care Facility	Princeton Radiology Associates, PA	901 West Main Street	Freehold	07728	(732) 462-4844
Ambulatory Care Facility	Professional Orthopaedic Assoc.	776 Shrewsbury Avenue Suite 205	Tinton Falls	07724	(732) 530-4949
Ambulatory Care Facility	Shore Dialysis	300 W Sylvania Avenue, Suite 1	Neptune	07753	(732) 988-3684
Ambulatory Care Facility	Shore Heart Group-Keyport Office	1 Highway 35	Keyport	07735	(732) 360-6333
Ambulatory Care Facility	Shrewsbury Diagnostic Imaging LLC	1131 Broad Street	Shrewsbury	07702	(732) 578-9640
Ambulatory Care Facility	Shrewsbury Surgery Center, LLC	655 Shrewsbury Avenue	Shrewsbury	07702	(732) 450-6000
Ambulatory Care Facility	Sleep Dynamics	2240 Highway 33, Suite 114	Neptune City	07753	(732) 455-3030
Ambulatory Care Facility	Solutions Health and Pregnancy Center	837 Broad Street	Shrewsbury	07702	(732) 747-5454
Ambulatory Care Facility	Specialty Surgery of Middletown LLC	1270 Route 35, Suite B	Middletown	07748	(732) 671-5555
Ambulatory Care Facility	Surgical Institute, LLC	3613 Route 33	Neptune	07753	(732) 918-0061
Ambulatory Care Facility	Surgicare Of Freehold	901 West Main Street, Suite 302, Cn 5050	Freehold	07728	(732) 303-1616
Ambulatory Care Facility	University Radiology Group, PC	2128 Kings Highway	Oakhurst	07755	(732) 4963-8444
Ambulatory Care Facility	University Radiology Group, PC	2315 Highway 34, Bldg. A, Suite C	Manasquan	08736	(732) 282-9120
Ambulatory Care Facility	University Radiology Group, PC	900 West Main Street, Suites G And I	Freehold	07728	(732) 462-1900
Ambulatory Care Facility	University Radiology-Atlantic LLC	48 North Gilbert Street	Tinton Falls	07753	(732) 530-5750
Ambulatory Care Facility	Visiting Nurse Association of Central New Jersey, Inc.	1301 Main Street	Asbury Park	07712	(732) 774-6333
Ambulatory Care Facility	Wall Township Home Training Center	5100 Belmar Boulevard, Suite 1	Wall	07719	(732) 938-2780
Assisted Living Residence	The Chelsea At Manalapan	445 Route 9 South	Manalapan	07726	(732) 972-6200
Assisted Living Residence	The Chelsea At Tinton Falls	One Hartford Drive	Tinton Falls	07701	(732) 933-4700
Assisted Living Residence	The Solana Marlboro	52 County Road 520	Morganville	07751	(732) 536-3000
Assisted Living Residence	The Willows At Holmdel	713 N Beers Street	Holmdel	07733	(732) 335-4405
Assisted Living Residence	Applewood Estates Assisted Living Residence	One Applewood Drive	Freehold	07728	(732) 780-7370
Assisted Living Residence	Arbor Terrace of Middletown	1800 Highway 35 South	Middletown	07748	(732) 957-0083
Assisted Living Residence	Arbor Terrace Shrewsbury	864 Shrewsbury Avenue	Tinton Falls	07724	(732)784-2400
Assisted Living Residence	Atria Tinton Falls	44 Pine Street	Tinton Falls	07753	(732) 918-1960

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Assisted Living Residence	Atrium Senior Living Of Matawan	40 Freneau Avenue	Matawan	07747	(732) 566-0800
Assisted Living Residence	Bayside Manor	7 Laurel Avenue	Keansburg	07734	(732) 471-1600
Assisted Living Residence	Brandywine Assisted Living At Governor's Crossing	49 Lasatta Avenue	Englishtown	07726	(732) 786-1000
Assisted Living Residence	Brandywine Assisted Living At Howell	100 Meridian Place	Howell	07731	(732) 719-0100
Assisted Living Residence	Brandywine Assisted Living At The Sycamore	5 Meridian Way	Shrewsbury	07702	(732) 212-2600
Assisted Living Residence	Brandywine Senior Living At Wall	2021 Highway 35	Wall	07719	(732) 282-1910
Assisted Living Residence	Brighton Gardens Of Middletown	620 State Highway 35 South	Middletown	07748	(732) 275-0790
Assisted Living Residence	Continuing Care At Seabrook	3002 Essex Road	Tinton Falls	07753	(732) 643-2029
Assisted Living Residence	Mattison Crossing At Manalapan Ave	93 Manalapan Avenue	Freehold	07728	(732) 303-8800
Assisted Living Residence	Monmouth Crossing	560 Iron Bridge Road	Freehold	07728	(732) 303-8600
Assisted Living Residence	Reflections At Colts Neck	3 Meridian Circle	Colts Neck	07722	(732) 303-3100
Assisted Living Residence	Sunnyside Manor	2500 Ridgewood Road	Wall	07719	(732) 528-9311
Assisted Living Residence	Sunrise Assisted Living Of Lincroft	734 Newman Springs Road	Lincroft	07738	(732) 212-1910
Assisted Living Residence	Sunrise Assisted Living Of Marlboro	3a South Main Street	Marlboro	07746	(732) 409-6665
Assisted Living Residence	Wellington Estates	2018 Highway 35	Spring Lake	07762	(732) 282-1014
Behavioral Health - County Mental Health Board	Monmouth Co. Div. of Mental Health & Addiction Services	3000 Kozloski Road	Freehold	07728	(732) 431-6451
Behavioral Health - Crisis Intervention	Monmouth Medical Center-West Side Plaza	3301 Highway 66 - Building B, 1st Floor	Neptune	07753	(732) 922-1042
Behavioral Health - Emergency Services	Jersey Shore University Medical Center	1945 Corlies Avenue, Route 33	Neptune	07753	(732) 776-4555
Behavioral Health - Emergency Services	CentraState Medical Center	901 West Main Street	Freehold	07728	(732) 294-2595
Behavioral Health - Emergency Services	Riverview Medical Center	1 Riverview Plaza	Red Bank	07701	(732) 450-2870
Behavioral Health - Family Support	Monmouth Medical Center	300 Second Avenue	Long Branch	07740	(732) 923-6999
Behavioral Health - Homeless Services	Mental Health Association of Monmouth County	119 Ave @ the Commons - Suite 5	Shrewsbury	07702	(732) 542-6422
Behavioral Health - Integrated Case Management Services	CPC Behavioral Healthcare	22 Court Street	Freehold	07728	(732) 780-2012
Behavioral Health - Intensive Family Support Services	Mental Health Association of Monmouth County	119 Avenue at the Common - Suite 5	Shrewsbury	07702	(732) 542-6422

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Behavioral Health - Outpatient	Advanced Health And Education	3 Corbett Way	Eatontown	07724	(732) 655-4239
Behavioral Health - Outpatient	Catholic Charities - Project Free / Asbury Park	238 Neptune Blvd., Suite 2B	Neptune	07753	
Behavioral Health - Outpatient	Community Rehab	3443 Route 9, Suite 9	Freehold	07728	(732) 462-5553
Behavioral Health - Outpatient	Community YMCA Family Services	166 Main Street	Matawan	07747	(732) 290-9040
Behavioral Health - Outpatient	Counseling Center - Freehold	4345 Route 9	Freehold	07728	(732) 431-5300
Behavioral Health - Outpatient	Jersey Shore Medical Center	Parkway 100 3535 Route 66 – Building 5	Neptune	07753	(732) 643-4400
Behavioral Health - Outpatient	Monmouth Medical Center	75 North Bath Avenue	Long Branch	07740	(732) 923-5222
Behavioral Health - Outpatient	CPC Behavioral Healthcare	270 Highway 35	Red Bank	07701	(732) 842-2000
Behavioral Health - Outpatient	Riverview Medical Center Booker Behavioral Health	661 Shrewsbury Avenue	Shrewsbury	07702	(732) 345-3400
Behavioral Health - Outpatient	CPC Behavioral Healthcare Aberdeen Counseling Center	1088 Highway 34	Aberdeen	07747	(732) 290-1700
Behavioral Health - PACT	CPC Behavioral Healthcare	270 Highway 35	Red Bank	07701	(732) 842-2000
Behavioral Health - Residential	Easter Seal Society of NJ	615 Hope Road Victoria Plaza	Eatontown	07712	(732) 380-0390
Behavioral Health - Residential	CPC Behavioral Healthcare Aberdeen Center	1088 Highway 34	Aberdeen	07747	(732) 290-1700
Behavioral Health - Residential	Declarations	345 Union Hill Road Building 2 - Suite C	Manalapan	07726	(732) 792-6990
Behavioral Health - Residential	Collaborative Support Program (CSP), Inc.	11 Spring Street	Freehold	07728	(732) 780-1175 or (800) 227-3729
Behavioral Health - Self Help Center	The C.A.R.E. Center	80 Steiner Ave.	Neptune City	07753	(732) 455-5358
Behavioral Health - Self Help Center	Freehold Self-Help Center	17 Bannard St., Suite 22	Freehold	07728	(732) 625-9485
Behavioral Health - Short Term Facility	Monmouth Medical Center/St. Barnabas	300 Second Avenue	Long Branch	07740	(732) 923-6901
Behavioral Health - Short Term Facility	CentraState Medical Center	901 West Main Street	Freehold	07728	(732) 294-2858
Behavioral Health - Supportive Housing	CPC Behavioral Healthcare	1088 Highway 34	Aberdeen	07747	(732) 290-1700
Behavioral Health - Supportive Housing	Easter Seal Society of NJ	615 Hope Road - Building 3 - 1st Floor	Eatontown	07724	(732) 380-0390
Behavioral Health - Supportive Housing	Mental Health Association of Monmouth	119 Ave @ the Commons Suite 5	Shrewsbury	07702	(732) 542-6422
Behavioral Health - Supportive Housing	Declarations	223 Taylors Mills Road	Manalapan	07726	(732) 792-6990
Behavioral Health - Supportive Housing	Collaborative Support Programs of NJ (CSP)	11 Spring Street	Freehold	07728	(732) 780-1175

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Behavioral Health - Supportive Housing	Triple C Housing, Inc	1 Distribution Way	Monmouth Junction	08852	(732) 297-5840
Behavioral Health - Systems Advocacy	Community Health Law Project	One Main Street. Suite 413	Eatontown	07724	(732) 380-1012
Behavioral Health - Systems Advocacy	City of Asbury Park	1 Municipal Plaza	Asbury Park	07712	(732) 502-5731
Behavioral Health - Voluntary Unit	CentraState Medical Center	901 West Main Street	Freehold	07728	(732) 294-2850
Behavioral Health - Voluntary Unit	Monmouth Medical Center	300 Second Avenue	Long Branch	07740	(732) 923-6909
Behavioral Health - Voluntary Unit	Riverview Hospital	1 Riverview Plaza (Lower Level 1)	Red Bank	07701	(732) 530-2478
Behavioral Health - Voluntary Unit	Jersey Shore Medical Center	Rosa II 1945 Rt. 33	Neptune	07753	(732) 776-4369
Behavioral Health - Partial Care	Riverview Medical Center Booker Behavioral Health	661 Shrewsbury Avenue	Shrewsbury	07702	(732) 345-3400
Behavioral Health - Partial Care	Monmouth Medical Center	75 North Bath Avenue	Long Branch	07740	(732) 923-6500
Behavioral Health - Partial Care	CPC Behavioral Healthcare	1088 Highway 34	Aberdeen	07747	(732) 290-1700
Behavioral Health - Partial Care	Jersey Shore Medical Center	1011 Bond Street	Asbury Park	07712	(732) 869-2760
Behavioral Health - PRIMARY SCREENING	Monmouth Medical Center	300 Second Avenue	Long Branch	07740	HOTLINE: (732) 923-6999
Behavioral Health - Supported Employment Services	CPC Behavioral Healthcare	1088 Highway 34	Aberdeen	07747	(732) 290-1700
Clinical Care -Dental	VNA of Central Jersey Health Center	1301 Main Street	Asbury Park	07712	(732) 776-3917
Clinical Care -Dental	Monmouth Family Health Center	335 Broadway	Long Branch	07740	(732) 475-3800
Clinical Care -Dental	Jersey Shore University Medical Center	1828 West Lake Avenue	Neptune	07753	(732) 673-8990
Communicable Disease - Testing and Services for HIV and STDs	Planned Parenthood of Central New Jersey	1 Bethany Road, Building 6, Suite 91	Hazlet	07730	(732) 888-4882
Communicable Disease - Testing and Services for HIV and STDs	Jane H. Booker Family Health Center	1828 West Lake Avenue	Neptune	07753	(732) 869-5740
Communicable Disease - Testing and Services for HIV and STDs	Riverview Hospital – Emergency Room	1 Riverview Plaza	Red Bank	07701	(732) 741-2700, Ext. 2204
Communicable Disease - Testing and Services for HIV and STDs	Planned Parenthood of Central New Jersey	69 East Newman Springs Road	Shrewsbury	07702	(732) 842-9300
Communicable Disease - Testing and Services for HIV and STDs	Check Mate, Inc	910 4th Avenue	Asbury Park	07712	(732) 774-3100

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Communicable Disease - Testing and Services for HIV and STDs	Check-Mate, Inc	605 Lake Ave	Asbury Park	07712	(732) 774-3100
Communicable Disease - Testing and Services for HIV and STDs	Jersey Shore Addiction Services	685 Neptune Blvd	Neptune	07753	(732) 988-8877
Communicable Disease - Testing and Services for HIV and STDs	Visiting Nurse Association Health Group	816 Sunset Ave	Asbury Park	07712	(732) 502-5100
Communicable Disease - Testing and Services TB Testing Center	Monmouth County Health Department	3435 U.S. Highway 9	Freehold	07728	(732) 431-7456
Communicable Disease - Testing and Services TB Testing Center	Monmouth County Regional Health Commission No. 1	1540 West Park Avenue	Ocean Township	07712	(732) 493-9520
Comprehensive Personal Care Home	Allegria Assisted Living	70 Stockton Avenue	Ocean Grove	07756	(732) 774-1316
Comprehensive Rehabilitation Hospital	HealthSouth Rehabilitation Hospital of Tinton Falls	2 Centre Plaza	Tinton Falls	07724	(732) 460-5320
End-Stage Renal Disease (ESRD) Treatment	Meridian-Fresenius Dialysis At Red Bank	48 E Front St	Red Bank	07701	(732) 530-2239
End-Stage Renal Disease (ESRD) Treatment	Shining Star Dialysis Inc	500 State Route 35	Red Bank	07701	(732) 576-9900
End-Stage Renal Disease (ESRD) Treatment	Riverview Medical Center-Renal Dialysis	48 E Front St	Red Bank	07701	(732) 741-2700
End-Stage Renal Disease (ESRD) Treatment	Total Renal Care Inc	6 Industrial Way W	Eatontown	07724	(732) 460-1414
End-Stage Renal Disease (ESRD) Treatment	Dialysis Clinic Inc	901 W Main St	Freehold Twp.	07728	(732) 940-4460
End-Stage Renal Disease (ESRD) Treatment	Freehold Artificial Kidney Center LLC	300 Craig Rd	Manalapan Twp.	07726	(732) 303-1589
End-Stage Renal Disease (ESRD) Treatment	Ganois Dialysis LLC	5100 Belmar Blvd	Wall Twp.	07727	(732) 938-2780
End-Stage Renal Disease (ESRD) Treatment	DVA Healthcare Renal Care Inc	668 N Beers St	Holmdel	07733	(732) 739-6676
End-Stage Renal Disease (ESRD) Treatment	Dialysis Clinic Inc.	625 Hwy 34	Matawan	07747	(732) 566-5050
End-Stage Renal Disease (ESRD) Treatment	Monmouth Medical Center	300 Second Ave	Long Branch	07740	(732) 923-6285

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
End-Stage Renal Disease (ESRD) Treatment	Dialyze Direct NJ	3297 State Route 66 - Suite 3	Neptune City	07753	(732) 806-9990
End-Stage Renal Disease (ESRD) Treatment	Jane H. Booker Dialysis Center	2441 State Highway 33 Fortunato Place	Neptune City	07753	(732) 776-4274
End-Stage Renal Disease (ESRD) Treatment	Jersey Shore University Medical Center- Renal Dialysis	1945 Route 33	Neptune City	07753	(732) 775-5500
End-Stage Renal Disease (ESRD) Treatment	Shining Star Dialysis Inc	2180 Bradley Ave	Neptune City	077583	(732) 775-2725
End-Stage Renal Disease (ESRD) Treatment	Premier Health Group LLC	3297 Route 66	Neptune City	07753	(732) 982-4464
End-Stage Renal Disease (ESRD) Treatment	Neptune Artificial Kidney Center LLC	300 W Sylvania Ave	Neptune City	07753	(732) 988-3684
Family Support Services	Coastal Communities Family Success Center	300 Broadway Rear Entrance	Long Branch	07740	(732) 571-1670
Family Support Services	Bayshore Family Success Center Henry Hudson Trail Activity Center	945 Route 36	Leonardo	07737	(732) 241-7098
Family Support Services	Oceans Family Success Center	1201 Springwood Avenue Unit 105	Asbury Park	07712	
Family Support Services	Children's Home Society	416 Bellevue Avenue, Suite 201	Trenton	08618	(800) 396-4518
Family Support Services	Monmouth County Division of Social Services	2405 Route 66	Ocean	07712	(732) 431-6000
Family Support Services	Monmouth County Division of Social Services	Kozloski Road - PO Box 3000	Freehold	07728	(732) 431-6000
Family Support Services - Displaced Homemaker Service	Brookdale College at Long Branch	213 Broadway	Long Branch	07740	(732) 739-6020
Family Support Services - Early Childhood Services	Visiting Nurses Association of Central Jersey/VNA Health Group	200 Broadway	Long Branch	07740	(732) 502-5158
Family Support Services - Early Childhood Services	Child Care Resources of Monmouth County	3301 C. Route 66	Neptune	07753	(732) 918-9901 ext. 107
Family Support Services - Early Childhood Services	Visiting Nurse Association of Central Jersey	176 Riverside Avenue	Red Bank	07701	(732) 224-6950
Family Support Services - Sexual Violence Program	180 Turning Lives Around				(732) 264-4360
Family Support Services - Women Services	Domestic Violence Program 180, Turning Lives Around	1 Bethany Road, Bldg. 3, Suite 42	Hazlet	07730	(732) 264-4360
FQHC	Monmouth Family Health Center	335 Broadway	Long Branch	07740	(732) 923-6585
FQHC	Monmouth Family Health Center	80 Pavilion Avenue	Long Branch	07740	(732) 963-0114

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
FQHC	Monmouth Family Health Center - Main Facility	270 Broadway	Long Branch	07740	(732) 923-7100
FQHC	Ocean Health Initiatives - Freehold	20 Jackson St.	Freehold	07728	(732) 363-6655
FQHC	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732) 888-4149
FQHC	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	188 East Bergen Place	Red Bank	07701	(732) 219-6620
FQHC	Visiting Nurse Association of Central Jersey Community Health Center - Main Facility	1301 Main Street	Asbury Park	07712	(732) 774-6333
General Acute Care Hospital	CentraState Medical Center	901 West Main Street	Freehold	07728	(732) 431-2000
General Acute Care Hospital	Bayshore Medical Center	727 No Beers Street	Holmdel	07733	(732) 739-5900
General Acute Care Hospital	Monmouth Medical Center	300 Second Avenue	Long Branch	07740	(732) 222-5200
General Acute Care Hospital	Jersey Shore University Medical Center	1945 Route 33	Neptune	07754	(732) 775-5500
General Acute Care Hospital	Riverview Medical Center	One Riverview Plaza	Red Bank	07701	(732) 741-2700
Home Health Agency	Hackensack Meridian Health at Home Monmouth County	1340 Campus Parkway, Suite A3	Neptune	07753	(732) 751-3700
Home Health Agency	Seabrook Home Health Agency	3000 Essex Road	Tinton Falls	07753	(732) 643-2000
Hospice Branch	Vitas Healthcare Corporation Atlantic	1040 Broad Street, Suite 300	Shrewsbury	07702	(732) 389-0066
Hospice Branch	Compassus-Greater New Jersey	1955 State Highway 34	Wall	07719	(267) 948-1495
Hospice Care	Hackensack Meridian Health Hospice	1340 Campus Parkway Suite A3	Neptune	07753	(732) 751-3750
Hospice Care	Embracing Hospice Care of New Jersey	3349 Route 138, Bldg. B Suite F	Wall	07719	(732) 974-2545
Hospital-Based, Off-Site Ambulatory Care Facility	Center For Wound Healing at Bayshore Medical Center	735 North Beers Street	Holmdel	07733	(732) 497-1611
Hospital-Based, Off-Site Ambulatory Care Facility	CentraState Family Medicine Center	1001 West Main Street	Freehold	07728	(732) 294-2540
Hospital-Based, Off-Site Ambulatory Care Facility	HOPE Tower	19 Davis Avenue	Neptune	07753	(732) 776-4900
Hospital-Based, Off-Site Ambulatory Care Facility	Jane H Booker Family Health Center	1828 West Lake Avenue	Neptune	07754	(732) 776-4209
Hospital-Based, Off-Site Ambulatory Care Facility	Meridian Rehabilitation At Neptune	2100 Route 33, Suite 2	Neptune	07754	(732) 776-4558

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Hospital-Based, Off-Site Ambulatory Care Facility	Monmouth Medical Center Laboratory & Infusion Center	100 State Route 36 Suite #1m	West Long Branch	07764	(732) 923-7450
Hospital-Based, Off-Site Ambulatory Care Facility	Riverview Medical Center Outpatient Behavioral Health	661 Shrewsbury Avenue	Shrewsbury	07702	(732) 530-2213
Hospital-Based, Off-Site Ambulatory Care Facility	The Center for Sleep Medicine at Bayshore Medical Center	678 North Beers Street	Holmdel	07733	(732) 739-5900
Hospital-Based, Off-Site Ambulatory Care Facility	The Sleepcare Center at Jersey Shore University Medical Center	1809 Corlies Avenue, Suite 3	Neptune	07753	(732) 776-4900
Long Term Care - Nursing Home	The Atrium At Navesink Harbor	40 Riverside Avenue	Red Bank	07701	(732) 842-3400
Long Term Care - Nursing Home	The Manor	689 West Main St	Freehold	07728	(732) 431-5200
Long Term Care - Nursing Home	Allaire Rehab & Nursing	115 Dutch Lane Road	Freehold	07728	(732) 431-7420
Long Term Care - Nursing Home	Anchor Care And Rehabilitation Center	3325 Highway 35	Hazlet	07730	(732) 264-5800
Long Term Care - Nursing Home	Applewood Estates	Applewood Drive	Freehold	07728	(732) 780-7370
Long Term Care - Nursing Home	Arnold Walter Nursing Home	622 S Laurel Avenue	Hazlet	07730	(732) 787-6300
Long Term Care - Nursing Home	Atrium Post-Acute Care of Matawan	38 Freneau Avenue	Matawan	07747	(732) 765-5600
Long Term Care - Nursing Home	Bayshore Health Care Center	715 North Beers Street	Holmdel	07733	(732) 847-3000
Long Term Care - Nursing Home	Care One At Holmdel	188 Highway 34	Holmdel	07733	(732) 946-4200
Long Term Care - Nursing Home	Care One At King James	1040 Route 36	Atlantic Highlands	07716	(732) 291-3400
Long Term Care - Nursing Home	Care One At Wall	2621 Highway 138	Wall	07719	(732) 556-1060
Long Term Care - Nursing Home	Continuing Care At Seabrook	3002 Essex Road	Tinton Falls	07753	(732) 643-2000
Long Term Care - Nursing Home	Coral Harbor Rehabilitation and Healthcare Center	2050 Sixth Ave	Neptune City	07753	(732) 774-8300
Long Term Care - Nursing Home	De La Salle Hall	810 Newman Springs Rd	Lincroft	07738	(732) 530-9470
Long Term Care - Nursing Home	Gateway Care Center	139 Grant Ave	Eatontown	07724	
Long Term Care - Nursing Home	Imperial Care Center	919 Green Grove Road	Neptune	07753	(732) 922-3400
Long Term Care - Nursing Home	Jersey Shore Center	3 Industrial Way East	Eatontown	07724	(732) 544-1557
Long Term Care - Nursing Home	Jewish Home for Rehabilitation And Nursing	1151 West Main Street	Freehold	07728	(732) 202-1000
Long Term Care - Nursing Home	King Manor Care and Rehabilitation Center	2303 West Bangs Ave	Neptune	07753	(732) 774-3500

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
Long Term Care - Nursing Home	Laurel Bay Health & Rehabilitation Center	32 Laurel Avenue	Keansburg	07734	(732) 787-8100
Long Term Care - Nursing Home	Madison Center	625 State Highway 34	Matawan	07747	(732) 566-6400
Long Term Care - Nursing Home	Majestic Rehabilitation and Nursing Center At Red Bank Inc	100 Chapin Avenue,	Red Bank	07701	(732) 741-8811
Long Term Care - Nursing Home	Meridian Nursing & Rehabilitation At Shrewsbury	89 Avenue at The Common	Shrewsbury	07702	(732) 676-5800
Long Term Care - Nursing Home	Meridian Nursing And Rehabilitation At Ocean Grove	160 Main Street	Ocean Grove	07756	(732) 481-8300
Long Term Care - Nursing Home	Meridian Subacute Rehabilitation	1725 Meridian Trail	Wall	07719	(732) 312-1800
Long Term Care - Nursing Home	Monmouth Care Center	229 Bath Avenue	Long Branch	07740	(732) 229-4300
Long Term Care - Nursing Home	Neptune Gardens Nursing and Rehab LLC	101 Walnut St	Neptune	07753	(732) 774-3550
Long Term Care - Nursing Home	Pine Brook Care Center	104 Pension Road	Englishtown	07726	(732) 446-3600
Long Term Care - Nursing Home	Preferred Care at Wall	2350 Hospital Road	Allenwood	08720	(732) 683-8600
Long Term Care - Nursing Home	Sunnyside Manor	2500 Ridgewood Road	Wall	07719	(732) 528-9311
Long Term Care - Nursing Home	Tower Lodge Care Center	1506 Gully Road	Wall	07719	(732) 681-1400
Long Term Care - Nursing Home	Wardell Gardens at Tinton Falls	524 Wardell Road	Tinton Falls	07753	(732) 922-9330
Long Term Care - Nursing Home	Wedgwood Gardens Care Center	3419 Highway 9	Freehold	07728	(732) 677-1200
Residential Dementia Care Home	Millennium Memory Care at Holmdel LLC	92 Stillwell Road	Holmdel	07733	(201) 529-4660
Residential Dementia Care Home	Millennium Memory Care at Matawan	447 Matawan Avenue	Cliffwood	07721	(201) 529-4660
Residential Dementia Care Home	Millennium Memory Care at Ocean	111 Bowne Road	Ocean	07712	(732) 761-2777
School Linked Services	Asbury Park High School	1003 Sunset Avenue	Asbury Park	07712	(732)776-2638 ext. 2675
School Linked Services	Freehold Learning Center	Dutch Lane	Freehold	07728	(732) 462-0464
School Linked Services	Keansburg High School	140 Port Monmouth Road	Keansburg	07734	(732) 996-7646
School Linked Services	Long Branch High School	404 Indiana Avenue	Long Branch	07740	(732) 728-9533
School Linked Services	Red Bank Regional High School	101 Ridge Road	Little Silver	07739	(732) 842-8000 ext. 1236
School Linked Services	Red Bank Primary	222 River Street	Red Bank	07701	(732) 861-5988
School Linked Services - Adolescent Pregnancy Prevention Initiative	Keansburg High School	140 Port Monmouth Road	Keansburg	07734	(732) 787-2007 ext. 2551

Provider Type	Provider Name	Street Address	Town	ZIP Code	Telephone
School Linked Services - Family Friendly Centers	Joseph C. Caruso Elementary School	285 Carr Avenue	Keansburg	07734	(732) 787-2001 ext. 2550
School Linked Services - Family Friendly Centers	Neptune Middle School	2300 Heck Avenue	Neptune	07753	(732) 776-2200/2100
Surgical Practice	Atlantic Surgery Center	279 Third Avenue, Suite105	Long Branch	07740	(732) 222-7300
Surgical Practice	Bogdan Surgery Center	112 Professional View Drive Bldg. 100	Freehold	07728	(732) 577-9126
Surgical Practice	Comprehensive Pain Management, L.L.C.	2420 Highway 34	Manasquan	08736	(732) 223-2873
Surgical Practice	Damien Fertility Partners a Division of Regional Women's Health Group, L.L.C.	655 Shrewsbury Avenue, Suite 300	Shrewsbury	07702	(732)758-6511
Surgical Practice	Freehold Surgical Center	500 West Main Street	Freehold	07728	(732) 462-8707
Surgical Practice	Maxillofacial Surgery Center for Excellence L.L.C.	276 Broad Street	Red Bank	07701	(732) 530-1110
Surgical Practice	Mid Atlantic Eye Center, PC	70 E Front Street	Red Bank	07701	(732) 741-0858
Surgical Practice	Monmouth Plastic Surgery PCC	264 Broad Street	Red Bank	07701	(732) 842-3737
Surgical Practice	Monmouth Surgi Center	370 State Highway 35	Red Bank	07701	(732) 530-1599
Surgical Practice	Moss Urologic Surgery, LLC	2356 Route 9s, Suite B6	Howell	07731	(732) 886-2252
Surgical Practice	Ocean Surgical Pavilion, PC	1907 Highway 35, Suite 9	Oakhurst	07755	(732) 517-8885
Surgical Practice	Physicians of Monmouth, LLC	733 North Beers Street, Suite L4	Holmdel	07733	(732) 739-0707
Surgical Practice	Plastic Surgery Center, PA (The)	535 Sycamore Avenue	Shrewsbury	07702	(732) 741-0970
Surgical Practice	Reproductive Science Center of New Jersey, PA	234 Industrial Way West, Suite A104	Eatontown	07724	(732) 918-2500
Surgical Practice	Retina Consultants Surgery Center	39 Sycamore Avenue	Little Silver	07739	(732) 530-7730
Surgical Practice	Riverside Plastic Surgery and Sinus Center	70 East Front Street-Third Floor	Red Bank	07701	(732) 747-5300
Surgical Practice	Two Rivers Surgery Center L.L.C.	194 Route 35 South	Red Bank	07701	(732) 242-4000

APPENDIX E: DISCHARGES AND POPULATION 18-64 FOR AMBULATORY CARE SENSITIVE CONDITIONS

ACSC Discharges from NJ Hospitals		Total ACS Discharges	ANGINA	ASTHMA	BACTERIAL PNEUMONIA	CELLULITIS	CONGESTIVE HEART FAILURE	CONVULSION	COPD	DEHYDRATION	DENTAL CONDITIONS	DIABETES	ENT
ALL RACES													
Statewide		55,565	603	3,780	6,170	6,230	5,260	963	6,355	2,923	761	7,624	533
MMC PSA		1,538	9	100	162	196	147	19	198	57	12	236	14
WHITE													
Statewide		27,668	276	1,289	3,316	4,150	2,014	528	3,729	1,469	379	3,271	237
MMC PSA		916	6	35	104	149	78	12	125	37	9	115	9
BLACK													
Statewide		15,535	160	1,363	1,578	892	2,180	242	1,792	740	186	2,603	134
MMC PSA		423	2	47	32	23	57	1	56	12	1	99	1

ACSC Discharges from NJ Hospitals		Total ACS Discharges	GASTRO-INSTESTINAL OBSTRUCTION	GRAND MAL STATUS/OTHER EPILEPTIC CONVULSION	HYPERTENSION	HYPOGLYCEMIA	IMMUNIZATION RELATED PREVENTABLE	KIDNEY/URINARY INFECTION	NUTRITION DEFICIENCIES (til 12/14 DSCHG)	OTHER TUBERCULOSIS	PELVIC INFLAMMATORY DISEASE	PULMONARY TUBERCULOSIS	SKIN GRAFTS W CELLULITIS
ALL RACES													
Statewide		55,565	1,936	4,534	994	60	8	4,164	2,068	33	359	73	134
MMC PSA		1,538	63	110	42	1		127	35	2	4	2	2
WHITE													
Statewide		27,668	969	2,226	346	25	3	2,051	1,203	4	110	6	67
MMC PSA		916	44	72	21			69	27		3		1
BLACK													
Statewide		15,535	437	1,293	427	26	2	841	462	10	118	16	33
MMC PSA		423	11	23	19	1		29	6		1	1	1

ACSC 2016 Discharge Rate per 1,000 population	Est 2016 Population 18-64	Total ACS Discharges	ANGINA	ASTHMA	BACTERIAL PNEUMONIA	CELLULITIS	CONGESTIVE HEART FAILURE	CONVULSION	COPD	DEHYDRATION	DENTAL CONDITIONS	DIABETES	ENT
ALL RACES													
Statewide	5,610,651	9.903	0.107	0.674	1.100	1.110	0.938	0.172	1.133	0.521	0.136	1.359	0.095
MMC PSA	165,350	9.301	0.054	0.605	0.980	1.185	0.889	0.115	1.197	0.345	0.073	1.427	0.085
Variance from Statewide		(0.602)	(0.053)	(0.069)	(0.120)	0.075	(0.048)	(0.057)	0.065	(0.176)	(0.063)	0.068	(0.010)
WHITE													
Statewide	3,657,780	7.564	0.075	0.352	0.907	1.135	0.551	0.144	1.019	0.402	0.104	0.894	0.065
MMC PSA	128,614	7.122	0.047	0.272	0.809	1.159	0.606	0.093	0.972	0.288	0.070	0.894	0.070
Variance from Statewide		(0.442)	(0.029)	(0.080)	(0.098)	0.024	0.056	(0.051)	(0.048)	(0.114)	(0.034)	(0.000)	0.005
BLACK													
Statewide	783,378	19.831	0.204	1.740	2.014	1.139	2.783	0.309	2.288	0.945	0.237	3.323	0.171
MMC PSA	18,945	22.328	0.106	2.481	1.689	1.214	3.009	0.053	2.956	0.633	0.053	5.226	0.053
Variance from Statewide		2.497	(0.099)	0.741	(0.325)	0.075	0.226	(0.256)	0.668	(0.311)	(0.185)	1.903	(0.118)
Variance Black from White													
Statewide		12.27	0.13	1.39	1.11	0.00	2.23	0.16	1.27	0.54	0.13	2.43	0.11
PSA		15.21	0.06	2.21	0.88	0.06	2.40	-0.04	1.98	0.35	-0.02	4.33	-0.02
Est Admissions Statewide		**9609.41**	**100.89**	**1086.94**	**867.82**	**3.20**	**1748.67**	**128.92**	**993.37**	**425.39**	**104.83**	**1902.46**	**83.24**
Est Admissions PSA		288.07	1.12	41.84	16.68	1.05	45.51	-0.77	37.59	6.55	-0.33	82.06	-0.33

ACSC 2016 Discharge Rate per 1,000 population	Est 2016 Population 18-64	Total ACS Discharges	GASTRO-INSTESTINAL OBSTRUCTION	GRAND MAL STATUS/OTHER EPILEPTIC CONVULSION	HYPERTENSION	HYPOGLYCEMIA	IMMUNIZATION RELATED PREVENTABLE	KIDNEY/URINARY INFECTION	NUTRITION DEFICIENCIES (til 12/14 DSCHG)	OTHER TUBERCULOSIS	PELVIC INFLAMMATORY DISEASE	PULMONARY TUBERCULOSIS	SKIN GRAFTS W CELLULITIS
ALL RACES													
Statewide	5,610,651	9.903	0.345	0.808	0.177	0.011	0.001	0.742	0.369	0.006	0.064	0.013	0.024
MMC PSA	165,350	9.301	0.381	0.665	0.254	0.006	0.000	0.768	0.212	0.012	0.024	0.012	0.012
Variance from Statewide		(0.602)	0.036	(0.143)	0.077	(0.005)	(0.001)	0.026	(0.157)	0.006	(0.040)	(0.001)	(0.012)
WHITE													
Statewide	3,657,780	7.564	0.265	0.609	0.095	0.007	0.001	0.561	0.329	0.001	0.030	0.002	0.018
MMC PSA	128,614	7.122	0.342	0.560	0.163	0.000	0.000	0.536	0.210	0.000	0.023	0.000	0.008
Variance from Statewide		(0.442)	0.077	(0.049)	0.069	(0.007)	(0.001)	(0.024)	(0.119)	(0.001)	(0.007)	(0.002)	(0.011)
BLACK													
Statewide	783,378	19.831	0.558	1.651	0.545	0.033	0.003	1.074	0.590	0.013	0.151	0.020	0.042
MMC PSA	18,945	22.328	0.581	1.214	1.003	0.053	0.000	1.531	0.317	0.000	0.053	0.053	0.053
Variance from Statewide		2.497	0.023	(0.437)	0.458	0.020	(0.003)	0.457	(0.273)	(0.013)	(0.098)	0.032	0.011
Variance Black from White													
Statewide		12.27	0.29	1.04	0.45	0.03	0.00	0.51	0.26	0.01	0.12	0.02	0.02
PSA		15.21	0.24	0.65	0.84	0.05	0.00	0.99	0.11	0.00	0.03	0.05	0.05
Est Admissions Statewide		**9609.41**	**229.47**	**816.26**	**352.90**	**20.65**	**1.36**	**401.74**	**204.36**	**9.14**	**94.44**	**14.71**	**18.65**
Est Admissions PSA		288.07	4.52	12.39	15.91	1.00	0.00	18.84	2.02	0.00	0.56	1.00	0.85