

Barnabas Health

MONMOUTH MEDICAL CENTER COMMUNITY HEALTH NEEDS ASSESSMENT 2013



ACKNOWLEDGEMENTS

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Barnabas Health

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- (1) The CHNA'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 three 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 Needs Assessment and Health Improvement Plan.

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EXECUTIVE SUMMARY

Background

The Community Health Needs Assessment (CHNA) for the communities served by Monmouth Medical Center (MMC) was designed to ensure that the Hospital continues to effectively and efficiently serve the health needs of the 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 Medical Center is a member of the Barnabas Health System (BH) which provided additional support and leadership in the development of the Plan. A county-wide work group of providers, civic leaders, health departments and community representatives worked with the Medical Center to identify the top health issues facing the county. These recommendations were considered by MMC and five were selected based on MMC's capacity, resources, competencies, and needs specific to the populations it serves.

The CHNA uses detailed secondary public health data at the county and community levels to identify health assets, gaps, disparities and trends. These data were supplemented by meetings and discussions with local health departments which shared data from their own needs assessments and by input from the county-wide task force who provided additional insight and expertise which led to the identification of Plan priorities. The communities considered throughout this CHNA are pictured in page (i), and are all located within Monmouth County.

Monmouth County is the sixth largest, and fourth most populous, county in New Jersey, and is among the fastest growing counties. Between 2000 and 2010, the population of the county increased by 2.5% to nearly 650,000 people. Most of the growth occurred along the shore communities of Asbury Park and Long Branch, which enjoyed a gentrification and resurgence of new residential and business growth along the Ocean front. In 2011, Monmouth County ranked among the top 2% of counties in the U.S. in terms of wealth. In October 2012, the New Jersey shoreline was hit by Superstorm Sandy whose path of destruction left many Monmouth County residents homeless and in need of support. Recover efforts continue to this day.

The county's economic wealth is not distributed uniformly across all residents, with pockets of poverty along some of the same coastal communities experiencing growth.

The following is an example of the differences and disparities identified in this CHNA:

- Eight percent of Monmouth County residents live in poverty, compared to 25% in Long

Service Area Map



Branch.

- In 2011, 9% of Monmouth County residents were unemployed, but in Asbury Park nearly 20% of residents were unemployed.
- Approximately 7% of Monmouth County's population has limited English proficiency. In Asbury Park the percentage rises to 29%.
- Monmouth County's racial and ethnic diversity is limited compared to New Jersey. But, Asbury Park is the most diverse municipality in MMC's service area with more than half of its residents Black/African-American (51%), and Hispanic/Latino residents accounting for more than a quarter of all residents (26%).

Disparities in Monmouth County and MMC's Primary Service Area (PSA) residents' incidence and prevalence of illness identified by this CHNA include:

- Stroke is the fourth leading cause of death in the county. Age-adjusted rates vary by race:
 - Black, Non-Hispanic = 49.2/1,000
 - White, Non-Hispanic = 34.6/1,000
- Disparities are also present among maternal and child health indicators.
 - The percentage of low birth weight infants born to White mothers in Monmouth County is 7.2%, compared to 10.9% of Black mothers.
 - Among very low birth rate infants, the percentage of low birth weight infants among Black women in Monmouth County was 3.2%, compared to 1.2% of White women.
 - In 2010, the county's teen (15-19) birth rate was 11.2/1,000. However, communities with low socioeconomic status or with higher minority populations exhibited birth rates that were three to four times higher.
- Emergency Department (ED) use rates in MMC's PSA (356/1,000) are higher than Monmouth County (295/1,000), and towns with the highest rates include Long Branch (502/1,000) and Asbury Park (491/1,000).
 - Asbury Park and Long Branch also demonstrate much higher Ambulatory Care Sensitive Conditions (ACSCs) ED admissions for adults than the PSA or the county. This is also the case for pediatric ED visits for ACSCs.
- Inpatient behavioral health use rates for mental health conditions are higher in MMC's PSA than the State or county rates.
- Substance abuse ED encounters are also higher in the PSA than both the county and statewide rates.

Healthy Community Indicators identify that:

- Six percent of low income residents in Monmouth County do not live near a grocery store.
- The violent crime rate in Monmouth County is nearly three times the *Healthy People 2020* target.
- The percentage of Monmouth County residents reporting high cholesterol results was 2.5 times the State rate.
- Although declining, the percent of Monmouth County residents who identify themselves as excessive drinkers is more than twice as high as the National Benchmark.
- The number of primary care physicians per 1,000 population in Monmouth County is nearly one-third lower than the National Benchmark.

TOP FIVE HEALTH ISSUES

Five health issues emerged as those most likely to benefit residents of the areas served by the Hospital and to be within the Hospital's purview, competency and resources to impact in a meaningful manner. These include:

Addressing the Needs of the "Frequent Flyer"

Recent studies dispel the long held belief that emergency room "frequent flyers" are patients who are willfully abusing access to emergency care. In reality, frequent flyers represent a varied population of patients with mental disorders and chronic conditions, who have no other source of care. Many of these patients are low-income, insured by Medicare and Medicaid. Frequent users account for 4% of ED patients and account for 25% of all ER visits, yet these patients appear to be showing up for actual emergencies not just showing up for non-emergent, primary care issues.¹

- Monmouth County has a significantly lower number of primary care physicians than the County Health Rankings Benchmark. This factor, coupled with low reimbursement rates for Medicaid patients, presents access problems for low income and Medicaid patients.
- ED visit rates for substance abuse and mental health conditions are higher in the PSA than in Monmouth County.
- ED visit rates for alcohol dependence jumped from 19/1,000 to 25/1,000 between 2006 and 2010.
- ED visit rates for COPD are on the rise in the county.

In addition, frequent ED use is often associated with higher rates of 30-day hospital readmissions. Under provisions of the Affordable Care Act, Medicare began penalizing hospitals for excessive readmission rates which provides even more reasons for physicians and other professionals to work together to manage frequent ED users better and to keep them out of the hospital.

Social problems can exacerbate the reasons that patients end up in the ED which only underscores the need for developing models of care that integrate medical care and social services.

Prevention and Management of Chronic Diseases

Chronic diseases are non-communicable diseases that are prolonged in duration and are rarely cured completely. These conditions include heart disease, cancer, stroke, diabetes and arthritis. Chronic diseases are responsible for 70% of all deaths in the U.S. and nearly 1 in 2 Americans suffer from at least one chronic illness. Treating people with chronic diseases account for 75% of all healthcare costs in the U.S. Additionally, nearly two-thirds of the increase in spending is a result of the increased prevalence of chronic disease. The average cost of treating someone with one or more chronic diseases is five times greater than for someone without a chronic disease.²

In addition, similar to national trends, Monmouth County residents are exhibiting increasing diagnoses for chronic diseases. It is also common that the pathology for one condition may also affect other body

¹ Retrieved from <http://www.documentingmedicare.com/frequentflyers-in-the-emergencyroom/> accessed 6/10/13.

² Retrieved from <http://www.cdc.gov/features/chronicdiseaseprogram/> accessed 6/7/13.

systems, resulting in co-occurrence of multiple chronic conditions (MCC). The presence of MCCs adds a layer of complexity to disease management.

- The elderly are more likely to suffer from multiple chronic diseases; approximately 14% of Monmouth County residents are elderly.
- Service area residents display high rates of Ambulatory Care Sensitive Admissions among chronic disease categories including CHF and Diabetes, as well as ED visits for COPD.
- Monmouth County residents have significantly higher age-adjusted mortality rates for Heart Disease, Cancer and Chronic Lower Respiratory Disease than benchmarks.

For many, chronic disease is a lifelong proposition impacting the quality of life for individuals, families and caregivers. Chronic disease also has broader economic impacts in terms of increased absenteeism, productivity, poor performance, etc.

Yet, the vast majority of chronic diseases are preventable and many could be managed more effectively. With an aging population and an increasing number of children and adolescents suffering from a chronic condition, this issue has become a leading health concern for the nation.

Physician Prescribing Patterns With Regard to Narcotics

According to a 2010 study by the National Institute on Drug Abuse, approximately 7 million people in the U.S., 2.7% of the population annually, abuse prescription drugs.³ The most commonly abused drugs fall into three categories: opioids (pain killers), depressants and stimulants.

The rise in the misuse and abuse of prescription drugs, especially opioids, has been attributed to the increased availability over the decade, a result of increased prescribing. The increased prescribing, in turn, is the result of more aggressive treatment of pain, new formulas of opiate analgesics to deal with the demand, and increased marketing of opiates by pharmaceutical companies.

Vicodin™ is among the most widely prescribed drug of any category in the U.S. Oxycontin™ and methadone are more frequently prescribed to treat non-cancer related pain than at any other period in time. Because of their psycho-active and addictive properties these drugs along with tranquilizers and stimulants have a high street value. They enter the illicit market by sharing among friends and family, doctor/ED shopping, prescription fraud and theft.

- Monmouth County residents ranked significantly higher than New Jersey residents for total discharges for substance abuse treatment.
- Inpatient substance abuse discharges in the PSA were higher than the county. ED substance abuse visit rates for MMC's PSA were also higher than the county.

New reports suggest that opiate use can be a gateway to heroin use due to heroin's lower cost and availability. Abuse of prescription drugs has also been linked to a steep rise in drug-related poisonings.

³ Retrieved from <http://www.pbs.org/newshourrundown/2013/04/which-prescription-drugs-do-americans-abuse-most.html>.

Pharmacy Counseling for Geriatric Patients

As people age it is common that the number of medications prescribed for them will increase. For example, older adults are prescribed twice as many drugs as the general population and three times as many as those under age 65. Each year more than 1.5 million Americans become ill, are injured, or die because of medication errors.⁴ Seniors are more at-risk because of the increased number of drugs prescribed.

- More than 44% of patients hospitalized in MMC's service area are Medicare patients.
- Deaths due to unintentional injuries are on the rise in Monmouth County.

Adding pharmaceutical counseling services to patients on four or more medications can decrease non-adherence and medication errors. In addition, comprehensive pharmaceutical therapy management is an effective means of managing chronic disease and drug-related issues such as misuse, abuse and non-compliance in the elderly. Enhanced collaboration between physicians and pharmacists has also been shown to improve the outcomes of these programs.

Care Transitions

The term "care transition" describes a process in which a patient's care setting changes from hospital to home, skilled nursing facility or other inpatient facility. Poor management of these transitions can have far reaching consequences such as hospital readmission, adverse medical events and sometimes death. In addition to the negative health consequences, these adverse outcomes are costly. Researchers estimate that inadequate care coordination and transition was responsible for \$25 to \$45 billion dollars in spending due to avoidable complications and hospital readmissions.⁵

- Hospital readmission rates for AMI, COPD and pneumonia increased in Monmouth County between 2006 and 2010.

Without information or an understanding of their diagnosis, medications and self-care needs, patients cannot fully participate in their care once they are sent home. In addition, primary care physicians too often have little to no information about their patients' hospitalizations, and patients fail to consistently get the follow-up care they need once they leave the hospital. Poor designed or executed discharge planning creates unnecessary and costly burdens for health professionals and patients.

A comprehensive, customized discharge plan can effectively communicate discharge information to patients, community providers and caregivers, and facilitate post-hospital discharge. When combined with post-discharge support, such a process can reduce hospital readmissions, improve outcomes and reduce costs.

⁴ Retrieved from <http://rnjournal.com/journalofnursing/pharmaceutical-counseling> accessed 6/13/13.

⁵ Retrieved from http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=76 accessed 6/13/13.

1. **INTRODUCTION**

Monmouth Medical Center (MMC), located in Long Branch, New Jersey, is one of six acute care hospitals operating in Monmouth County. MMC is celebrating its 125 year anniversary of providing high quality health care to area residents and is an essential area resource. MMC is one of New Jersey's largest academic medical centers and has been a teaching affiliate of Philadelphia's Drexel University College of Medicine for over 40 years. From its earliest days, MMC has been a leader in surgical advancement and has introduced many technological firsts to the region, including robotic surgery and other minimally invasive techniques.

MMC was recently awarded the highest score ('A') for patient safety by the Leapfrog Group, an independent, national nonprofit organization of employer purchasers of health care and the nation's leading experts on safety. The hospital is routinely recognized by HealthGrades, the nation's largest premier independent health care quality company, for excellence in both emergency medicine and maternity care. U.S. News & World Report has recognized MMC as a regional leader in cancer, geriatrics, gynecology, neurology and neurosurgery.

Monmouth County is slightly more affluent and less diverse than New Jersey overall. However, some of the County's towns are very diverse, and pockets of poverty exist. MMC consistently strives to deliver culturally competent, linguistically effective and educationally appropriate care to all residents.

Healthy People 2020 benchmarks are used throughout the report to assess the health status of residents. *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.

The County Health rankings are also used throughout this report to measure the overall health of Essex County residents. These 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. They 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.

In June 2011, the National Prevention Council (NPC) announced its strategy. The NPC was created through the Affordable Care Act (ACA) in 2010, and tasked with the development of a National Prevention Strategy to realize the law's efforts to reduce costs, improve quality of care, and provide coverage options for the uninsured. The NPC's overarching goal is to increase the number of Americans who are healthy at every stage of life. To achieve this goal, the strategy identifies four Strategic Directions and seven targeted Priorities. The Strategic Directions are core recommendations for developing a prevention-oriented society. The Strategic Directions are:

- **Healthy and Safe Community Environments:** Create, sustain, and recognize communities that promote health and wellness through prevention.
- **Clinical and Community Prevention Services:** Ensure that prevention-focused healthcare and community prevention efforts are available, integrated, and mutually reinforcing.
- **Empowered People:** Support people in making healthy choices.
- **Elimination of Health Disparities:** Eliminate disparities, improving the quality of life for all Americans.

With this framework, the Priorities provide directives that are most likely to reduce the burden of the leading causes of preventable death and major illness. The seven Priorities are:

- **Tobacco Free Living**
- **Preventing Drug Abuse and Excessive Alcohol Use**
- **Healthy Eating**
- **Active Living**
- **Injury and Violence Free Living**
- **Reproductive and Sexual Health**
- **Mental and Emotional Well-Being**

The MMC needs assessment was undertaken in this context and developed for the purpose of enhancing the health and quality of life throughout the community.

2. METHODOLOGY

Data sources for the CHNA included review of both secondary data and qualitative input from local community leaders. The latter included meeting and discussions with the Monmouth County public health officials, service providers and other health care agencies. This allowed MMC to identify and prioritize the top issues facing service area residents.

Secondary Data Sources

Thirty two secondary data sources were used in this Community Health Needs Assessment (CHNA). These included the United States Census Bureau, Centers for Disease Control and Prevention (CDC), New Jersey Department of Health (NJDOH), Behavioral Risk Factor Surveillance System (BRFSS) and the County Health Rankings mentioned above. A detailed list of secondary sources can be found in Appendix A.

Meetings with County/Local Health Departments and Key Community Stakeholders

Staff from MMC and BH met with a number of local health departments within Monmouth County at the beginning of the CHNA process to advise them of the pending assessment and to request their input. The County Health Department shared findings of the Community Needs Assessment it undertook in 2010.

Following collection and analysis of secondary source data in February 2013, a meeting was convened at the Monmouth County Health Department with key community stakeholders. (See Appendix C) Staff from MMC and BH were in attendance. The meeting included a presentation of key health indicators followed by an interactive discussion and prioritization of top health issues.

Participants were asked if there were any health issues or factors that were absent from the presentation that should be considered. Their responses were as follows:

- The incidence of childhood obesity.
- The density of fast food restaurants by town.
- The density of liquor stores by town.
- Poor rates of breast feeding across the county.
- The lack of psychiatrists in the county.
- Long wait lists at mental health clinics.
- The low number of psychiatrists available to work with children.
- The need for mid-level mental health professionals.
- The large number of people who have remained homeless as a result of hurricane Sandy.
- Lack of dental health services.
- The need for cultural competency.

Participants were also asked how the presentation compares or contrasts with their data or experience. Their responses were as follows:

- Not surprised that opioids took first place for patients hospitalized with substance abuse issues.
- There is a growing problem with people who are addicted to prescription drugs.

- We've noted clusters of teen suicides in southern Monmouth County and in the Bayshore area.
- There is a need for greater integration with the FQHC.
- There are growing numbers of undocumented residents in the county and a need for culturally competent personnel to deal with them.
- FQHCs need more resources to care for the poor in the community.

The last item on the agenda included a discussion and prioritization of health needs.

Prioritizing Needs

At the meeting in February, the following priorities were identified by the group.

1. Addressing the needs of the frequent flyers.
2. Establishing a preventive coalition to influence policymakers of the importance of building a healthy environment.
3. Prevention and management of chronic diseases.
4. Ensuring all residents have a regular source of care.
5. Childhood obesity.
6. Physician prescribing patterns with regard to narcotics.
7. Pharmacy counseling for geriatric patients.
8. Transitions in care.

This information was shared with Medical Center executives on April 18, 2013, along with information gleaned from an in-depth look at Hospital utilization data, a previously conducted physician needs assessment, and sociodemographic data specific to the Medical Center's service area. Medical Center executives then entered into a discussion and process to determine priorities that were most indicative of the needs of the communities served by the Medical Center. Through this process the following priorities were identified.

1. Addressing the needs of the "frequent flyers".
2. Prevention and management of chronic diseases.
3. Physician prescribing patterns with regard to narcotics.
4. Pharmacy counseling for geriatric patients.
5. Transitions in care.

Oversight of the CHNA was provided by internal Medical Center and System leadership. This insured that health issues, needs and priorities received the attention and support of the executive leadership of MMC and BH.

Service Area Definition

Monmouth Medical Center is located in Long Branch, New Jersey. The Medical Center’s primary service area (PSA) consists of the following 19 zip codes:

ZIP Code	ZIP Name
07701	RED BANK
07702	SHREWSBURY
07704	FAIR HAVEN
07711	ALLENHURST
07712	ASBURY PARK
07716	ATLANTIC HIGHLANDS
07723	DEAL
07724	EATONTOWN
07732	HIGHLANDS
07739	LITTLE SILVER
07740	LONG BRANCH
07748	MIDDLETOWN
07750	MONMOUTH BEACH
07753	NEPTUNE
07755	OAKHURST
07756	OCEAN GROVE
07757	OCEANPORT
07760	RUMSON
07764	WEST LONG BRANCH

The PSA is determined by taking into consideration three factors: patient origin, market share, and geographic continuity/proximity. Zips 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 low market share is deleted from the PSA definition as well. Geographic proximity to create a contiguous area completes the service area determination.

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.

Figure 2.1
Service Area Map



Notes on Data Sources

In reviewing the document, the following will facilitate understanding.

Color Indicator Tables

Throughout the Health Profile, the reader will find tables that have red, yellow and green colored indicators. These tables compare the county level data to the *Healthy People 2020* targets, Community Health Rankings benchmarks and New Jersey State data. Data by race/ethnicity is compared to data for all races in the county, unless otherwise indicated.

- Red indicators means the value is statistically worse than the comparison statistics.
- Green indicates a value statistically better than the comparison.
- Yellow identifies indicators with no statistical difference.

Depending upon the data source, various methods were used to define statistical significance. Details relating to these calculations can be found in Appendix B.

3. MONMOUTH COUNTY OVERVIEW

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

- The largest municipality by size is Howell (62.1 square miles).
- The largest municipality by population is Middletown (66,327).
- The most densely populated municipalities include: Asbury Park (16,930 persons/sq. mi.), Keansburg (10,732 persons/sq. mi.), and Shrewsbury Township (1,098 persons/sq. mi.).
- The least densely populated municipality is Upper Freehold Township (4,282 persons/sq. mi.).

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. This occurred despite population declines in Freehold (-12.8%) and Red Bank Borough (-3.0%). The highest growth occurred in Asbury Park (5.1%) and Long Branch City (2.0%).

Monmouth County residents are predominantly Caucasian (82.6%). The most prevalent minority is Hispanic (9.7%) followed by Black/African American (7.4%) and Asian (5.0%). Black/African American residents declined 6.4% between 2000 and 2010 while Hispanic/Latinos increased by 59.6% and Asians by 28.1%.

Asbury Park is the County's most diverse municipality with more than half of residents Black/African American (51.3%). This is followed by Caucasians (36.5%) and Hispanic/Latino (25.5%).⁶ Although Long Branch and Red Bank Borough are predominantly Caucasian, 65.3% and 63.2% respectively, they have higher concentrations of Hispanic/Latino residents than the county, 28.1% and 34.4%, respectively, as well as Black/African American residents, 14.2% and 12.4% respectively.

In 2011 Monmouth County ranked 38th among the highest income counties in the United States, placing it among the top 2% of counties by wealth. In 2009 it ranked 56th in the United States by personal per capita income.

Monmouth County borders the Atlantic Ocean resulting in significant interest in boating and fishing. Monmouth County residents can access New York City via ferry, making it a bedroom community for lower Manhattan business. 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.

⁶ Hispanics are counted regardless of race.

4. MONMOUTH COUNTY/SERVICE AREA HEALTH PROFILE

The Monmouth County Health Profile is organized to provide a discussion of health outcomes including mortality, morbidity, health status, etc., followed by a discussion of the role that health factors such as income, employment, access to care, health behaviors, and the environment play in determining people’s health and longevity.

A. HEALTH OUTCOMES

1. Premature Deaths

Premature deaths, or years of potential life lost (YPLL), is a measure of early death. It represents the number of years not lived by people who die before a given age (usually 75 years). Monmouth County’s rate is lower than found in New Jersey and in neighboring Ocean County. The Monmouth County rate is also below the County Health Rankings (CHR) national benchmark.

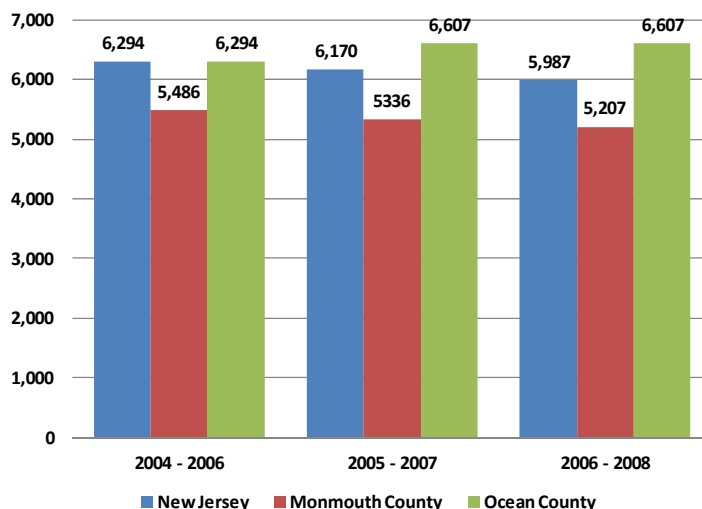
- Monmouth County’s 2006 – 2008 premature death rate of 5,207/100,000 is 13% lower than found throughout New Jersey.
- Comparing the 2004 – 2006 premature death rate to that of 2006 – 2008 demonstrates a 5% decline in the rate.

2. Leading Cause of Death

Between 2004 and 2008 the age-adjusted mortality rates (AAMR) for six of the 10 leading Monmouth County causes of death declined. The exceptions included chronic lower respiratory disease (CLRD), stroke, unintentional injuries and Alzheimer’s disease.

- The top five leading causes of death include heart disease, cancer, CLRD, stroke, unintentional injuries and Alzheimer’s disease.
- Heart disease and cancer mortality rates have declined but the rates remain significantly higher than all other causes of death.

Figure 4.1
Years of Potential Life Lost per 100,000



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.

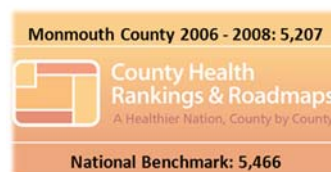


Figure 4.2
Leading Causes of Death per 100,000

	2004 Rate	2008 Rate
Diseases of the Heart	215.4	186.8
Cancer	195	180.7
CLRD	36.7	42.1
Stroke	36.6	37.2
Unintentional Injuries	21.5	25
Alzheimer's Disease	21.1	25
Diabetes	28.4	22.4
Kidney Disease	17.9	16.9
Septicemia	21.2	15.7
Flu & Pneumonia	14.8	11

Source: N.J. Department of Health and Senior Services, Center for Health Statistics, State Health Assessment Data

Heart Disease

Heart disease is the leading cause of death in the nation, New Jersey and Monmouth County.

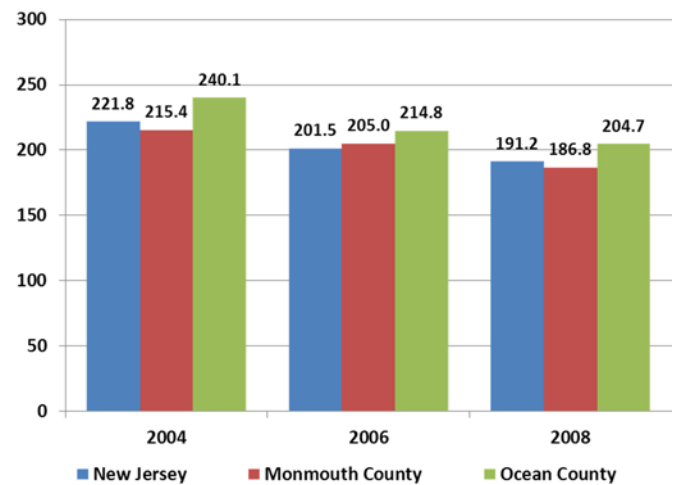
- Between 2004 and 2008 the Monmouth County AAMR for heart disease dropped 13.3% to 186.8/100,000 which is below the statewide rate of 191.2/100,000. However, Monmouth County's rate is significantly higher than the U.S. baseline of 126/100,000 and the *Healthy People 2020* target of 100.8/100,000.
- Considering the AAMR for heart disease by race/ethnicity, Monmouth County, like New Jersey, has a higher AAMR among Black/African Americans (202.8/100,000). This is followed by the AAMR for White/Caucasians (191.6/100,000) and Hispanics (96.6/100,000)
- The New Jersey AAMR for heart disease is higher across all racial/ethnic groups than the Monmouth County rate.

Cancer

Cancer is the second leading cause of death in Monmouth County, New Jersey and the nation.

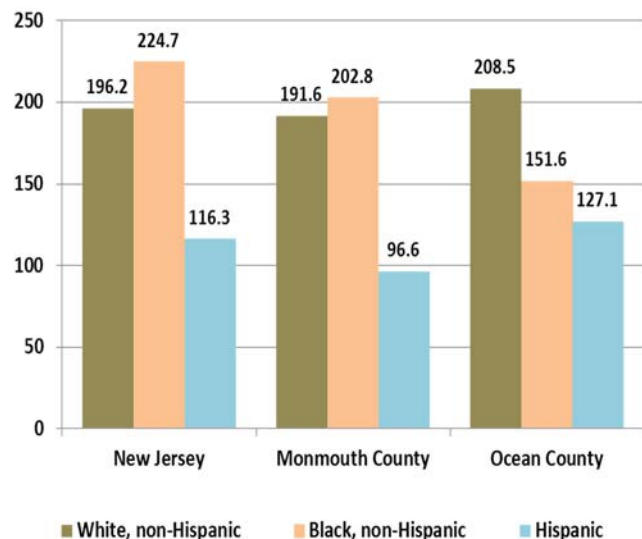
- Between 2004 and 2008 AAMR for Monmouth County cancer mortality decreased from 195/100,000 to 180.7/100,000, or 7.3%. The *Healthy People 2020* target is 160.6/100,000 and the U.S. baseline is 178.4.
- Figure 4.5 demonstrates that Monmouth County is significantly higher than the *Healthy People 2020* target for cancer mortality and on par with the New Jersey average for cancer AAMR.

Figure 4.3
Deaths Due to Heart Disease per 100,000



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

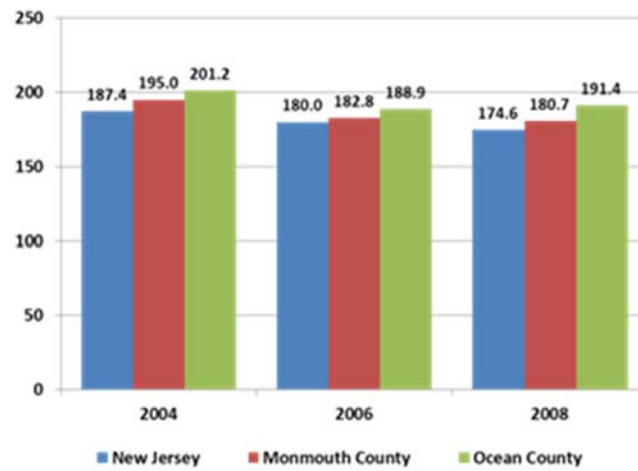
Figure 4.4
2008 Deaths Due to Heart Disease by Race/Ethnicity per 100,000



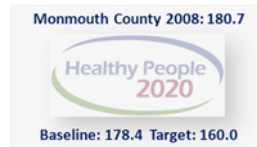
Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

Note: 2004 data for the Hispanic population in Ocean County does not meet standards of reliability based on fewer than 20 cases in the numerator and/or denominator.

Figure 4.5
Cancer Morality Trends per 100,000



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data



- Comparing Monmouth County’s cancer AAMR by race/ethnicity between 2004 and 2008, the trend for all groups is declining. Variations over time occurred, particularly the Hispanic/Latino rate in 2005, which was nearly double rate in 2008.
- Consistently, Black/African Americans had the highest rate, followed by White/Caucasians. Hispanics/Latinos consistently have the lowest rate.

Figure 4.6

Monmouth County Trend 2004-2008

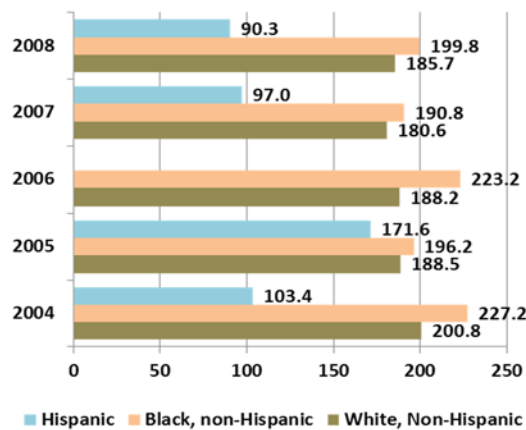
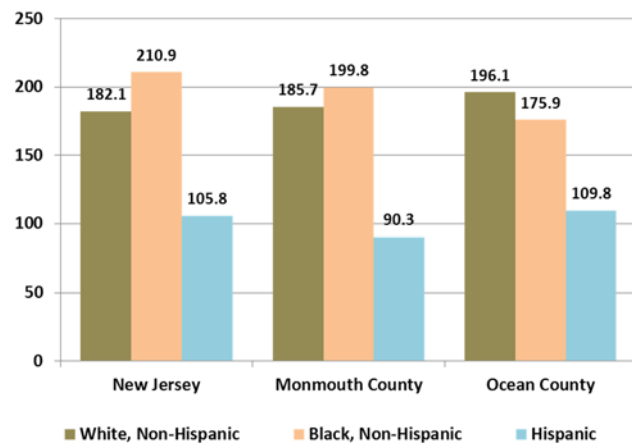


Figure 4.7

2008 Cancer Mortality by Race/Ethnicity per 100,000



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

Note: 2007, 2006, and 2004 data for the Hispanic population in Ocean County does not meet standards of reliability based on fewer than 20 cases in the numerator and/or denominator.

Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is the third leading cause of death in Monmouth County.

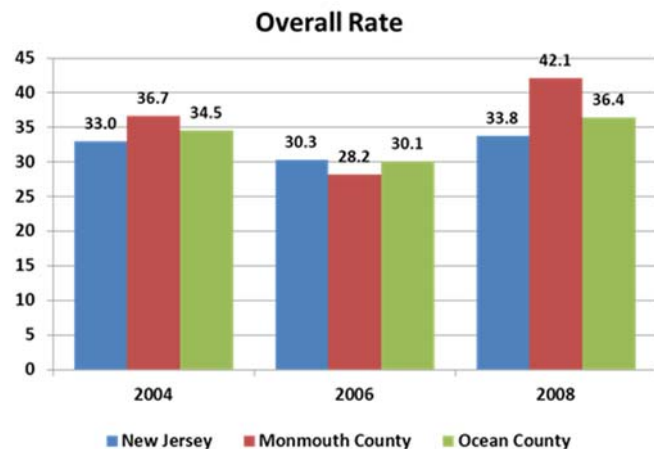
- The age adjusted mortality rate for CLRD is higher in Monmouth County than New Jersey by 8.3/100,000.
- Overall mortality due to CLRD increased 14.7% between 2004 and 2008, and among White/Caucasians it increased 17.9%.
- Figure 4.8 demonstrates that Monmouth County is significantly worse than the New Jersey average for AAMR due to CLRD.

Stroke

Stroke is the fourth leading cause of death in Monmouth County. It is the third leading cause of death in both New Jersey and the U.S.

- Between 2004 and 2008 the AAMR for stroke in Monmouth County increased slightly (1.6%) from 36.6/100,000 to 37.2/100,000. The *Healthy People 2020* target is 33.8/100,000.
- AAMR for stroke by race/ethnicity declined between 2004 and 2008, Black/African residents continue to have the highest rate of stroke deaths at 49.2/100,000 in 2008. This represents a decrease of 22%. The 2008 rate for White/Caucasians was 34.6/100,000 which is a decrease of 11.1%.
- Figure 4.10 identifies no significant difference between the Monmouth County AAMR for stroke and the *Healthy People 2020* target or the state of New Jersey. There is also no significant difference in the AAMR between Monmouth County and New Jersey for Black/African American residents and any other racial group.

Figure 4.8
Mortality from CLRD per 100,000



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

Figure 4.9
Stroke Deaths by Race/Ethnicity – Trend
per 100,000

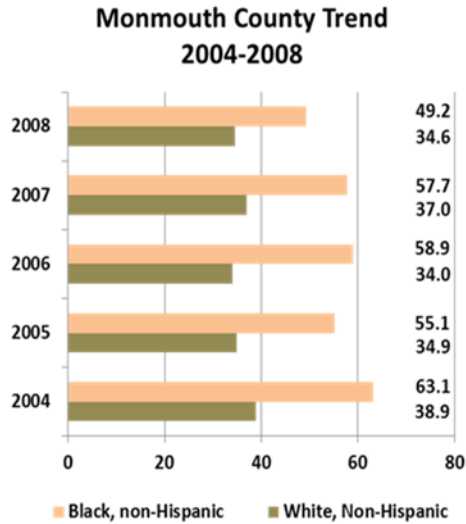
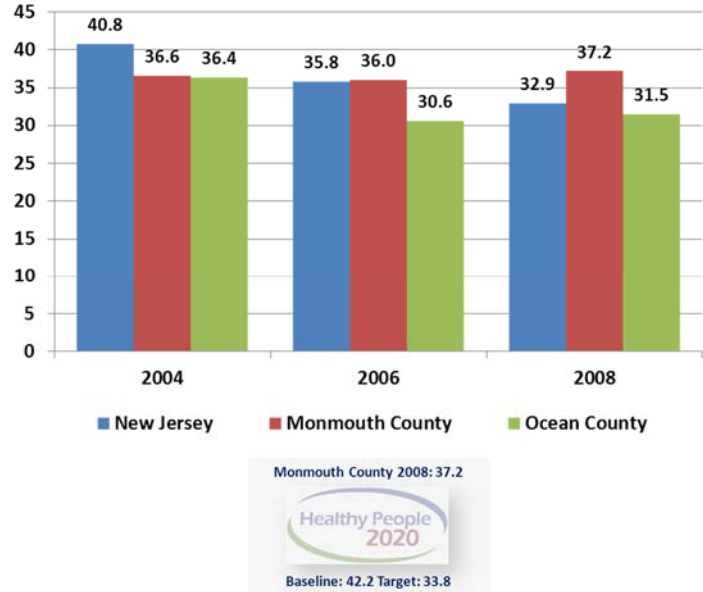


Figure 4.10
Stroke Deaths by County and State per 100,000
Overall Rate



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

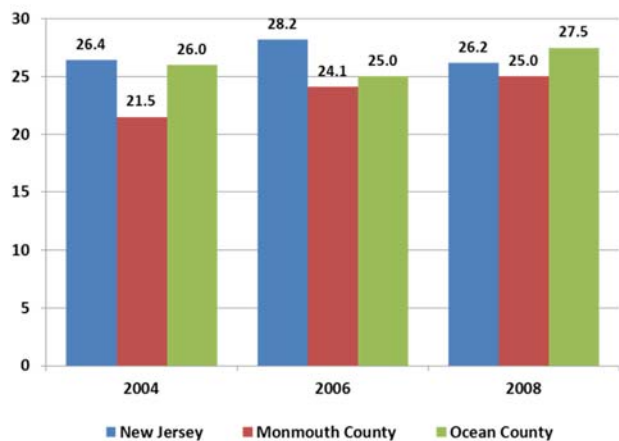
Note: Data for other racial/ethnic groups not shown because figures do not meet standards of reliability or precision, based on fewer than 20 cases in the numerator and/or denominator.

Unintentional Injuries

Unintentional Injuries are the fifth leading cause of death in Monmouth County. This includes motor vehicle-related injuries, poisonings, falls, burns and smoke inhalation, drowning, suffocation, and other injuries.












- Between 2004 and 2008, the mortality rate for unintentional injuries increased 16.3%.
- The unintentional injury AAMR in Monmouth is not statistically different from New Jersey.

Figure 4.11
AAMR due to Unintentional Injuries per 100,000



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

Figure 4.12
Comparisons between AAMR in Monmouth County, Jersey and Healthy People 2020 Targets

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Deaths due to Diseases of the Heart: Age-Adjusted Rate per 100,000 Population		N/A	
* Deaths due to Diseases of the Heart (Black, Non-Hispanic): Age-Adjusted Rate per 100,000 Population	N/A	N/A	
Deaths due to Malignant Neoplasms (Cancer): Age-Adjusted Rate per 100,000 Population		N/A	
* Deaths due to Malignant Neoplasms (Cancer) (Black, Non-Hispanic): Age-Adjusted Rate per 100,000 Population	N/A	N/A	
Deaths due to Chronic Lower Respiratory Disease: Age-Adjusted Rate per 100,000 Population	N/A	N/A	
Deaths due to Cerebrovascular Disease (Stroke): Age-Adjusted Rate per 100,000 Population		N/A	
*Deaths due to Cerebrovascular Disease (Stroke) (Black, Non-Hispanic): Age-Adjusted Rate per 100,000 Population	N/A	N/A	
Deaths due to Unintentional Injuries: Age-adjusted rate per 100,000 population	N/A	N/A	

*Among all races/ethnicities in Monmouth County.

3. Behavioral Health-Related Deaths

- Age-adjusted drug-related deaths (AADD) decreased between 2006 and 2007 from 11.0/100,000 to 7.6/100,000.
- The AADD was not statistically different from the New Jersey rate or the *Healthy People 2020* target.
- The age-adjusted rate of alcohol deaths increased from 5.4/100,000 to 5.6/100,000 between 2006 and 2007 and was not significantly different from the New Jersey rate.

Figure 4.13
Alcohol & Drug-Related Deaths
AADD Rate per 100,000 Population (2007)

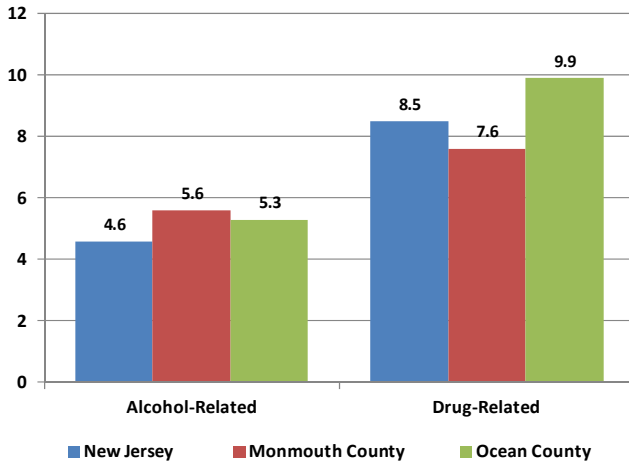
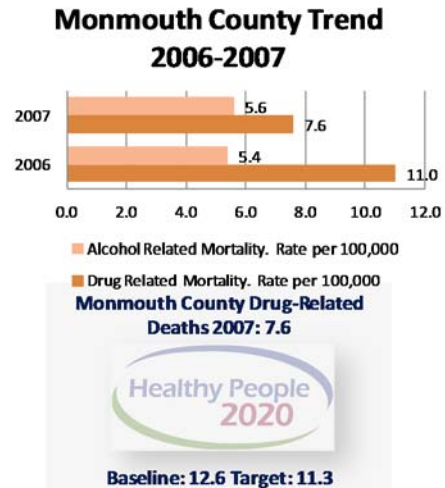


Figure 4.14
Alcohol & Drug-Related Deaths
AADD Rate per 100,000 Population



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, NJ State Health Assessment Data

- The age-adjusted suicide rates for 2004 and 2008 were relatively the same, 7.9/100,000 and 7.8/100,000. However, during the intervening years they were somewhat lower.
- The Monmouth County age-adjusted suicide rate is not statistically different from the statewide rate, but was significantly lower than the *Healthy People 2020* target of 10.2/100,000 population.

Figure 4.15
Death Due to Suicide per 100,000

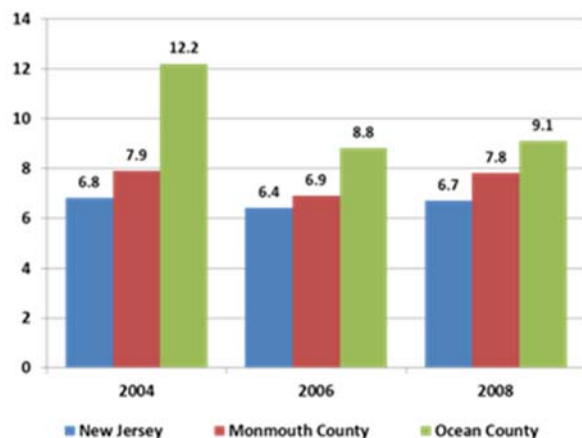
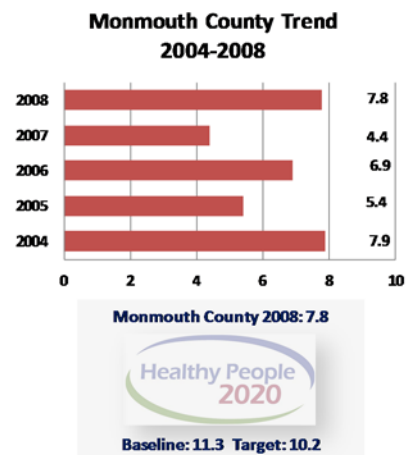


Figure 4.16
Deaths Due to Suicide – Trends per 100,000



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, NJ State Health Assessment Data

Figure 4.17

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Deaths due to Suicide: Age-Adjusted Rate per 100,000 Population	●	N/A	●
Alcohol-Related Deaths: Age-Adjusted Rate per 100,000 Population	N/A	N/A	●
Drug-Related Deaths: Age-Adjusted Rate per 100,000 Population	●	N/A	●

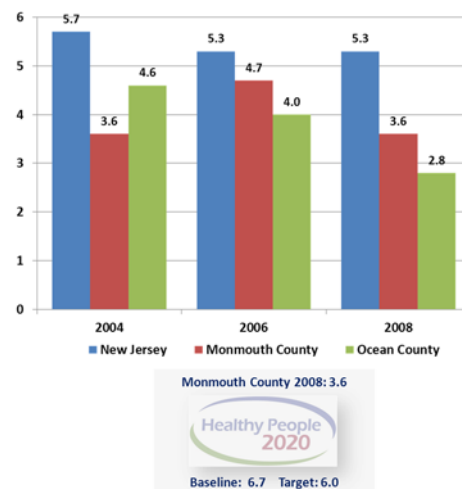
4. Infant Mortality

Infant mortality has traditionally been used to measure the health and well-being of populations within and across nations. The United States ranks far behind most industrialized nations in terms of infant mortality. This ranking is due in large part to disparities that occur in the percentage of pre-term babies born among racial and ethnic minorities in this country.⁷

In Monmouth, infant deaths per 1,000 live births, reached a period high in 2006 (4.7/1,000), but saw no net change in from 2004 to 2008 (3.6/1,000).

- The infant mortality rate for the county is consistently below that found in New Jersey but statistically is viewed as comparable to the state.
- Monmouth County infant mortality is also significantly below the *Healthy People 2020* target of 6.0/1,000.

Figure 4.18
Infant Mortality Comparison by County and State per 1,000 Live Births



Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

⁷ Retrieved www.cdc.gov/nchs/data/databriefs/db74PDJ. Accessed 3/27/13.

Figure 4.19

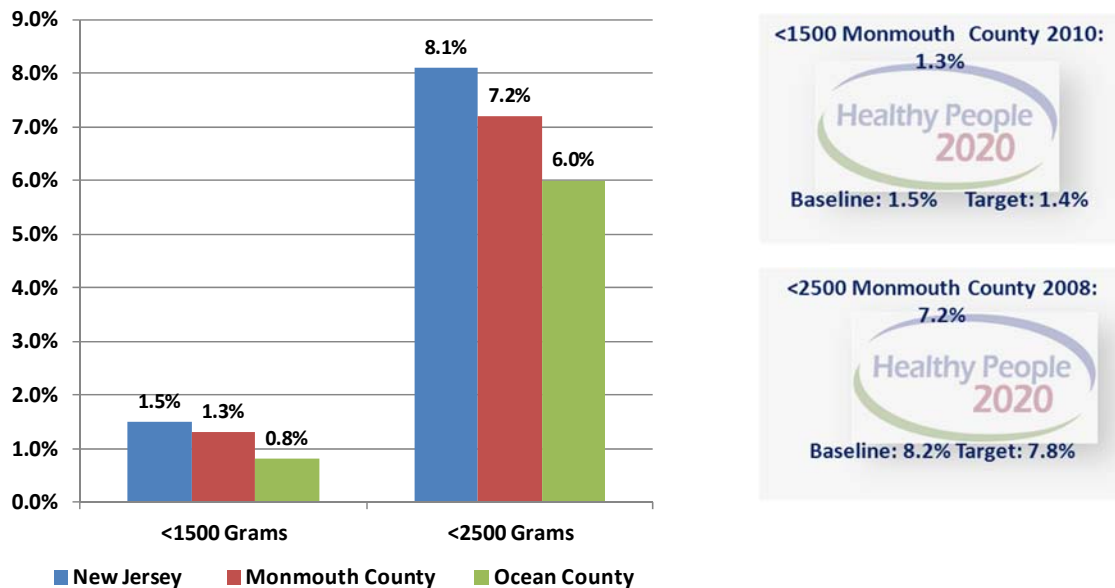
Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Infant Mortality Rate: Rate of Infant (Under 1 year) Deaths per 1,000 Live Births	●	N/A	●

5. Low and Very Low Birth Weight Infants

Between 2004 and 2008 the rate of very low birth weight infants in Monmouth County increased by 0.20%. The percentage of low birth weight infants remained the same, 7.2%, in both 2004 and 2008. However, the percentage in intervening years ranged from 6.9% to 8.1%.

- In 2008 Monmouth County was lower than the New Jersey state average for both low and very low birth weight infants. The rate for low birth weight babies was significantly lower than New Jersey.
- The percent of both low birth weight and very low birth weight infants are below the *Healthy People 2020* targets of 7.8% and 1.4% but are identified as statistically the same when compared.

Figure 4.20
2008 Low and Very Low Birth Weight Infants
Percentage of Live Births

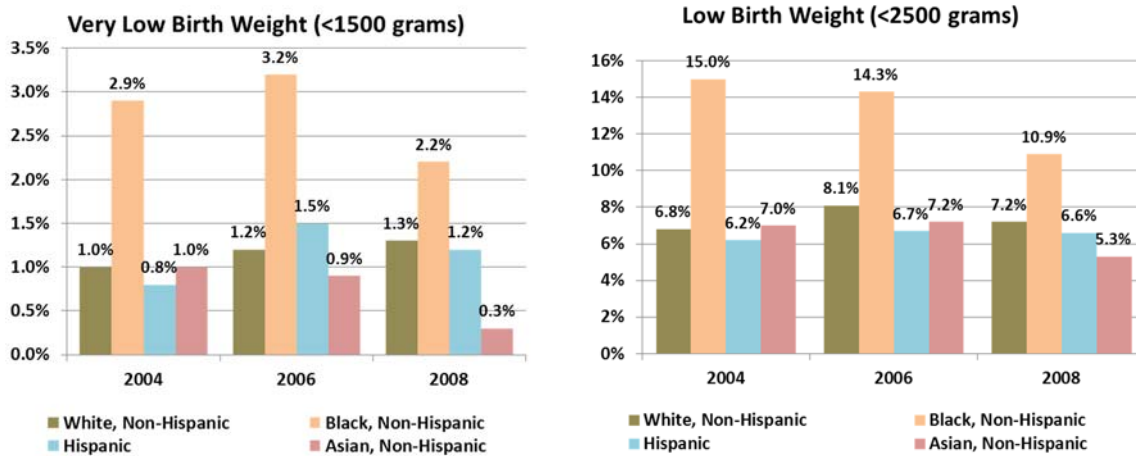


Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data
Note: Percentages are based on the total number of live births for county and state.

- While declining among all racial/ethnic groups, low and very low birth weight babies are most prevalent among Monmouth County Black/African Americans.
- Black women in Monmouth County had a statistically higher percentage of low birth rate babies than women of all races in the county.

Figure 4.21

**Low and Very Low Birth Weight by Race
Percentage of Live Births**



Source: NJ Department of Health and Senior Services, Bureau of Vital Statistics and Registration, N.J. Birth Certificate Database
Note: Percentages are based on the total number of live births for county and state.

Figure 4.22

Low and Very Low Birth Weight Infants

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Low (<2500 grams) Birth Weight: Percentage of Live Births	●	N/A	●
* Low (<2500 grams) Birth Weight (Black, Non-Hispanic): Percentage of Live Births	N/A	N/A	●
Very Low (<1500 grams) Birth Weight: Percentage of Live Births	●	N/A	●
* Very Low (<1500 grams) Birth Weight (Black, Non-Hispanic): Percentage of Live Births	N/A	N/A	●

*Among all races/ethnicities in Monmouth County.

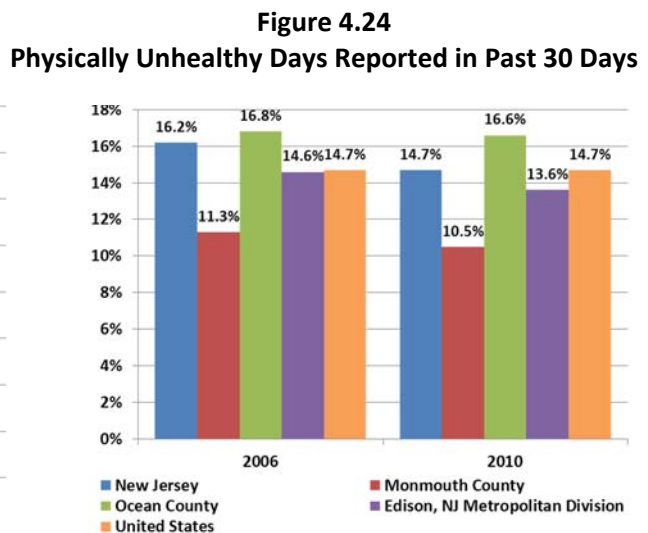
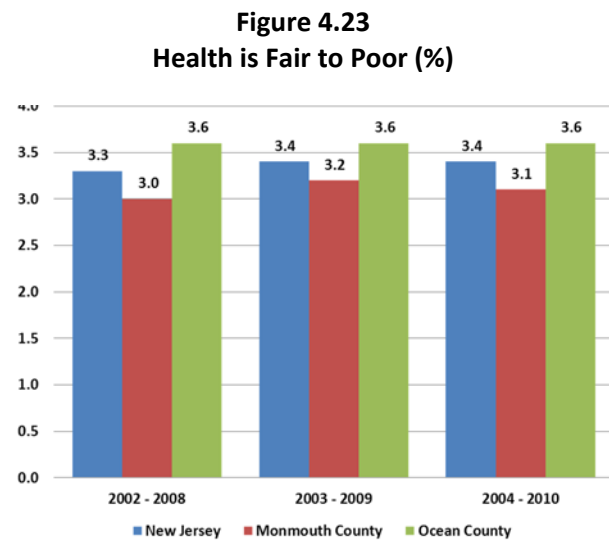
6. Health and Behavioral Health Status

Health status is often defined as the level of health status of the individual, group or population as subjectively assessed by the individual, group or population or by more objective measures.⁸ Presented below are both subjective and objective measures of both health and behavioral health status.

Health Status and Disability

Monmouth County residents' perceptions of their health improved between 2006 and 2010.

- The percent of Monmouth County residents reporting their health as fair or poor declined from 11.3% in 2006 to 10.5% in 2010.
- It remains lower than the percentages reported statewide, in the MMSA, and in comparison counties. It is, however, not significantly lower than the percentage found in the State.
- Monmouth County residents report an average of 3.1 physically unhealthy days per month which is significantly higher than the national benchmark of 2.6. This is not significantly different from the number found in New Jersey.
- The percent of Monmouth County residents reporting a disability declined by 43.6% between 2000 and 2010, from 14.9% of the population to 8.4%. The percentage of the total population with any disability is statistically lower than New Jersey.

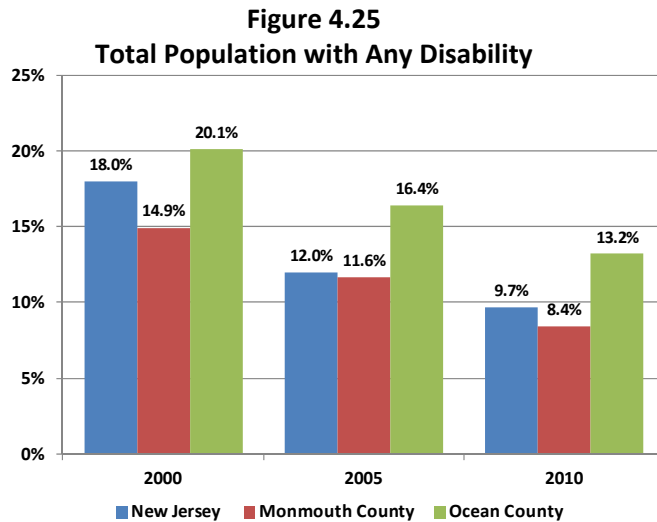


Source: CDC, Behavioral Risk Factor Surveillance System

Source: County Health Rankings, National Center for Health Statistics

Note: The poor physical health measure is based on response to the question: "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?"

⁸ Retrieved from www.reference.md/files/D006/mD006/mD006304.html. Accessed 3/27/13.



Source: U.S. Census Bureau, American Community Survey

Note: Percentages are based on the total civilian non-institutionalized population 5 years and older in each region.

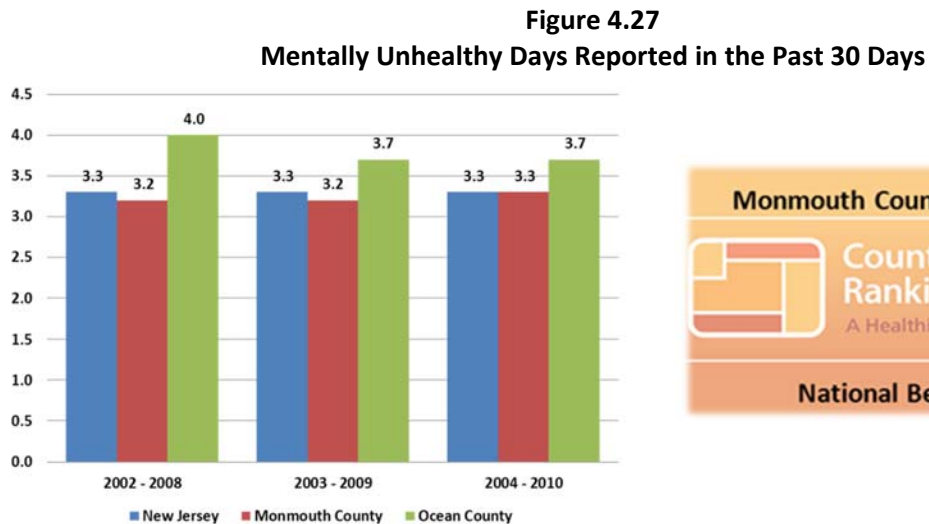
Figure 4.26
County Health Ranking Unhealthy Days



Behavioral Health Status

Mentally unhealthy days per month are measured over a six year period. Comparing the period from 2002 through 2008 with 2004 through 2010 finds a slight increase in the number of mentally unhealthy days per month among Monmouth County residents, increasing from 3.2 to 3.3.

- The number of mentally unhealthy days is significantly higher than the county health ranking benchmark, but similar to the number in New Jersey.



Source: County Health Rankings, National Center for Health Statistics

Note: The poor physical health measure is based on response to the question: "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?"

7. Morbidity

Cardiovascular Disease (CVD) morbidity includes illness related to heart disease and stroke.

Heart Disease

According to data collected from the 2010 Behavioral Risk Factor Surveillance System (BRFSS), an estimated 4.4% of Monmouth County adults report having been told they have angina or coronary heart disease (CHD).

- Between 2007 and 2010 the percent of Monmouth County adults who report being diagnosed with a heart attack decreased from 6.2% to 3.5%.
- Monmouth County was below the New Jersey average in 2007, but exceeded it in 2010.

Risk Factors

According to the American Heart Association, the controllable risk factors for developing cardiovascular disease include:

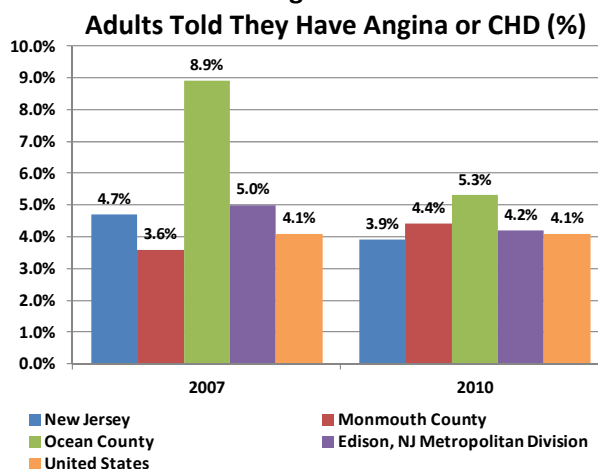
- High blood pressure
- High cholesterol
- Cigarette smoking
- Physical inactivity
- Poor diet, overweight and obesity
- Diabetes

Many of these risk factors are also healthy community indicators. Two, high blood pressure and high cholesterol, are discussed here.

Monmouth County

- Between 2005 and 2009 high blood pressure among Monmouth County adult residents rose from 23.6% to 26.3% which is a 11.4% increase.
- The Edison Metropolitan Statistical Area (MSA) also experienced an increase of 7%.
- Adults reporting high cholesterol declined from 36.2% to 33.9%. This is 2.5 times higher than the *Healthy People 2020* target of 13.5%

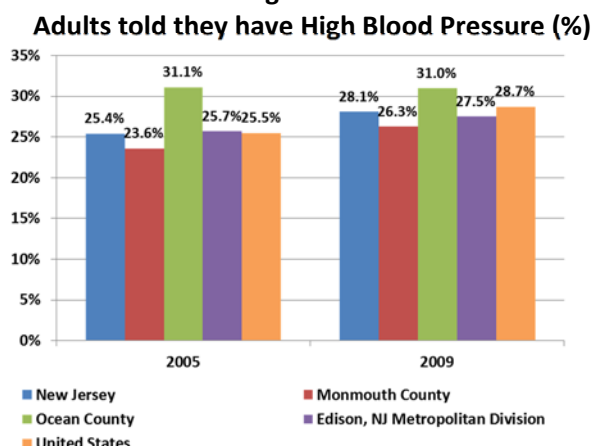
Figure 4.28



Source: CDC, Behavioral Risk Factor Surveillance System

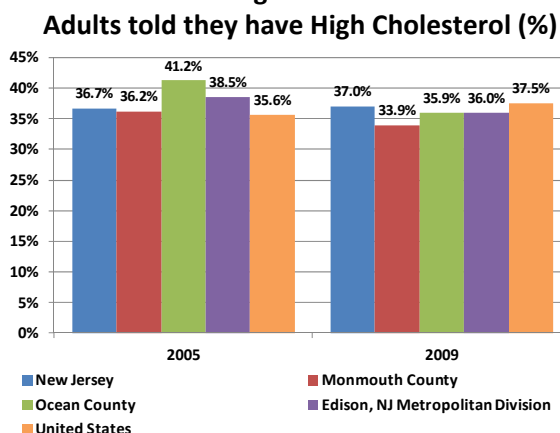
Note: MMSA: Metropolitan and Micropolitan Statistical Areas

Figure 4.29



Source: CDC, Behavioral Risk Factor Surveillance System

Figure 4.30



Source: CDC, Behavioral Risk Factor Surveillance System

Over time, these risk factors cause changes in the heart and blood vessels that can lead to heart attacks, heart failure, and strokes.⁹

Figure 4.31

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
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	

Stroke

According to the 2007-2010 BRFSS survey, only 1.6% of Monmouth County residents have ever been told they have had a stroke. This has been stable since 2007.

- The prevalence of stroke declined in the Edison MSA between 2007 and 2010 from 2.6% to 1.9%.

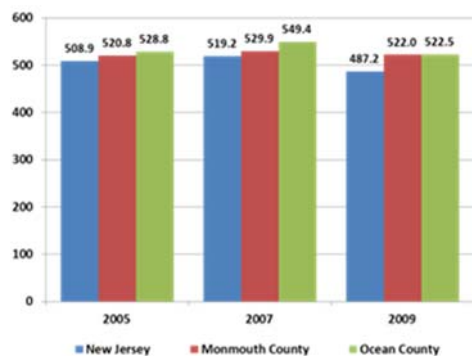
Cancer

Between 2005 and 2009 the overall age-adjusted rate (AAR) of cancer incidence in Monmouth County increased slightly from 520.8/100,000 to 522.0/100,000.

- During this time the New Jersey State AAR for cancer decreased to 487.2/100,000 in 2009.

Figure 4.33

Cancer Incidence by County per 100,000

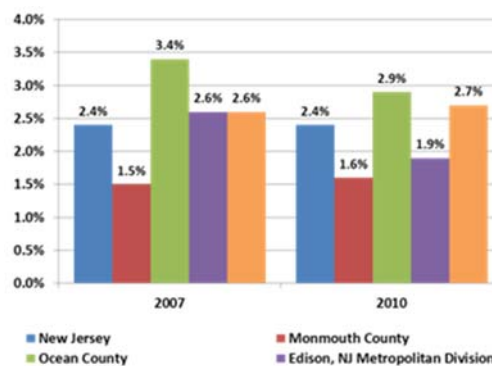


Source: N.J. Department of Health and Human Services, New Jersey Cancer Registry

Note: The rate for prostate cancer is based on 100,000 males, and the rate for breast cancer is based on 100,000 females.

⁹ Retrieved from www.heart.org/HEARTORG/conditions/heartattack/heartattacktoolsresources/heartattack. Accessed on March 15, 2013.

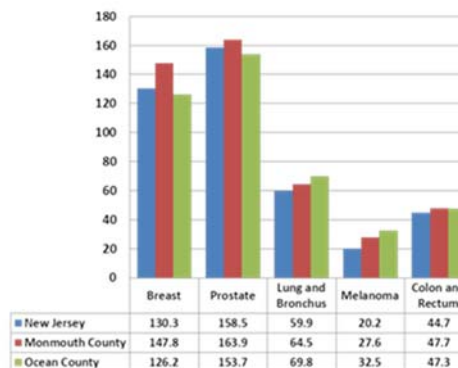
Figure 4.32
Ever Told You Had a Stroke (%)



Source: CDC, Behavioral Risk Factor Surveillance System

Figure 4.34

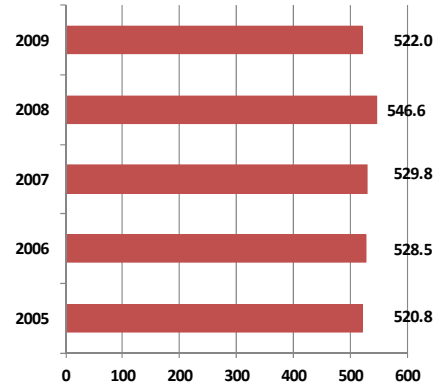
Top 5 Cancer Incidences per 100,000



Monmouth County ranks sixth in the State for the overall age-adjusted cancer incidence rate. Monmouth County's incidence rate is significantly higher than the New Jersey State rate.

- Within Monmouth County, prostate (163.9/100,000) and breast (147.8.0/100,000) had the highest cancer incidence rates.
- Lung was 64.5/100,000.
- Colon-rectal was 47.7/100,000; and melanoma was 27.6/100,000.
- Between 2006 and 2009 the AAR for breast, and colon/rectum cancers increased. Melanoma incidence declined and lung cancer incidence was stable.
- The County's incidence rates are statistically comparable to the State for all site-specific cancers.

Figure 4.35
Cancer Incidence – Trends
Per 100,000 Population
Monmouth County Trend
2005-2009



Source: N.J. Department of Health and Human Services, New Jersey Cancer Registry

Note: The rate for prostate cancer is based on 100,000 males, and the rate for breast cancer is based on 100,000 females.

Asthma

Asthma—Background

- Currently in the United States more than 23 million people have asthma. Asthma affects people of all ages, but it most often starts during childhood. About 7 million of those in the U.S. with asthma are children.¹⁰
- The exact cause of asthma is not known. Researchers think some genetic and environmental factors interact to cause asthma, most often early in life. These factors include:
 - An inherited tendency to develop allergies.
 - Parents who have asthma.
 - Certain respiratory infections during childhood.
 - Contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing.¹¹
 - Allergy and asthma "triggers," include plant pollens, dust, animals and stinging insects and cockroaches.

¹⁰ Retrieved from www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid. Accessed 4/30/13.

¹¹ Retrieved from <http://www.nh/bi.nih.gov/health/healthtopics/topics/asthma/atrisk.html>. Accessed 4/30/13.

Asthma – Incidence

According to the BRFSS survey, between 2006 and 2010 the percent of adults reporting asthma has risen in the nation, New Jersey and Monmouth County.

- Monmouth County experienced a 22.4% increase, but is not statistically different from the statewide percentage.
- During this time period, the Edison MSA experienced a 42.2% increase in asthma prevalence.

Diabetes

Diabetes – Background

The three common types of diabetes are:

- Type 2—caused by a combination of resistance to the action of insulin and insufficient insulin production.
- Type 1—results when the body loses its ability to produce insulin.
- Gestational—a common complication of pregnancy that can lead to perinatal complications in mother and child. It is a risk factor for development of Type 2 diabetes after pregnancy.

Diabetes is the seventh leading cause of death in the U.S. Complications include:

- Reduced life expectancy by up to 15 years.
- Increased risk of heart disease by two to four times.
- Leading cause of kidney failure, limb amputations, and adult onset blindness.
- Significant financial costs in healthcare, lost productivity and early death.¹²

Almost 7 million Americans with diabetes are undiagnosed, and another 79 million Americans have pre-diabetes which greatly increases their risk of developing diabetes in the next several years.¹³

Factors contributing to diabetes prevalence overall and in Monmouth County include:

- Obesity
- Lack of physical activity
- Family history
- Environmental resources including such things as the availability of wholesome food, healthcare access and recreational availability.

Figure 4.36
Asthma

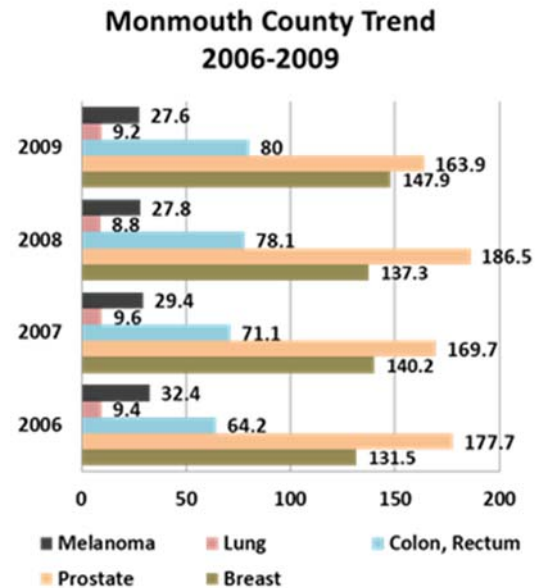
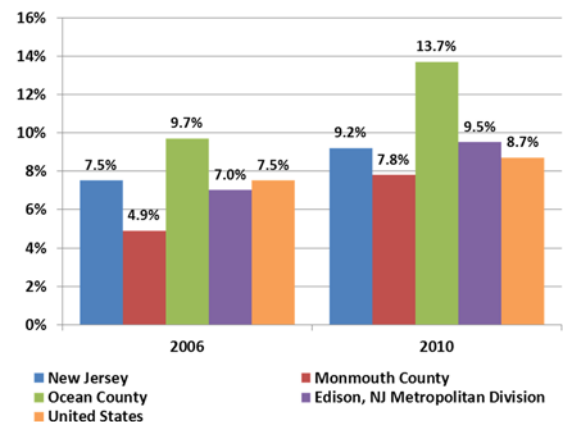


Figure 4.37
Diabetes (%)



¹² Retrieved from www.diabetes.org/diabetesbasics. Accessed April 30, 2013.

¹³ Retrieved from www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf. Accessed April 30, 2013.

Diabetes – Incidence

Diabetes is on the rise in the U.S., in New Jersey, and in Monmouth County.

- Between 2006 and 2010 the percentage of Monmouth County residents reporting diabetes increased 59.2% (from 4.9% to 7.8% of County residents).
- Diabetes also increased in the Edison MSA by 35.7%.

Arthritis

Arthritis is the inflammation of one or more joints. A joint is where two bones meet. There are over 100 different types of arthritis. The most common form of arthritis is osteoarthritis which is a normal result of aging. It is also caused by “wear and tear” on the joints. Arthritis is the most common cause of disability in the U.S., limiting the activities of an estimated 22 million adults (9%).¹⁴

Arthritis – Incidence

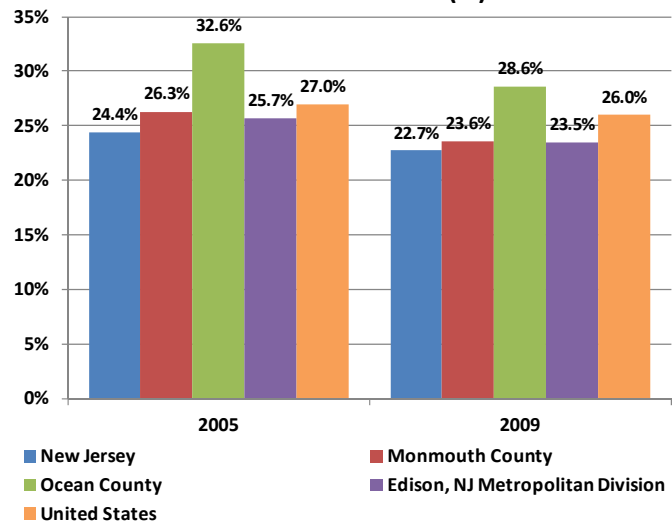
- Between 2005 and 2009 the percent of Monmouth County residents reporting arthritis declined from 26.3% to 23.6%.
- This is similar to the Edison MSA incidence of 23.5% and the statewide average of 22.7%.

Notifiable Infectious Diseases

Healthy People 2020 goals for infectious diseases are rooted in evidence-based clinical and community activities and services for their prevention and treatment.

- Objectives focus on ensuring that States, local public health departments, and nongovernmental organizations are strong partners in the Nation’s attempt to control the spread of infectious diseases.
- They also reflect a more mobile society with diseases crossing state and country borders. Awareness of disease and completing prevention and treatment courses remain essential components for reducing infectious disease transmission.¹⁵

Figure 4.38
Arthritis Incidence (%)



Source: CDC, Behavioral Risk Factor Surveillance System

¹⁴ Retrieved from <http://www.cdc.gov/arthritis>. Accessed 4/30/13.

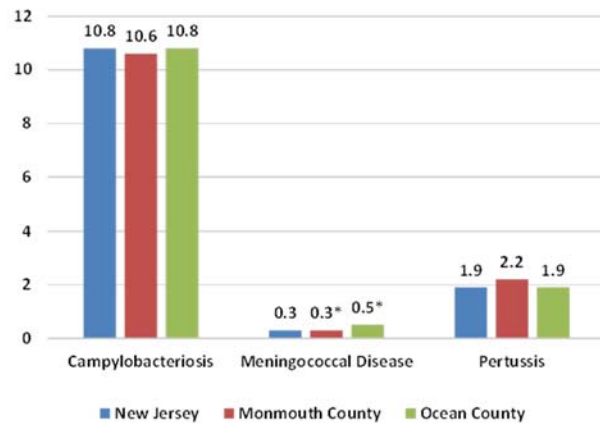
¹⁵ Retrieved from <http://www.healthypeople.gov>. Accessed 4/30/13.

Communicable Disease – Incidence

In comparison to New Jersey, Monmouth County has the similar incidence rates for three communicable diseases: campylobacteriosis, aseptic meningitis, and pertussis.

- Campylobacteriosis is among the most common bacterial infections in humans. The illness is usually spread by consumption of contaminated food or water and, occasionally, by contact with infected people or animals. It typically runs a course of two weeks unless the person is immuno-compromised, in which case it can be life-threatening.
- Aseptic meningitis is an inflammation of the membranes covering the brain or spinal column. Aseptic meningitis is usually caused by viruses. The virus can pass from person-to-person via direct contact.
- Pertussis, or whooping cough, is a highly contagious bacterial respiratory disease. Pertussis is known to cause uncontrollable, violent coughing making it difficult to breathe. Monmouth County has a slightly higher incidence of pertussis than is found in the State, but it is not statistically significantly different.

Figure 4.39
Communicable Diseases (2010) per 100,000



Source: N.J. Department of Health and Human Services, Division of Communicable Disease Service, New Jersey Reportable Communicable Disease Report, 2010, 2009, 2008, 2007; U.S. Census Bureau, American Community Survey
Note: *The Ocean and Monmouth County rates for Meningococcal Disease are based on too few cases to be considered statistically significant.

B. HEALTH FACTORS

1. Socioeconomic Status (SES)

According to *Healthy People 2020*, socioeconomic factors contribute to observed disparities in disease incidence and mortality among racial, ethnic and underserved groups. Although Monmouth County has affluent areas, pockets of poverty in Lakewood, Long Branch, Asbury Park and Keansburg exist. These communities also experience employment and education disparities as well as racial and ethnic diversity.

Studies have found that income/SES, over race or ethnicity, predicts the likelihood of an individual's or group's access to:

- Education
- Health insurance
- Safe and healthy living and working conditions, including places free from exposure to environmental toxins.¹⁶

¹⁶ Retrieved from <http://www.healthypeople.gov/2020/about/disparities/about.aspx>. Accessed 4/30/13.

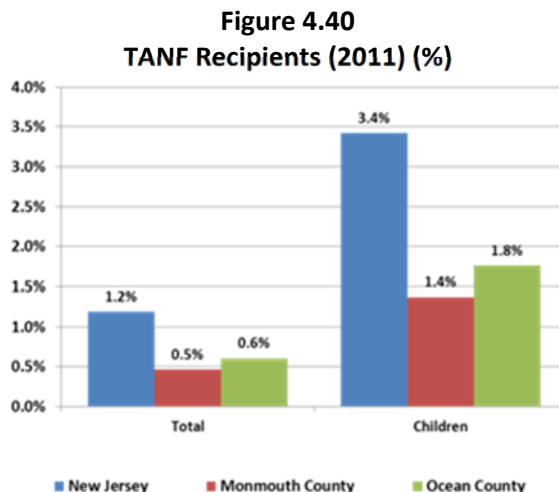
SES also appears to play a major role in:

- Prevalence of behavioral risk factors like tobacco smoking, physical inactivity, obesity, and excessive alcohol use.
- Rates of preventive screenings, with those with lower SES having fewer screenings.¹⁷

Monmouth County

The percent of Monmouth County residents and children receiving Temporary Assistance to the Needy (TANF) benefits in 2011 was significantly lower than the State rate.

- In Monmouth County 0.5% of residents and 1.4% of children were receiving TANF in 2011.
- This compares to 1.2% of New Jersey residents and 3.4% of New Jersey children receiving TANF. (Figure 4.40)



Source: N.J. Department of Human Services, Division of Family Development, Current Program Statistics, 2007, 2009, 2011; N.J. Department of Health and Senior Services, Division of Family Health Services, 2011; U.S. Census Bureau, American Community Survey 2010; 2011 Claritas Population Projection

Economic status and employment.

- Monmouth County’s median household income in 2011 was \$78,285, more than \$11,000 above the State average. Figure 4.41 presents the range of median household income in Monmouth County and the MMC service areas.
- While Monmouth County had a lower percentage of residents living in below federal poverty level (FPL) in 2011 when compared to the State, 4.5% for the former and 6.6 for the latter, the communities which make up MMC’s Service Area reflect populations with diverse economic backgrounds.
 - Pockets of poverty exist in Lakewood (16.8%), Long Branch (13.7%), Keansburg (12.2%) and Asbury Park (12.2%).
- In 2011, 8.6% of county residents were unemployed. This was below the State unemployment level (9.3%).
 - Asbury Park’s 2011 unemployment rate was 19.8%.
 - Between 2007 and 2011 unemployment steadily increased throughout the County and the State.

Figure 4.41

HOUSEHOLD INCOME (2011)	
GEOGRAPHIC AREA	MEDIAN
New Jersey	\$ 67,009
Monmouth County	\$ 78,285
MMC PSA	\$ 84,653
MMC SSA	\$ 71,390

¹⁷ Ibid.

Varying education levels are found in Monmouth County.

- Nine percent of Monmouth County residents have not graduated from high school. This includes 10% in MMC's PSA and 12% in MMC's SSA.
- Thirty-nine percent of Monmouth County residents have bachelor's, professional or graduate degrees.

Monmouth County residents are somewhat older than the New Jersey average.

- Monmouth County has 31% of residents in the 45 to 64 year age range, compared to 28% in New Jersey.
- The County has 14% of residents age 65 and older including 15% in the MMC PSA. This compares to 13% in the State.

Figure 4.42

FAMILIES BELOW POVERTY (2011)		
GEOGRAPHIC AREA	#	%
New Jersey	150,667	6.6%
Monmouth County	7,890	4.5%
MMC PSA	4,104	6.3%
MMC SSA	4,487	7.8%
Lakewood	2,835	16.8%
Asbury Park	1,243	12.2%
Long Branch	1,052	13.7%
Keansburg	419	12.2%
Highlands	139	11.8%
Neptune	607	6.2%
Farmingdale	96	5.4%

Figure 4.43
Education Level

EDUCATION LEVEL (2011)	MMC PSA	MMC SSA	Monmouth County	New Jersey
Less Than Grade 9	4%	5%	4%	6%
Some High School w/o Diploma	6%	7%	5%	7%
High School Grad	28%	31%	27%	30%
Some College/ Associates Degree	25%	26%	25%	23%
Bachelors Degree	23%	19%	24%	22%
Masters/ Professional	13%	11%	14%	12%
Doctorate	1%	1%	1%	1%

Figure 4.44
Age Cohorts

AGE COHORT	MMC PSA (2011)	MMC SSA (2011)	Monmouth County (2011)	New Jersey (2011)
0-17	22%	31%	23%	23%
18-44	33%	34%	32%	36%
45-64	29%	24%	31%	28%
65+	15%	12%	14%	13%

Monmouth County's racial and ethnic diversity is limited when compared to New Jersey.

- 77% of Monmouth County residents are White/Caucasian, non-Hispanic compared with 59% in New Jersey.
- Black, non-Hispanics are 7% of the county's population compared to 13% in the State.
- Asians are 5% of the population compared to 8% in New Jersey.
- The County's Hispanic/Latino populations constitute 10% compared to 18% in New Jersey.

Figure 4.45

TOTAL POPULATION (2010 Census)				
RACE COHORT	MMC PSA	MMC SSA	Monmouth County	New Jersey
White	71%	79%	77%	59%
Hispanic	12%	12%	10%	18%
African American	12%	4%	7%	13%
Asian	3%	3%	5%	8%
Two or more	2%	1%	1%	2%
Other	1%	0%	0%	0%

MMC Service Area

- MMC's PSA has a higher percentage of Hispanic/Latino and Black/African American residents than found in the County.
- Asbury Park is the County's most diverse municipality with more than half of residents Black/African American (51.3%), and Hispanic/Latino residents accounting for more than a quarter of residents (25.5%).
- Although Long Branch and Red Bank Borough are predominantly Caucasian, 65.3% and 63.2% respectively, they have higher concentrations of Hispanic/Latino residents, 28.1% and 34.4% respectively, as well as Black/African American residents, 14.2% and 12.4%, respectively, than the State.
- The percent of families living below poverty in the PSA (6.3%) is higher than the county (4.5%).
- A slightly higher percentage of residents in the PSA (10%) and SSA (12%) failed to complete high school compared to 9% in the county.
- The median income in the PSA is higher by \$16,000 than the county median income.

Select PSA Communities

Freehold Township

- Freehold Township is the county's largest city with 36,186 residents or 5.7% of Monmouth County's population. Between 2000 and 2010 the population declined by 12.8%.
- White/Caucasians are 84.3% of the population. Hispanic/Latinos are 7.8% and Asians are 7%.
- Freehold Twp. is an affluent community. The 2010 median household income was \$94,735. Unemployment was 7.1% in 2011, and only 3.5% of residents had incomes below the FPL in 2009.
- Less than 4% of Freehold Twp. residents have limited English proficiency.

Long Branch City

- Long Branch City's 2010 population was 30,719. Between 2000 and 2010 the population increased by 2%.
- Long Branch City's 2010 median household income was \$52,792. The 2011 unemployment rate was 10.1%, with 14% of residents living in poverty in 2009.
- Long Branch City has a relatively young population, with larger populations than found in the State in the 18 to 24 and 25 to 44 age cohorts.
- A quarter (25%) of Long Branch City residents has limited English proficiency.
- Nearly two-thirds (65.3%) of Long Branch City residents are White/Caucasian; 28.1% are Hispanic; and 14.2% are Black/African American.

Asbury Park

- Asbury Park, with 16,116 residents, increased in population by 5.1% between 2000 and 2010.
- Asbury Park is among the communities with low socioeconomic status in Monmouth County. The 2010 median household income was \$33,527. The 2011 unemployment rate 19.8%; and 29% of residents lived below FPL in 2009.
- Black/African Americans (51.3%) were the dominant race followed by White/Caucasians (36.5%) and Hispanics (25.5%).
- Over 29% of Asbury Park residents have limited English proficiency.

Red Bank Borough

- Red Bank Borough had a 3% decline in population between 2000 and 2010 to 12,206 residents.
- The median household income in 2010 was \$59,118 with 16.3% of residents living below the FPL in 2009. Unemployment rate for 2010 was 10.8%.
- White/Caucasian (63.2%) is the predominant racial/ethnic group followed by Hispanic/Latino (34.4%). Black/African Americans are 12.4% of the population.
- The 18–24 and 25–44 age ranges are the largest population groups relative to the State average.

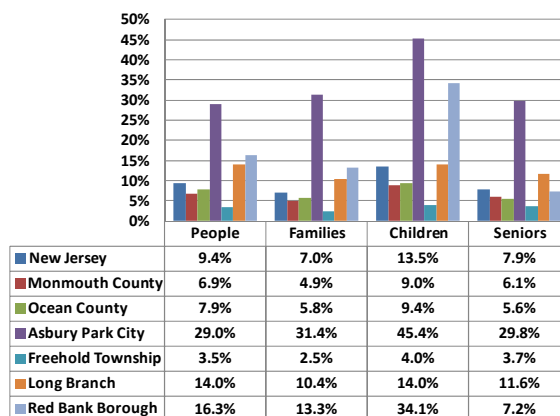
Figure 4.46
Median Household Income



Source: U.S. Census Bureau, American Community Survey

Note: 2005 City-Wide data is unavailable and the 2010 Median Household Income represents a five year estimate, ranging from 2006 to 2010.

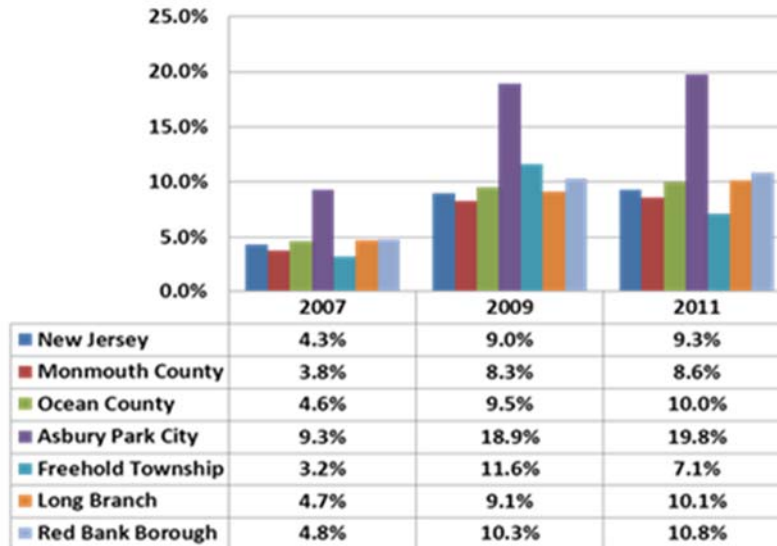
Figure 4.47
Income Below FPL 2009 (%)



Source: U.S. Census Bureau, American Community Survey

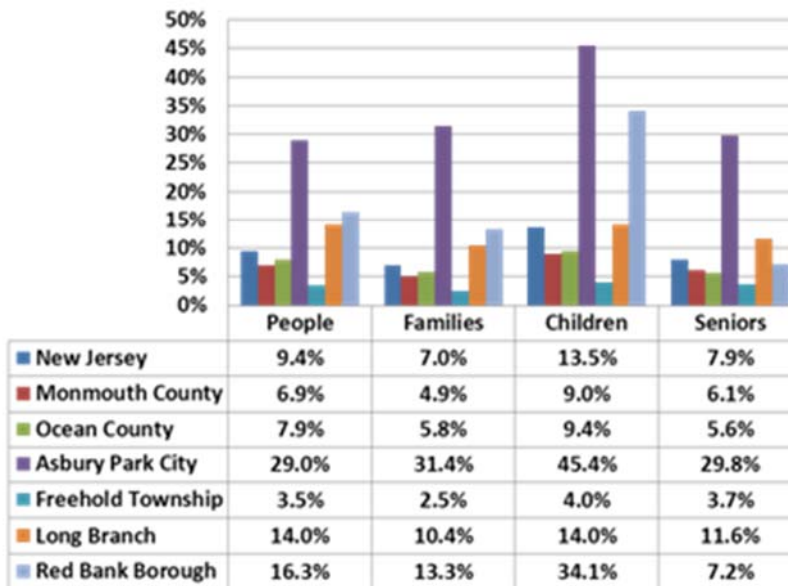
Note: People are defined as the entire population in each geographic area, children are defined as the population under 18 years, and seniors are defined as the population over 65 years.

Figure 4.48
Unemployment (%)



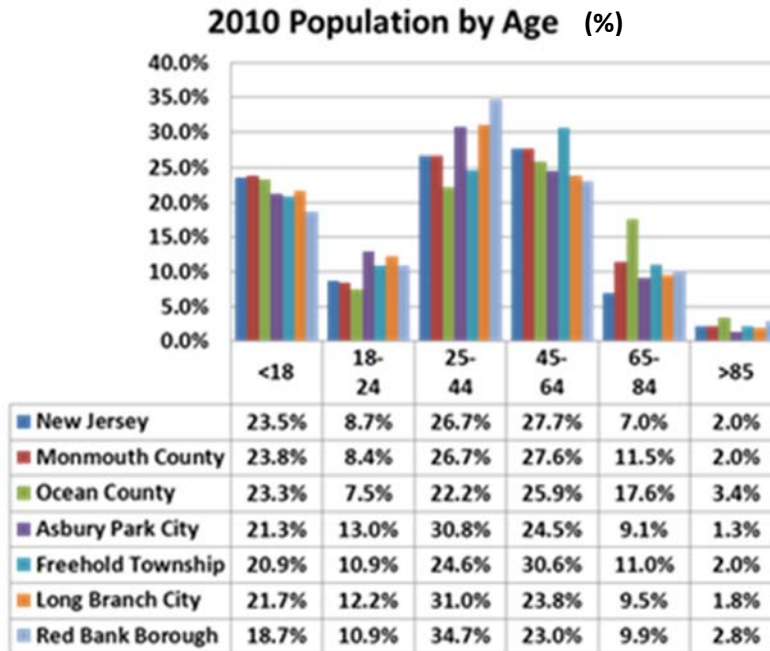
Source: N.J. Department of Labor, New Jersey Labor Force Estimates by Area
Note: The Data represents unadjusted annual averages.

Figure 4.49
Limited English Proficiency (%)



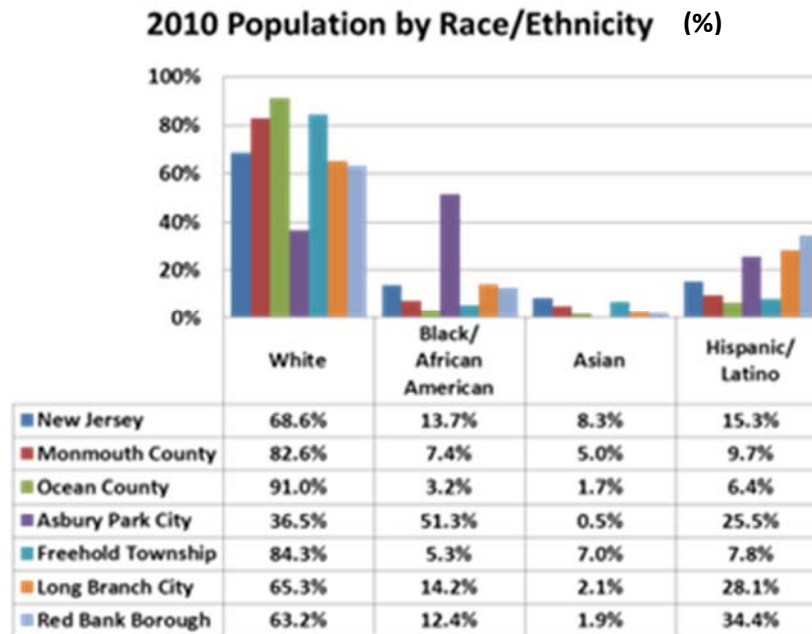
Source: U.S. Census Bureau, American Community Survey
Note: The U.S. Census Bureau defines LEP Population as persons who reported speaking English less than "very well." 2005 City-Wide Data is unavailable, and 2009 city-wide data represents a five year estimate ranging from 2005 to 2009.

Figure 4.50



Source: U.S. Census Bureau, American Community Survey

Figure 4.51



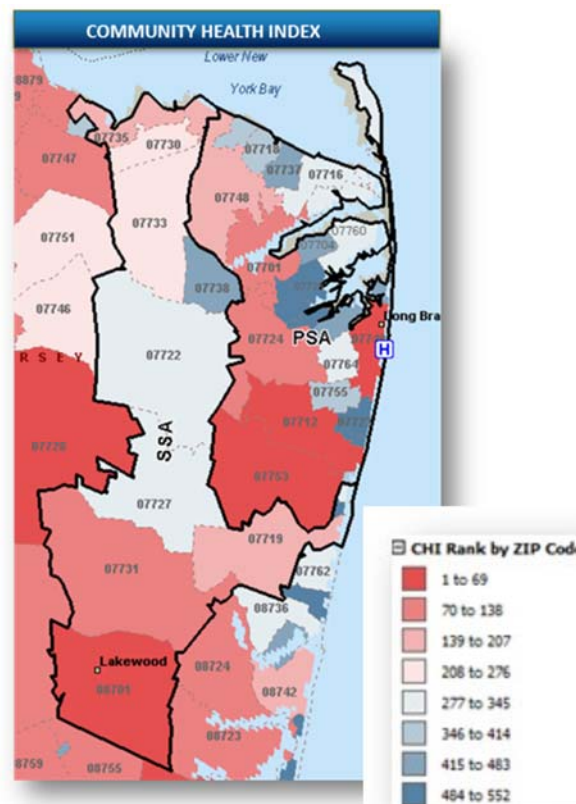
Source: U.S. Census Bureau, American Community Survey
Note: Numbers may not add up to 100%

Community Health Index

New Solutions, Inc.'s Community Health Index (CHI) is a numerical indicator that accounts for the underlying socioeconomic and access barriers that affect a population's health status. In developing this index, NSI identified prominent barriers related to income, culture/language, education, age, insurance and housing. The index is developed at the zip code level.

- A comparison of CHI scores to hospital utilization shows a strong inverse correlation between high need and high use – communities with low CHI scores can be expected to have higher hospital utilization.
- There is also a causal relationship between CHI scores and preventable hospitalizations and ED visits for manageable conditions – communities with high CHI scores have more hospitalizations and ED visits that could have been avoided with improved healthy community structures and appropriate outpatient/primary care.
- Monmouth County has an average CHI of 173. The PSA average CHI is 49 and the SSA 91. The PSA and SSA averages are indicative of a greater need than the county.

Figure 4.52



2. Access to Care

Monmouth County communities with low socioeconomic status experience disparities in health status and access to resources. These disparities are evidenced by uninsured status, limited access to primary care physicians and health services, and inappropriate use of hospital/emergency department services for conditions that could have been treated with preventive and primary care.

Background

Access to comprehensive, quality healthcare services is important for the achievement of health equity and healthy lifestyles for Monmouth County residents. Access to healthcare impacts:

- Overall physical, social, and mental health status
- Prevention of disease and disability
- Detection and treatment of health conditions
- Quality of life
- Preventable death and life expectancy

Disparities in healthcare access negatively impact each of these outcomes. Access is governed by a range of systemic barriers across the continuum prevention and care. These include: location of health facilities, resident geographic location, transportation infrastructure, health literacy and awareness, and ability to pay for services. These barriers can lead to:

- Unmet health needs
- Inability to access preventive services
- Emphasis on emergency treatment instead of prevention and primary care
- Hospitalizations that could have been prevented

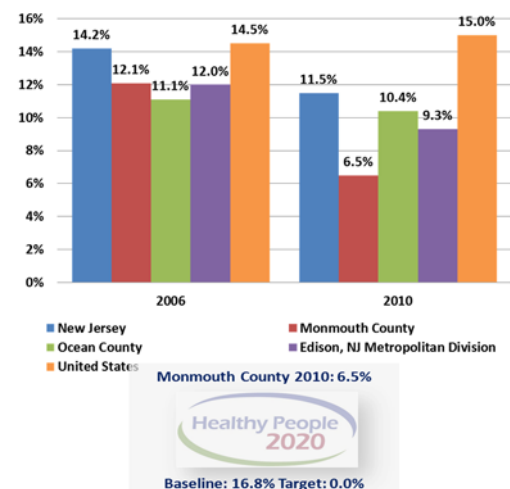
Healthy People 2020 identifies four components of access to care which will be used to frame this discussion: health insurance coverage, services, timeliness, and adequate and appropriate workforce.

Health Insurance Coverage—Uninsured

Health insurance coverage provides people with the security to access more affordable preventive services and clinical care when needed. It has been documented that people without insurance will not be offered the same range of medical services as those who are insured.¹⁸

In addition, ongoing contact with physicians fosters more comprehensive health awareness that informs preventive care and illness management. The uninsured do not think about their health or medical conditions in the same comprehensive way as do the insured.¹⁹ When a medical condition occurs, they may delay treatment and/or use the emergency department instead of a lower cost, more

Figure 4.53
Healthcare Access/Coverage; % = No



Source: CDC, Behavioral Risk Factor Surveillance System

¹⁸ Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20073184>.

¹⁹ Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/pmc1447830>.

appropriate primary care setting. The uninsured are:

- Less likely to receive needed medical care.
- More likely to have more years of potential life lost.
- More likely to have poor health status.

Monmouth County

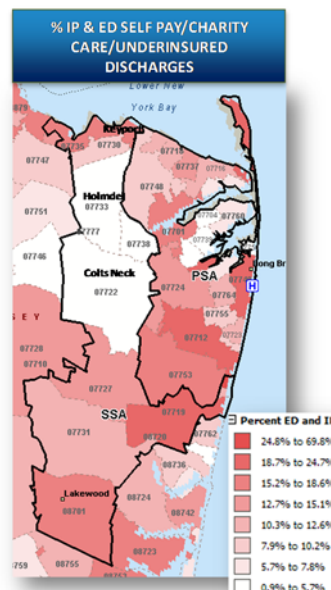
Monmouth County has a lower percentage of uninsured residents compared to New Jersey and the United States.

- Between 2006 and 2010 the rate significantly decreased by 46% from 12.1% to 6.5%.
- The *Healthy People 2020* goal is 0%. Monmouth County thus ranks higher (worse) than this target goal.
- The State already provides one of the nation's most generous subsidized health insurance programs through Family Care, which uses a mix of State and Federal money to cover more than 900,000 children and adults. Despite this, it is estimated that there are an additional 1.3 million residents in New Jersey without insurance which includes nearly 200,000 children.

Insurance Coverage Among Hospitalized Patients

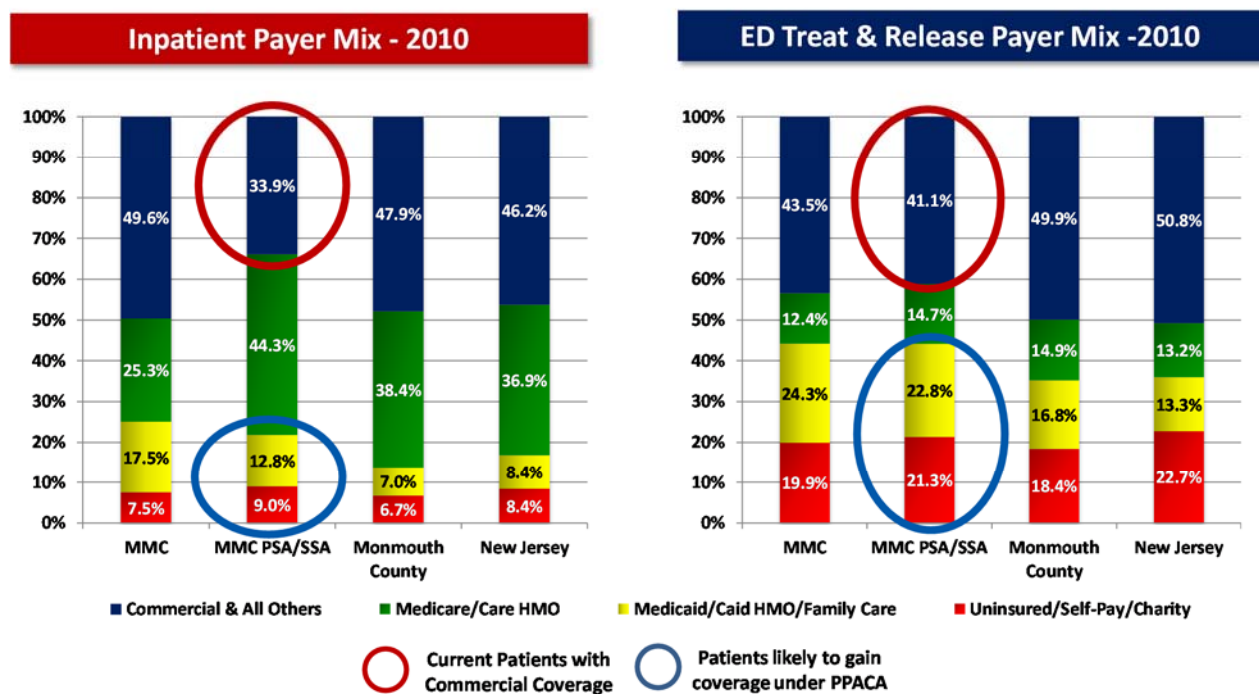
- MMC's PSA and SSA both have a higher percentage of Self Pay/Charity Care/Underinsured Patients than Monmouth County.
- Long Branch in the PSA has the highest percentage (24.3%) of IP and ED discharges for self pay/charity care/underinsured patients.
- The second greatest percentage of IP and ED discharges for self pay/charity care/underinsured patient occurs in Asbury Park in the PSA with 23.7% of discharges.

Figure 4.54



- Statistics for MMC show that a slightly lower percent of its inpatients are self-pay, charity care or uninsured; 7.5% for the Hospital compared to 9% in the service area. However, MMC treats a larger share of Medicaid/Family Care patients, 17.5% compared to 12.8% in the service area.
- The payer mix for ED treat and release patients shows a similar trend. MMC treats 19% of the self-pay, charity care and uninsured patients compared to 21.3% in the PSA/SSA. However, a larger percentage of the Medical Center’s patients are Medicaid/Family Care, 24.3% compared to 21.3% in the PSA/SSA.

Figure 4.55
Payer Mix Comparison



Source: HCDA 2010 UB-04 – Data Exclude Normal Newborn

Affordable Care Act – Expansion of Care

The Affordable Care Act (ACA) is expected to decrease the percentage of uninsured New Jersey residents under the age of 65 from 14.5% to 8.6%. The non-group health insurance market will increase (from 2.8% to 7.6%) to about 362,000 individuals. More than half of those enrolled in the non-group coverage following reform will be eligible for tax credits. The expansion of Medicaid/NJ Family Care is anticipated to result in an increase of 234,000 individuals, increasing from 13.6% of the non-elderly population to 16.7%. More than half of these individuals will be non-parent adults. In addition, about 3% of individuals covered by employer sponsored healthcare insurance are anticipated to switch to exchange based coverage.

The reduction in the non-elderly uninsured rate from 14.5% to 8.6% will likely put the New Jersey rate in line with the national average for uninsured residents under 65. The Congressional Budget Office, in 2010, estimated that the uninsured rate in the U.S. would be 8% after reform, and Buettgens, Hallohan & Carroll (2011) project a national rate of 8.7%.²⁰

As noted in Figure 4.56, if all towns in Monmouth County towns in which more than 8.6% of residents were uninsured reduced the percentage of uninsured to 8.6%, ACA would increase the number of insured by more than 7,000 individuals.

Figure 4.56

CURRENT ESTIMATED UNINSURED vs. ESTIMATED IMPACT OF PPACA ON UNINSURED POPULATION								
COUNTY	TOWN	2011 ACS Population Estimate*	# With health insurance coverage	No Health Insurance Coverage (Current Estimate)		Remaining Uninsured**		# of Newly Insured
				#	%	#	%	
MONMOUTH COUNTY	Long Branch City	30,685	22,366	8,319	27.1%	2,639	8.6%	5,680
	Neptune Township	27,620	24,700	2,920	10.6%	2,375	8.6%	545
	Ocean Township	27,289	24,011	3,278	12.0%	2,347	8.6%	931
TOTAL (TOWNS CURRENTLY > 8.6% UNINSURED)		85,594	71,077	14,517	17.0%	7,361	8.6%	7,156
*Civilian Non-institutionalized Population								
** Remaining Uninsured Calculated at Town Level Based on Estimated PPACA Impact (Reduction to 8.6% Uninsured)								

Source: United States Census – 2009-2011 American Community Survey 3-Year Estimates – DP03 Selected Economic Characteristics

Services

Care Coordination—Medical Homes

Improving healthcare access depends, in part, on ensuring that people have a standard and consistent source of preventive care and clinical treatment. One method to accomplish this is through patient-centered medical homes. This model provides personalized, comprehensive medical care using a physician led multidisciplinary team that might also include nurse practitioners, nurses, case managers, community health workers and other medical personnel. Medical homes hold promise to transform the delivery of healthcare by improving quality, safety, efficiency and effectiveness. This will ultimately result in better health outcomes and fewer disparities and costs.²¹

Conveniently locating medical homes and other primary care in local communities further supports access. Providers who are invested in the community promote meaningful and sustained relationships between themselves, their patients, and patient families. Medical homes may be led by PCPs at clinics, hospitals, and health departments. Medical homes are also enriched by preventive and treatment services from nurse practitioners, parish nurses, community health workers and navigators among others. As a result, medical homes are associated with:

²⁰ Health Insurance Status in New Jersey After Implementation of the Affordable Care Act. Joel Cantor, ScD; Dorothy Gaidobu, MSW, Ph.D.; Jose Novams; and Kristen Lloyd, MPN.

²¹ Retrieved from <http://www.pcmh.ahqr.gov>.

- Greater patient trust in the provider
- Effective patient-provider communication
- Increased likelihood that patients will receive appropriate care
- Decreased duplication and disconnection of health services provided.²²

Care Coordination—Accountable Care

In January 2013, the Central New Jersey ACO, LLC consisting of Monmouth Medical Center in Long Branch, Community Medical Center in Toms River, Kimball Medical Center in Lakewood, CentraState Medical Center in Freehold, as well as aligned physicians throughout the area was selected to participate as an Accountable Care Organization (ACO) in the Medicare Shared Savings Program (MSSP). Through the MSSP, Central Jersey ACO, LLC will work with CMS to provide Medicare fee-for-service beneficiaries with high quality care and services, while reducing the growth in Medicare expenditures through enhanced care coordination.

Using a team-based approach, the ACO will aim to enhance wellness and preventive care and make the patient's primary care physician the "quarterback" in what is an increasingly complex array of issues and choices patients must navigate through.

Primary Care Physicians

Primary care physicians represent slightly more than a third of the physicians practicing in Monmouth County.

- In 2008 there were 104.8 primary care physicians per 100,000 people compared to the CHR benchmark of 158.5 per 100,000.

Primary Service Area Physician Need

A physician staff needs assessment carried out by New Solutions, Inc. on behalf of MMC identified the following needs within the communities served by the Hospital.

- Primary care physicians (Family Practice, Internal Medicine and Geriatrics) show a need for 10-15 additional physicians.
- Neurology shows a need for 2.
- Hematology shows a need for 4-6.
- Endocrinology shows a need for 1.
- General surgeons (including Breast, Bariatric, and Vascular) show a need for 8.
- Ophthalmology shows a need for one.
- Otolaryngology shows a need for 2-3.
- Psychiatry shows a need for 3.

²² Ibid.

Physicians Acceptance of Medicaid

In addition to the fact that Monmouth County and the service area served by MMC have fewer primary care physicians than are recommended by CHR, many physicians refuse to accept Medicaid patients because physician payment rates are so low. This substantial impediment to access for New Jersey Medicaid patients is the result of a Medicaid payment rate that is one-third the rate the Federal government now pays for Medicare patients. Healthcare reform measures would equalize payment rates and potentially enhance access for Medicaid patients.

Monmouth County Clinics

There are five acute care hospitals in the county, one in Long Branch, one in Freehold, one in Holmdel, one in Red Bank, and one in Asbury Park, which provide primary access points for patients. Most of these facilities provide outpatient clinic services including family health care services.

There are also a number of community-based organizations (CBOs) that provide medical and health services at local sites. In addition, Planned Parenthood provides sexual and reproductive health services at offices located in Freehold, Hazlet, and Shrewsbury. Lead screening, hypertension screening, immunization, child health services, STD clinics and Tuberculosis services, women's health screening and physician visits by appointment are offered by the Monmouth County Health Department.

In addition, there are two Federally Qualified Health Centers (FQHCs) operating at six locations in Monmouth County, Monmouth Family Health Center and Visiting Nurses Association of Central Jersey Community Health Center. Offices are located in Long Branch (2), Asbury Park (1), Keansburg (1), Keyport (1), and Red Bank (1). Characteristics which distinguish FQHCs from most other healthcare providers include:

- Governance by users of FQHCs and by local professionals.
- Locations in underserved neighborhoods with clinic hours that include nights and weekends.
- Utilization of National Health Service Corps physicians who are devoted on a full-time basis to the Center.
- Multilingual staff.
- Ability to provide multiple sites and even mobile clinics and services for rural populations.
- Commitment to offering a wide array of medical and supportive services.
- Provision of care at costs which are substantially lower than at other settings, sliding fee scales.
- Reduction of overall healthcare costs as an effective alternative to emergency room utilization.
- Physician admitting privileges in local hospitals to provide 24-hour care to patients.
- Networking with community-based human service organizations to provide a continuum of care.
- Programs are based on the life-cycle concept, which gives particular emphasis to maternal and child health and seeks to provide quality care for people from prenatal care to old age.

Dental Clinics

Dental clinics in Monmouth County are provided at Jersey Shore Medical Center, Monmouth Family Health Center, and the Parker Family Health Center in Red Bank.

Timeliness of Services

A key indicator of the timeliness of services is emergency department (ED) utilization for conditions that could have been treated in a primary care setting. These include both unnecessary emergency department visits for minor, treatable conditions and visits for conditions that progressed as a result of not accessing timely treatment in an outpatient 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 including the inability to pay co-pays for office visits
- Transportation issues
- Practices without extended office hours
- Undocumented citizenship status

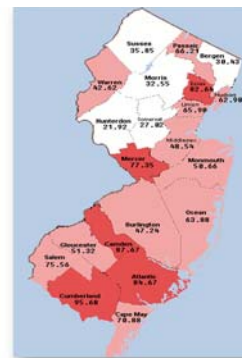
ED Usage by Community, Case Type and Payer

Ambulatory care sensitive conditions (ACSC) are indicators emergency department (ED) use by patients who would have more appropriately been cared for in an outpatient primary setting. The charts below identify the number and rate of ED visits that might have been treated in another setting for Monmouth County compared to all New Jersey counties.

Figure 4.57

ACSC - ED Rate/1000		ACSC - ED Rate/1000	
COUNTY	NJ 2010	COUNTY	NJ 2010
CUMBERLAND	95.68	GLOUCESTER	51.32
CAMDEN	87.67	MONMOUTH	50.66
ATLANTIC	84.67	MIDDLESEX	48.54
ESSEX	82.64	BURLINGTON	47.24
MERCER	77.35	WARREN	42.62
SALEM	75.56	SUSSEX	35.85
CAPE MAY	70.88	MORRIS	32.55
PASSAIC	66.21	BERGEN	30.43
UNION	65.98	SOMERSET	27.02
OCEAN	63.88	HUNTERDON	21.92
HUDSON	62.98	STATEWIDE RATE	57.55

Figure 4.58



Monmouth County

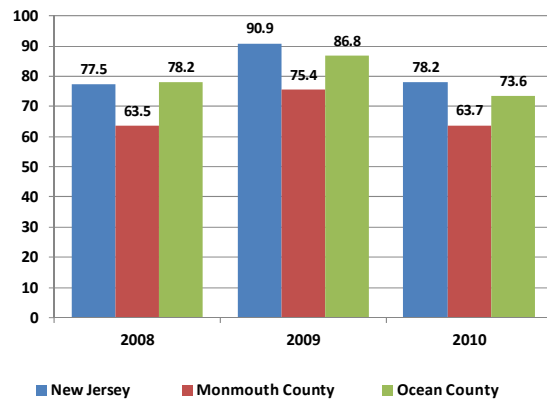
Monmouth County ranks thirteenth statewide in the rate of ACSC per 1,000 population.

- In 2010, Monmouth County had an ACSC ED visit rate of 50.7/1,000 compared to 57.6/1,000 for New Jersey.

Figure 4.59
Top 5 ACSC ED Visits For Children by County per 1,000

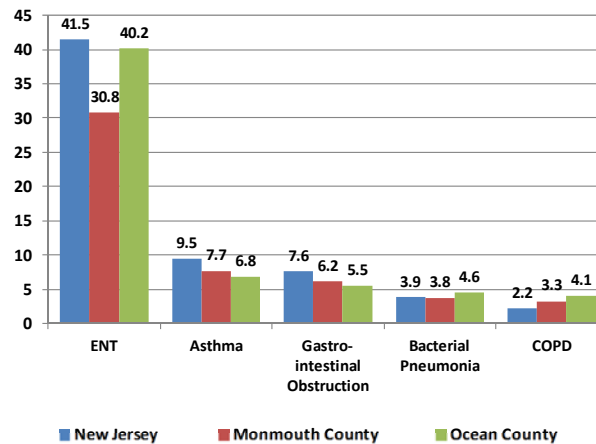
Children

- The rate of ED visits for ACSC among children remained nearly the same between 2008 and 2010 and is significantly lower than the state rate of 78.2/1,000.
- ENT conditions were the number one ACSC for which children experienced an ED visit for residents of both the State (41.5/1,000) and county (30.8/1,000).



Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents; U.S. Census Bureau, American Community Survey

Figure 4.60
Top 5 ACSC ED Visits for Children per 1,000

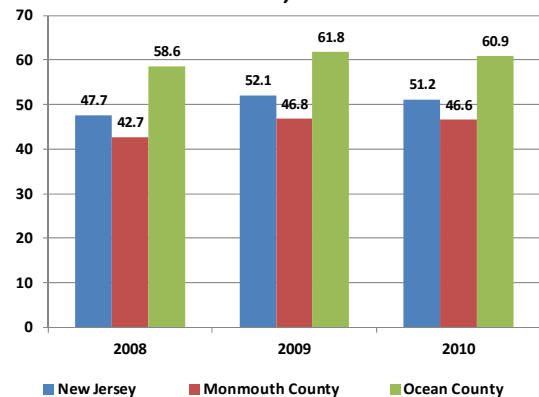


Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents; U.S. Census Bureau, American Community Survey

Adults

- The rate of ACSC ED visits for adults increased from 42.7/1,000 to 46.6/1,000 but remains lower than the State rate of 51.2/1,000.
- The top ACSC ED visit rate among Monmouth County adults was for Cellulitis conditions at 7.5/1,000. The top ACSC ED visit rate for the State was for ENT at 8.0/1,000.

Figure 4.61
Top 5 ACSC ED Visits for Adults by County Per 1,000



Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents; U.S. Census Bureau, American Community Survey

Service Area ACSC ED Rates Among Children 0-17

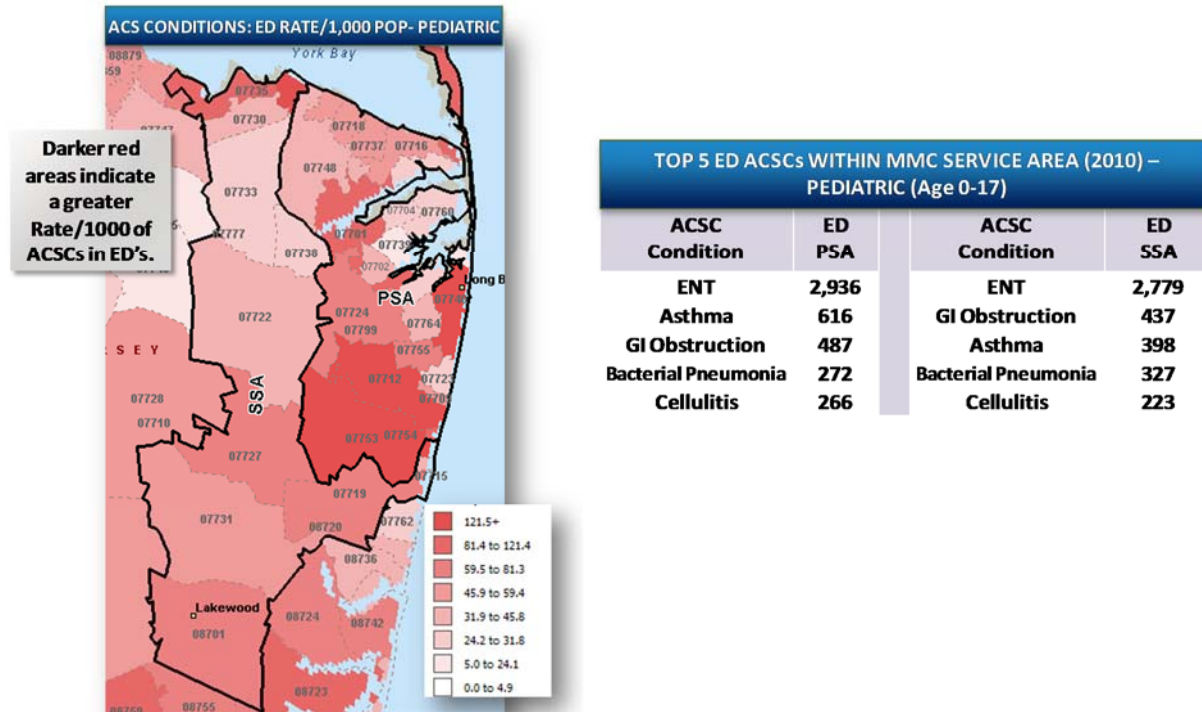
The rate of ED visits for ACSC among children was 97.46/1,000 in the PSA and 65.03/1,000 in the SSA far surpassing both the County rate (63.7/1,000) and the State rate (78.20/1,000).

- Long Branch (07740) had the highest rate for ED

visits for ACSC (186.61/1,000).

- The top 5 ED visits for ACSC among children in the PSA were ENT, Asthma, GI Obstruction, Bacterial Pneumonia, and Cellulitis.
- The top 5 ACSC ED visits among children in the SSA were ENT, GI Obstruction, Asthma, Bacterial Pneumonia, and Cellulitis.

Figure 4.62



Service Area ACSC ED Rates Among Adults 18+

The rate of ED visits for ACSC among those 18+ was 60.5/1,000 in the PSA and 53.99/1,000 in the SSA compared to county (46.6/1,000) and State (51.20/1,000) rates.

- Keansburg (07734) in the SSA had the highest rate (97.91/1,000).
- The top 5 ED visit types for ACSC among adults in the PSA were Cellulitis, ENT, Dental conditions, Kidney/Urinary Tract Infections, and COPD.
- In the SSA, the top 5 were Dental conditions, Cellulitis, ENT, Kidney/Urinary Tract Infections, and COPD.

Figure 4.63

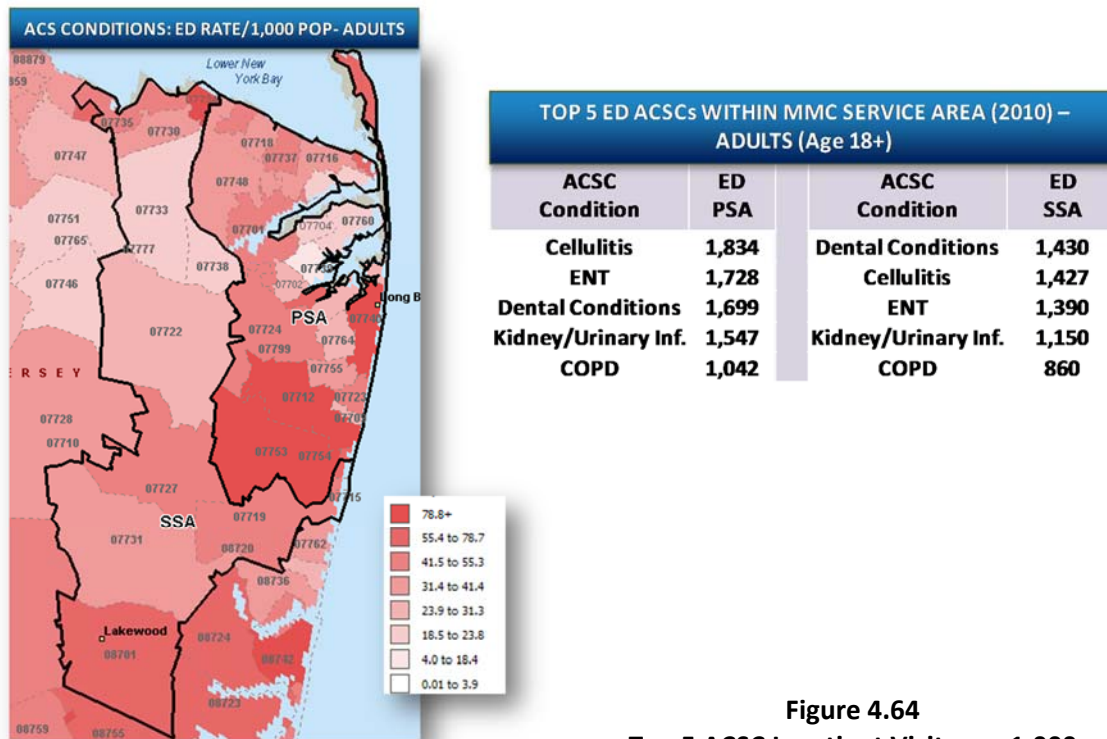
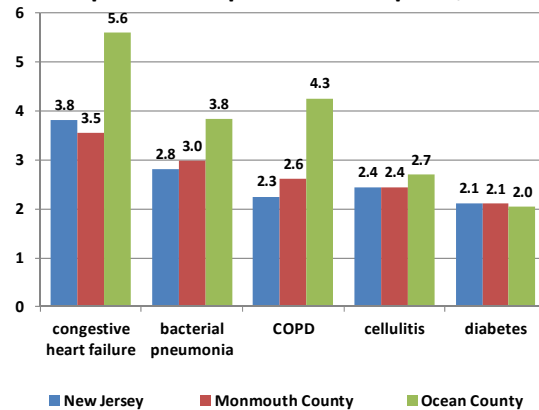


Figure 4.64

Top 5 ACSC Inpatient Visits per 1,000



Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents; U.S. Census Bureau, American Community Survey

Inpatient ACSC

Individuals can be admitted to the hospital due to ACSC. Monmouth County rates twelfth statewide in the rate of ACSC admissions per 1,000.

- In 2010, Monmouth County had an ACSC inpatient use rate of 22.57/1,000 compared to 22.65/1,000 statewide.
- In both Monmouth County and in New Jersey, congestive heart failure is the most common inpatient ACSC.
- Admission rates for the top 5 ACSCs were not statistically different than the State rate.

Inpatient ACSC Use Rates in the Service Area

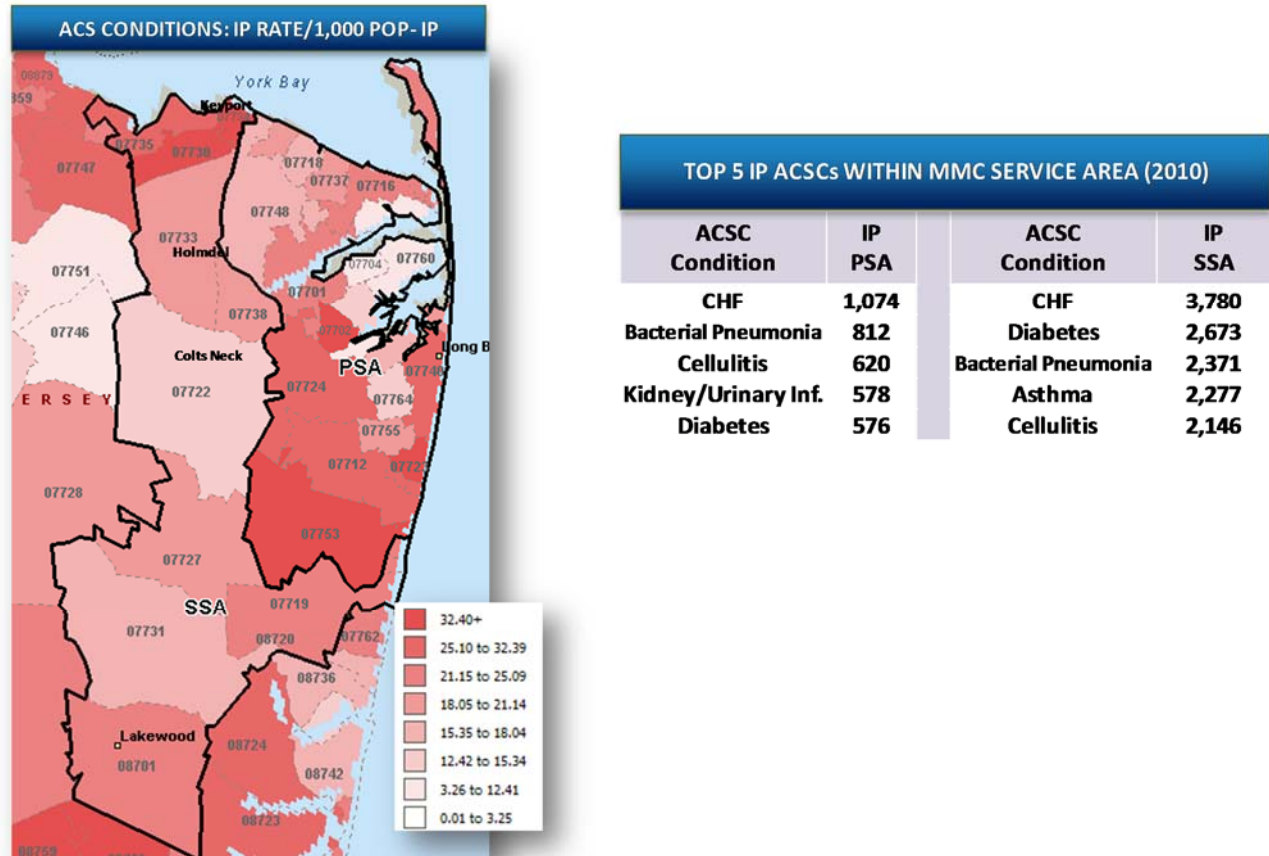
The inpatient use rate for ACSC in the PSA was 25.03/1,000 compared to 22.57/1,000 for the county and 22.65/1,000 for the State.

- The top 5 inpatient ACSC use rates occurred in CHF, Bacterial Pneumonia, Cellulitis, Kidney/Urinary Tract Infections, and Diabetes.

In the SSA, inpatient use rate for ACSC was 24.32/1,000.

- The top 5 inpatient ACSC use rates were CHF, Diabetes, Bacterial Pneumonia, Asthma and Cellulitis.

Figure 4.65

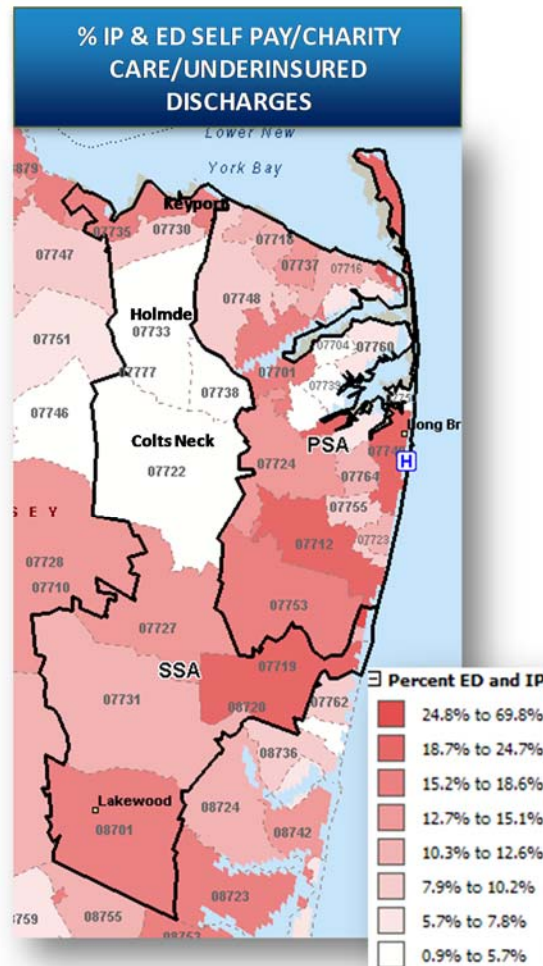


Service Area ED and Inpatient Utilization by Self-Pay/Charity Care/Uninsured

The PSA (17.1%), SSA (15.4%), and county (13.9%) have a lower percentage of self-pay, charity care and uninsured patients than the State (17.8%).

- Long Branch (07740) in the PSA has the highest percentage (24.5%) of inpatient and ED discharges among the uninsured/underinsured.
- The second highest occurs in Asbury Park (07712) at 23.7%.

Figure 4.66

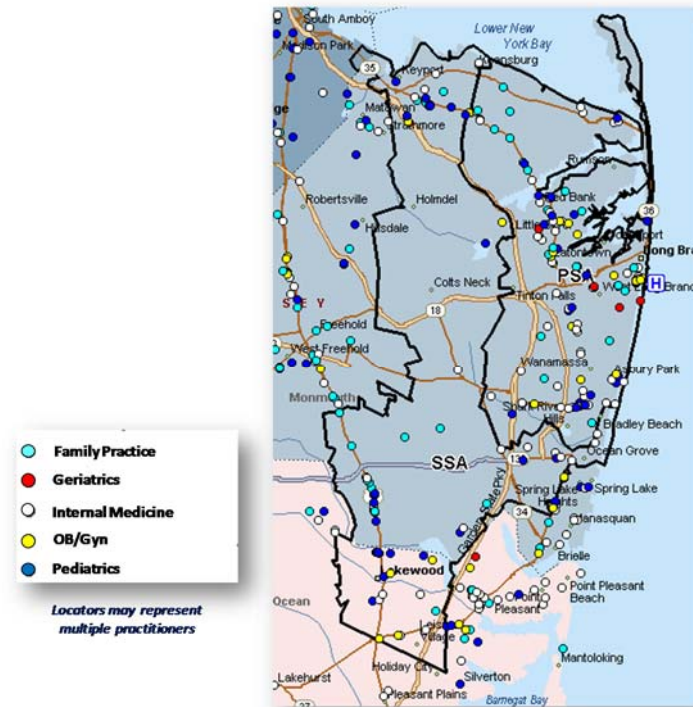


Workforce

A key to enhancing access is to increase the availability of high quality community prevention services, clinical prevention services as well as community-based care and treatment. To accomplish this, a well-trained, culturally competent public and private sector workforce is required. The workforce must hold expertise in wellness, preventive care, chronic-illness care and public health.

Nationally, PCPs are in short supply, and according to the Lewin Group, the demand for PCPs will increase between 3% and 6% with the initiation of healthcare reform. As described above, New Jersey is experiencing a shortage of PCPs. Monmouth County has a maldistribution of PCPs, with the majority in the northern and western suburbs.

Figure 4.67



3. Clinical Care Measures

Monmouth County

Hospital Inpatient and ED Utilization

Hospital inpatient utilization tends to be higher in Monmouth County than statewide and MMC's PSA tends to experience higher inpatient and ED utilization than are experienced by county residents. It is expected that under healthcare reform, use rates will decrease as care transitions and coordination of care improves, more care is delivered in ambulatory care settings and access to primary and preventive care increases. Hospital ED utilization in Monmouth County was lower than the State but both the PSA and SSA had ED utilization rates that exceed the county rate.

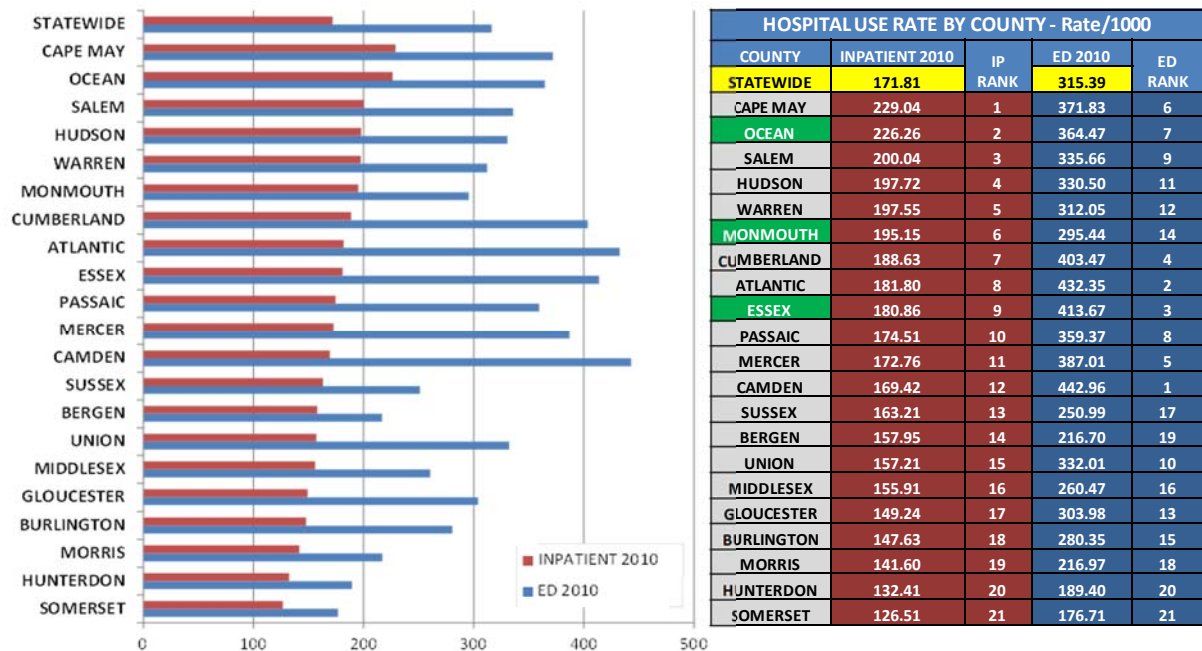
Nearly 80% of U.S. adults (18-64) cite the reason for their last ED visit (that did not result in a hospitalization) was a lack of access to other providers. Specifically:

- 48.0% Doctor's office not open
- 46.3% No other place to go
- 45.8% The ED was their closest provider
- 17.7% Most of their care was at the ED²³

²³ Emergency Room Use Among Adults 18-64: Early Release of Estimates from the National Health Interview Survey, January-June 2011. Renee M. Gindi, Ph.D., Robin Cohen, Ph.D. and Whitney K. Kirzinger, MPH. Division of Health Interview Statistics, National Center for Health Statistics.

- In 2010, Monmouth County had the sixth highest inpatient utilization rate in the State, 195.15/1,000, compared to 171.81 statewide.
- Monmouth County’s utilization rate for ED visits is 295.44/1,000, making it the 14th highest in the State.
- The New Jersey rate in 2010 was 315.39.

Figure 68
Clinical Care Measures – Total Inpatient and ED Admissions by County per 1,000 Population



Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents

Service Area Use Rates

Inpatient use rates for MMC’s PSA and SSA are generally higher than use rates in the county and statewide.

- The PSA inpatient use rate was 200.25/1,000.
- The SSA inpatient use rate was 199.17/1,000.
- Several zip codes in the SSA had inpatient use rates that were much higher than the State or county rate.
 - Keansburg (07734) was 318.64/1,000.
 - Hazlet (07730) was 306.10/1,000.
 - Keyport (07735) was 268.28/1,000.

PSA Emergency Department visit rates per 1,000 are also higher than the State and county rates.

- The ED visit rate in the PSA was 355.69/1,000.
- There are also several zip codes in the PSA with exceptionally high ED visit rates. These include:
 - Long Branch (07740) was 501.87/1,000.

- Asbury Park (07712) was 490.81/1,000.
- Neptune (07753) was 456.54/1,000.

Methods to reduce ED use rates include addressing potential primary care access issues and effective management of patients using the ED for ACSC.

Cesarean-Section

Rates for Cesarean-sections in the U.S. continue to rise well above the 15% recommended by the World Health Organization. In 1965, the National U.S. rate for c-sections was 4.5%. Since then the rate has risen steadily, leveling off at 32.8% in 2010 and 2011.²⁴ As a result, nearly one in three moms gave birth by Cesarean-section.

Cesarean-section is major abdominal surgery and increases the chance of long and short term side effects for both mother and child. As a result, *Healthy People 2020* has recommended a 10% improvement of the rate of Cesarean births among low-risk women with no prior Cesarean births to 23.9%, and for low-risk women with a prior Cesarean birth the recommendation is to reduce Cesarean-section rate from 90.8% to 81.7%.

Current research suggests that the following interconnected factors appear to contribute to high Cesarean-section rates.

- Low priority of enhancing woman's own abilities to give birth.
- Side effects of common labor interventions.
- Refusal to offer informed choice of vaginal birth.
- Casual attitudes about surgery and variation in professional practice style.
- Limited awareness of harms that are more likely with Cesarean-sections.
- Incentive to practice in a manner that is more efficient for providers.²⁵

Monmouth County

- In 2010, the repeat cesarean-section rates in Monmouth County (31.4%) were significantly higher than the statewide rate of 27.4%.
- Primary Cesarean-section rates at 9.3% were better than the *Healthy People 2020* target of 23.9%.

Service Area

In order to gain a perspective of the utilization of Cesarean-section at the service area/zip code level, we employed the AHQR inpatient quality indicator #21 which excludes breech births, abnormal presentation, pre-term, fetal deaths, and multiple gestations, and calculates an overall Cesarean-section rate. In addition, because of the data available, Cesarean-section rates are presented as a percent of deliveries rather than as presented above as a percent of birth, therefore the differences.

Accordingly, Monmouth County's overall Cesarean-section rate in 2010, as a percent of total deliveries, is 45.2% compared to the New Jersey rate of 43.4%.

- The Cesarean-section rate for MMC's PSA is 41.0%.

²⁴ Retrieved from <http://www.childbirthconnection.org.asp?ck=10456>. Accessed 4/30/13.

²⁵ Retrieved from <http://childbirthconnection.org/article.asp?ck=10456>. Accessed 4/30/13.

- The SSA rate is 20.4%.
- Within the service area one zip code had a rate that was substantially higher:
 - Middletown (07748) was 51.8%.

The figure below provides the Cesarean-section rates by the four Monmouth County hospitals with maternity units.

- Two (Riverview and CentraState) of the four hospitals with maternity units have rates that exceed the State and county rates.

Figure 4.69
(%)

AHRQ C-Section Rates Monmouth County Hospitals (2010)	
Monmouth Medical Center	26.4%
Riverview	51.7%
CentraState	50.4%
Jersey Shore	45.0%

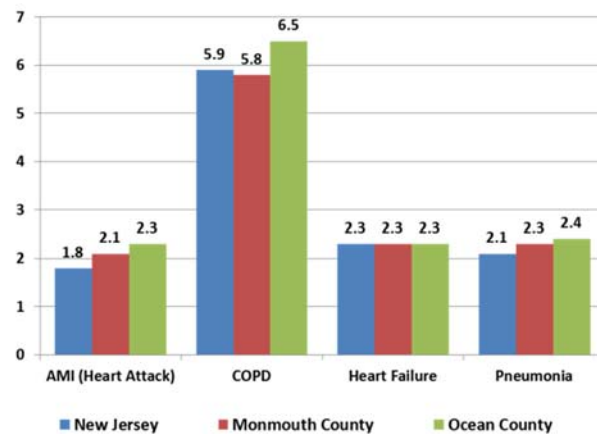
Readmissions

Nearly one in five Medicare beneficiaries is readmitted within a month. In an effort to reduce costs and improve the transition of care from hospital to home or other care setting, readmission rates for three conditions: congestive heart failure, heart attack and pneumonia are being tracked and hospitals with high readmission rates among these patient categories are receiving penalties of up to 1% of their Medicare reimbursement in FY 2013.

Although New Jersey hospitals have reduced admission rates from 21.8% in the second quarter of 2008 to 20.5% in the first quarter of 2012, New Jersey continues to rank among the bottom of states for controlling readmissions. Due to the above, it is not surprising that the Monmouth County rate of hospital admissions per 1,000 Medicare beneficiaries was not statistically different from that of New Jersey.

- The Monmouth County rate of readmissions was slightly higher, but not significantly different than the State rate for heart attack and pneumonia.

Figure 4.70
30 Day Hospital Readmissions per
1,000 Medicare Beneficiaries by
Primary Diagnosis (2010)



Source: Health Care Quality Strategies, Inc. (HQSI), Report of Medicare FFS Claims for New Jersey, 2011

- The figure at the right shows the CMS statewide readmission penalty as well as the readmission penalty rates for all hospitals in Monmouth County. Only two New Jersey hospitals avoided any penalty. MMC received the lowest readmission penalty in the county.

Figure 4.71

CMS Readmission Penalties - 2013 (Monmouth County Hospitals)	
Statewide Median	0.72%
Monmouth Medical Center	0.24%
Riverview	0.58%
Bayshore	1.00%
CentraState	1.00%
Jersey Shore	0.55%

4. Health Behaviors

Health behaviors such as eating sensibly and exercising lower the risk of conditions like heart disease and diabetes, while unhealthy behaviors like smoking, excessive drinking, and high-risk sexual activities increase the risk of conditions like lung cancer, heart disease, and liver disease. Preventive health behaviors like prenatal care and health screenings can result in early identification and treatment of disease.

Maternal/Fetal Health Indicators

Prenatal Care

Pregnancy can provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children.

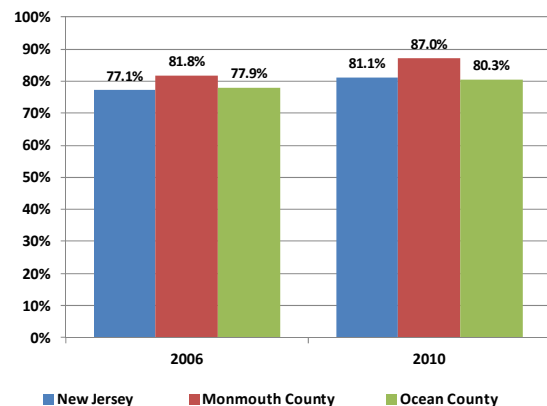
According to *Healthy People 2020*, factors that affect pregnancy and childbirth, include:

- Preconception health status, including stress
- Age
- Access to appropriate preconception and inter-conception healthcare
- Poverty

In 2010, 87.0% of Monmouth County live births were born to mothers who initiated prenatal care in the first trimester.




- This was an increase of 5.2 percentage points over the percent in 2006.
- This compared to 81.1% of New Jersey live births receiving care in the first trimester.
- The percentage of live births in Monmouth County whose mothers received first trimester care was significantly higher (better) than the statewide percentage and the *Healthy People 2020* target of 77.9%
- Between 2006 and 2010 the percent of Monmouth County live births with no prenatal care increased from 0.6% to 0.9%.
- The percentage of Monmouth County live births with no prenatal care remains the same as the State rate of 0.9%.

Figure 4.72
Percent of Live Births with
Prenatal Care in First Trimester



Source: N.J. Department of Health and Senior Services, N.J. Department of Health and Senior Services, Bureau of Vital Statistics and Registration, N.J. Birth Certificate Database, 2011; U.S. Census Bureau, American Community Survey
Note: Percentages are based on total number of live births for county and state.

Figure 4.73
Maternal Health

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	

High Risk Sexual Behaviors

Teen Pregnancy

One in five unplanned pregnancies each year is among teens; and 82% of pregnancies to mothers aged 15 to 19 are unintended. Teen mothers:

- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately \$3,500 less per year, when compared with those who delay childbearing until their 20s.
- Receive nearly twice as much Federal aid for nearly twice as long.²⁶

Births resulting from unplanned pregnancies can have negative consequences including birth defects and low birth weight. Children from unintended pregnancies are more likely to experience poor mental and physical health during childhood, and have lower educational attainment and more behavioral issues in their teen years. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.²⁷

The increased costs of healthcare and social service costs, increased costs for incarceration, rates of children born to teen parents, and cost of tax revenue from teen moms who earn less money costs U.S. tax payers an estimated \$11 billion a year.²⁸

Monmouth County Teen Births

The teen birth rate among 15-19 year old females declined from 18/1,000 to 6/1,000 in Monmouth County and was significantly lower than the statewide rate of 25/1,000. The teen birth rate among 15-17 years old slightly increased from 5.5/1,000 to 6.0/1,000 and was also significantly lower than the statewide rate of 12.0/1,000.

- The birth rate for teens 15-19 in Monmouth County is lower than the CHR benchmark of 22/1,000, which is based upon a 6-year average from 2002 to 2008.





²⁶ Retrieved from <http://healthpeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=13>.

²⁷ Ibid.

²⁸ Retrieved from <http://cdc.gov/teenpregnancy/aboutteenpregnancy>. Accessed 4/30/13.

- The rate of teen births among those 15-17 is lower (better) than the *Healthy People 2020* target of 36.2/1,000.

Figure 4.74
Teen Births

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Teen Birth Ages 15-19: Rate per 1,000 Female Population	N/A		
Teen Birth Ages 15-17: Rate per 1,000 Female Population		N/A	

Service Area Teen Births

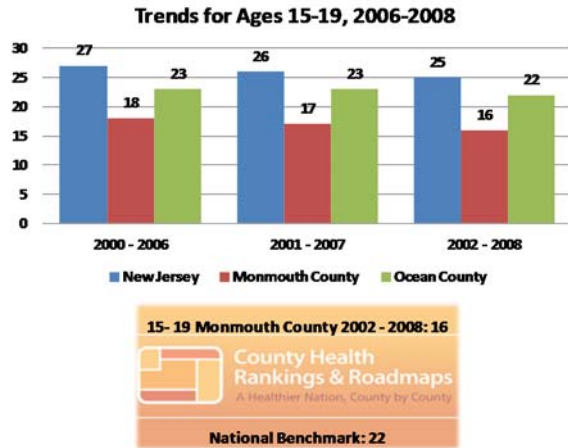
More recent data available through the 2010, UB New Jersey data, shows the rate for teen births 15-19 dropped to 19.5/1,000.

- The rate among Monmouth County teens also dropped (11.16/1,000) and continues to be lower than the statewide rate.
- The PSA teen birth rate in 2010 was 16.23/1,000.
- Within the service area several zip codes exceed the State, county and service area rates. Two, Long Branch (45.67/1,000) and Keansburg (44.67/1,000), are more than twice the State rate.

Figure 4.75

TEEN BIRTH RATES/1000 (2010)**	
GEOGRAPHIC AREA	Rate
New Jersey	19.50
Monmouth County	11.16
MMC PSA	16.23
MMC SSA	17.72
Long Branch	45.67
Keansburg	44.67
Neptune	31.88
Asbury Park	30.03
Lakewood	29.00

Figure 4.76
Teen Births (per 1,000)



Source: National Center for Health Statistics, County Health Rankings; N.J. Department of Health, State Health Assessment Data

Figure 4.77
Teen Births (per 1,000)

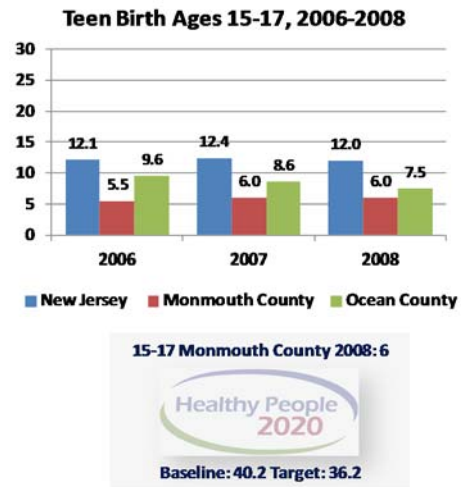
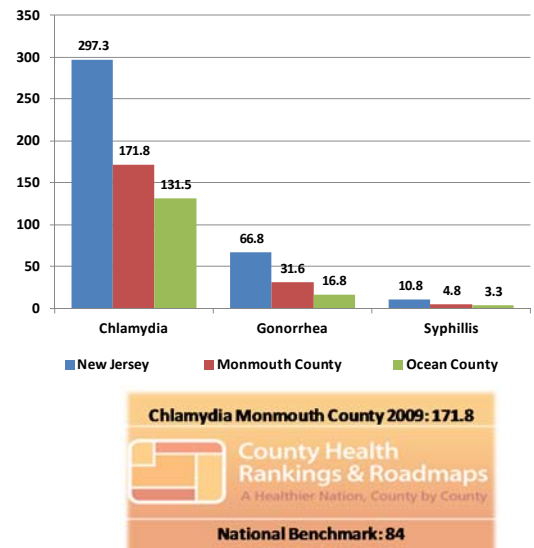


Figure 4.78
Sexually Transmitted Diseases (per 100,000)



Source: N.J. Department of Health and Senior Services, Division of HIV, STD, and TB Services, Sexually Transmitted Disease Program, 2008, 2009, 2010; U.S. Census Bureau, American Community Survey

Sexually Transmitted Diseases

Background

Sexually transmitted diseases (STD) refer to more than 25 infectious organisms that are transmitted primarily through (unprotected) sexual activity. STDs remain a significant public health problem in the Monmouth County and the United States. Factors that affect the spread of STDs include:

- Asymptomatic nature of STDs.
 - The majority of STDs either do not produce any symptoms, or they produce symptoms so mild that they are unnoticed. As a result, many infected persons do not know that they need medical care.
- Gender disparities.
 - Women suffer more frequent and more serious STD complications than men including pelvic inflammatory disease, ectopic pregnancy, infertility, and chronic pelvic pain.²⁹
- Age disparities.
 - Nationally, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs than older adults.³⁰

²⁹ Retrieved from <http://helathypeople.gov/topics/objectives2020/overview.aspx?topicid=37>.

³⁰ Ibid.

Incidence

Monmouth County sexually transmitted disease rates per 100,000:

- The rates for Chlamydia and gonorrhea increased between 2008 and 2010, by 20.2/100,000 and 12/100,000, respectively, while the rate of syphilis declined.
- The rate for Chlamydia, gonorrhea and syphilis are all significantly lower than the State rate.
- The rate of Chlamydia in Monmouth County is significantly higher and more than double the national benchmark.

HIV/AIDS

HIV/AIDS can be transmitted through sexual contact, through intravenous drug use or contact with bodily fluids.

- In 2010, the HIV/AIDS prevalence rate per 100,000 for Monmouth County was significantly (nearly 1.5 times) lower than the statewide rate.
- Black residents constitute 43.7% of HIV/AIDS cases in Monmouth County, while White/Caucasian residents constitute 39.8% of HIV/AIDS cases, and Hispanics were 15.1% of all HIV/AIDS cases in the county.

Figure 4.79

2010 Overall Prevalence Rate per 100,000

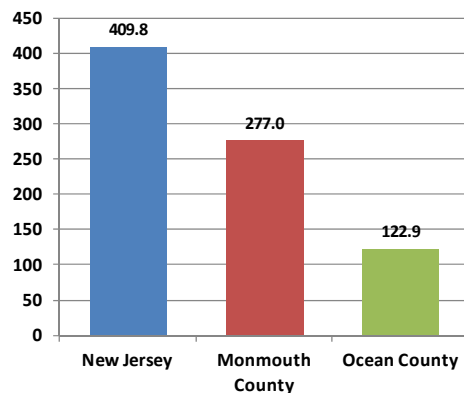
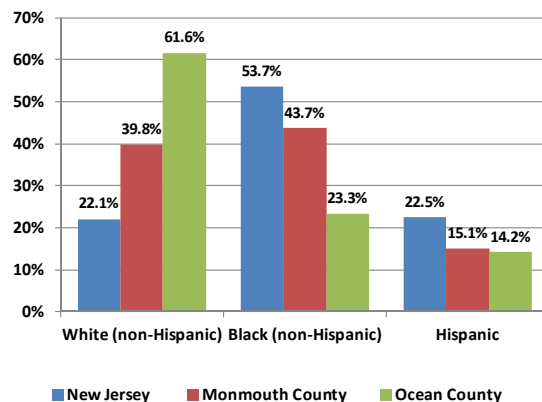


Figure 4.80

Prevalence by Race/Ethnicity (%)

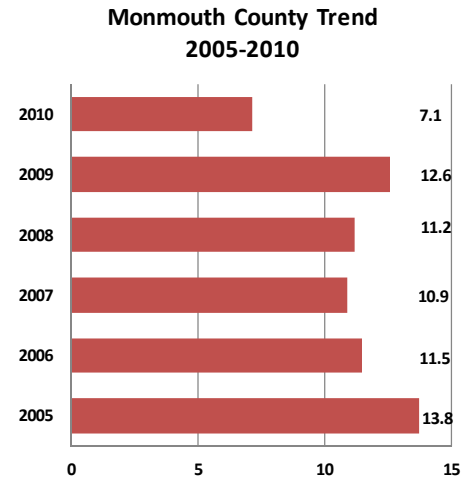
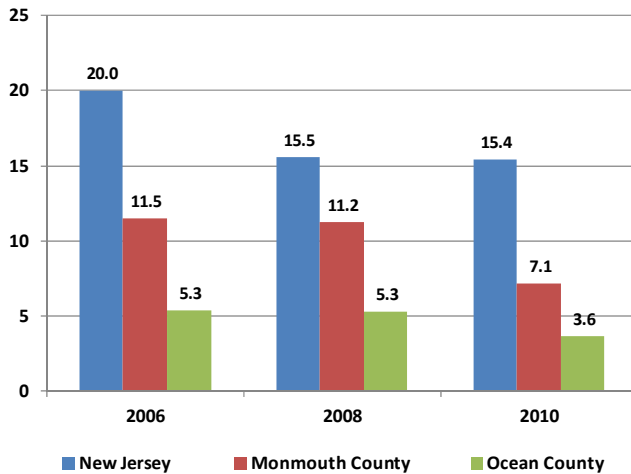


Source: NJ Department of Health and Senior Services, Division of HIV, STD, and TB Services, HIV/AIDS Reporting System, 2011

Note: Prevalence indicates amount of people living with HIV/AIDS at the time.

- The rate of new HIV/AIDS cases declined by 49% in Monmouth County between 2005 and 2010, but remains significantly lower than the statewide rate of 15.4/100,000.

Figure 4.81
HIV/AIDS Cases by County and State
(per 100,000)



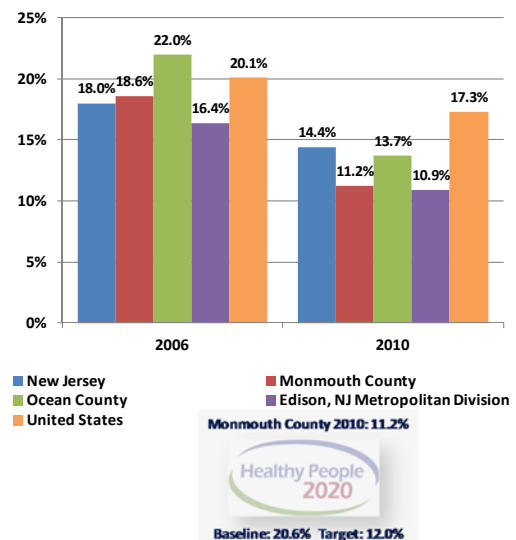
Source: N.J. Department of Health and Senior Services, Division of HIV, STD, and TB Services, HIV/AIDS Reporting System, 2011; U.S. Census Bureau, American Community Survey
Note: New cases reported indicates new cases per year.

Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. The hazards of tobacco use are well known.

- Cigarette smokers are at high risk for cancer, heart disease, respiratory diseases, and premature birth.
- Secondhand smoke causes heart disease and lung cancer in adults and asthma, respiratory infections, ear infections and sudden infant death syndrome (SIDS) in children.
- Smokeless tobacco causes serious oral health problems, including mouth and gum cancer, periodontitis, and tooth loss.
- Cigar and pipe use causes cancer of the larynx, mouth, esophagus, and lung.³¹

Figure 4.82
Tobacco Use by County and State (%)



Source: CDC, Behavioral Risk Factor Surveillance System, County Health Rankings

³¹ Retrieved from http://www.cdc.gov/tobacco/data_statistic/fact_sheet/fast_facts.

Monmouth County

Smoking is declining in the U.S., Monmouth County and New Jersey.

- Between 2006 and 2010, smoking in the U.S. declined from 20.1% to 17.3%.
- During the same time, smoking in Monmouth County declined from 18.6% to 11.2%.
- The percent of current smokers in Monmouth County is not significantly different than the *Healthy People 2020* target of 12%.

Diet and Exercise

According to the Centers for Disease Control and Prevention (CDC), poor diet and physical inactivity have nearly caught up with tobacco use as the second leading preventable cause of death in the United States.

It has been estimated that total annual economic cost of overweight and obesity in the United States and Canada combining medical costs, excess mortality and disability was approximately \$300 billion in 2009.³²

In trying to promote healthy eating as a way to raise the health status of individuals and communities, the high prices for fresh fruits, fresh vegetables, and whole grains have put that common sense, non-medical approach out of reach for those already living in the margins of poverty. The reality is that it is cheaper to eat poorly.

Diet and Nutrition

Diet and body weight are related to health status. A healthy diet reduces risks for many health conditions discussed in this report, including:

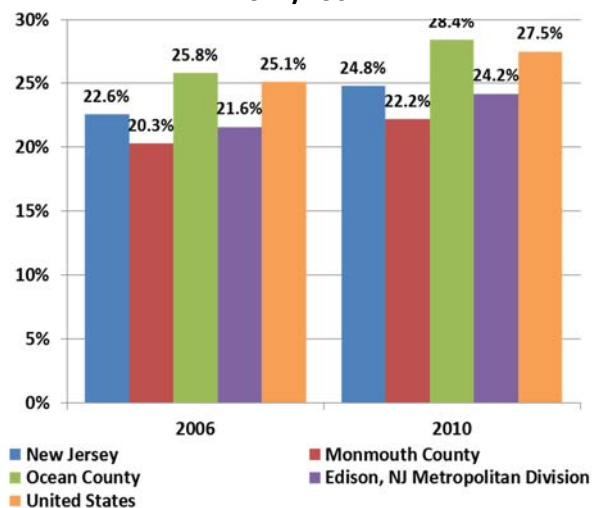
- Overweight and obesity
- Heart disease
- High blood pressure
- Stroke
- Type 2 diabetes
- Osteoporosis
- Oral disease
- Some cancers
- Complications during pregnancy.³³

Monmouth County

Obesity in Monmouth County rose between 2006 and 2010 from 20.3% to 22.2%.

- Obesity in Monmouth County was lower than the New Jersey, the Edison MSA, and Ocean County.

Figure 4.83
Obesity: Percent with Reported BMI of ≥ 30



Source: CDC, Behavioral Risk Factor Surveillance System

³² Retrieved from <http://www.soa.org/news-andpublications/newsroom/pressreleases/new-society-of-actuaries-study>.

³³ Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=29>.

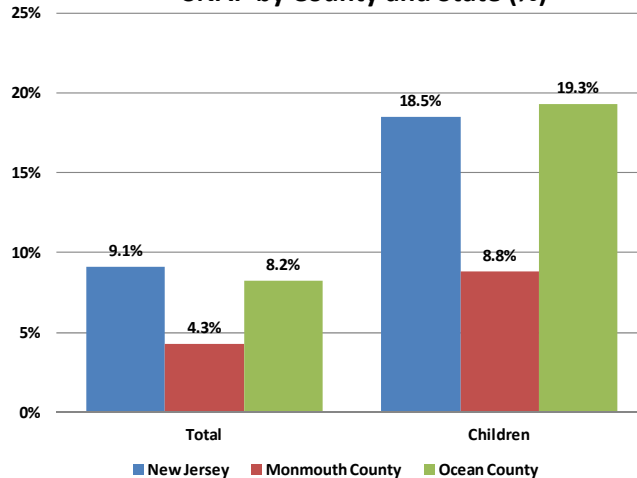
- It was also lower than the U.S. reported rate of 27.5%.
- Despite the increase, the Monmouth County obesity rate was significantly lower than the *Healthy People 2020* target of 30.6% and the CHR benchmark of 25%.

Supplemental Food Assistance

Monmouth County recipients of the Supplemental Nutritional Assistance Program (SNAP) increased (nearly doubled) between 2007 and 2011.

- The percent of all SNAP recipients grew from 2.3% to 4.3%.
- Among children the percent grew from 4.7% to 8.8%.
- Monmouth County has a significantly lower percent of SNAP recipients than the State.

Figure 4.84
SNAP by County and State (%)



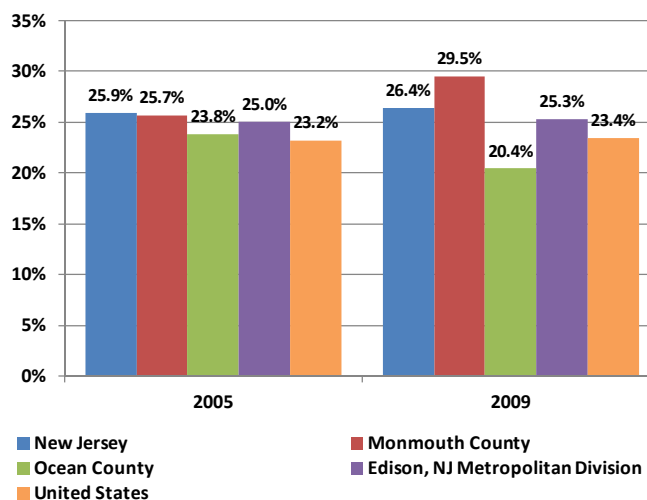
Source: NJ Department of Human Services, Division of Family Development, Current Program Statistics, 2011; U.S. Census, ACS, Claritas 2011-2017 Projection / Intervening Year: Straight Line Method. Note: The total percentages are based on the total and the percentages of children are based on the number of children (<18 years). Percentages are for December of each year given.

Fruit and Vegetable Consumption

Between 2005 and 2009 the percent of Monmouth County residents who consumed five servings of fruit and vegetables a day increased from 25.7% to 29.5%.

- This percentage is higher than the statewide rate of 26.4% and U.S. rate of 23.4%

Figure 4.85
Adults Who Have Consumed 5 or More Fruits/Vegetables Daily (%)



Source: CDC, Behavioral Risk Factor Surveillance System

Physical Exercise

Regular physical exercise is increasing among Monmouth County residents.

- Between 2005 and 2009 the percent of Monmouth County adults engaging in recommended levels of physical activity increased from 46.0% to 49.7%.
- The *Healthy People 2020* target is 47.9%.
- The percent of county residents reporting any physical activity rose only 1.7 percentage points between 2006 and 2010, from 78.0% to 79.7%.

Figure 4.86
Adequate Activity Achieved (%)

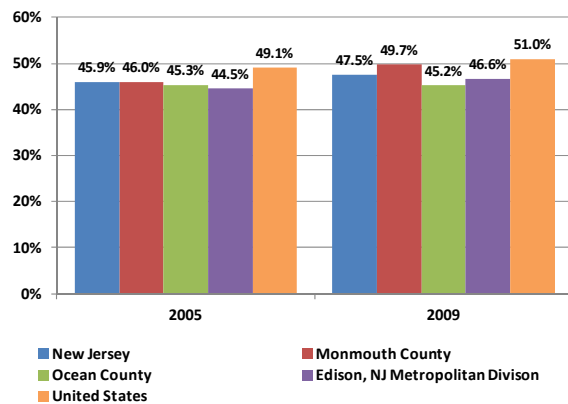
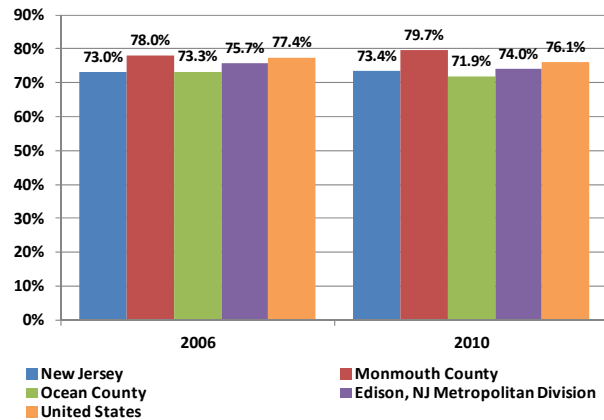


Figure 4.87
Participated in Physical Activity in the Past Month (%)



Source: CDC, Behavioral Risk Factor Surveillance System

Note: Healthy People 2020 baseline and target are defined as, "moderate intensity for at least 150 minutes/week, or 75/minutes/week of vigorous intensity, or an equivalent combination."

Figure 4.88
Diet and Exercise

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Obesity: Percent with Reported BMI of ≥ 30	●	●	●
Adults with 30+ Minutes of Moderate Physical Activity 5 or More Days/Week, or Vigorous Physical Activity for 20+ Minutes 3 or More Days/Week	●	N/A	●
During the Past Month, Did You Participate in Any Physical Activities? %=Yes	N/A	●	●
Adults Who Have Consumed Fruits and Vegetables Five or More Times/Day	N/A	N/A	●
Percent of Population Receiving SNAP	N/A	N/A	●
Percent of Children Receiving SNAP	N/A	N/A	●

Health Screenings

Health screenings include preventable actions people can take to ensure early identification or monitoring of disease processes.

Cancer Screenings

Screening is effective in identifying some types of cancer including:

Breast Cancer (mammography)

- In Monmouth County the percentage of women age 40 and over who **did not** have a mammogram decreased by 10.0 percentage points from 27.5% to 17.5% and is not significantly different than the *Healthy People 2020* target of 18.9%.







Cervical Cancer (pap smear)

- The percentage of women 18 and over who had a pap smear in the last three years increased between 2004 and 2010 from 86.0% to 86.7%. The 2010 rate was not significantly different from the rate statewide (84.1%).
- The *Healthy People 2020* target is 93.0%, which is statistically higher than the Monmouth County rate.

Colon-rectal Cancer (sigmoidoscopy or colonoscopy)

- The percentage of Monmouth County adults 50+ who ever had a sigmoidoscopy or colonoscopy increased 10.8 percentage points between 2004 and 2010, from 52.3% to 63.1%, but remained statistically lower than the *Healthy People 2020* target of 70.5%.

Figure 4.89
Cancer Screenings

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Percent of Women Age 40+ Who Have NOT Had a Mammogram Within Past Two Years		N/A	
Percent of Women 18 Years and Over Who have Had a Pap Test in the Past 3 years		N/A	
Percent of Adults 50 Years and Over Who Have Ever Had a Sigmoidoscopy or Colonoscopy		N/A	

Research shows that a recommendation from a healthcare provider is the most important reason patients cite for having cancer screening tests.³⁴



³⁴ Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=5>.

Diabetes Screening

Diabetes screenings are an effective way of managing the illness.

- The percentage of diabetes screenings among diabetic Medicare enrollees increased from 77% in the period 2003-2006, to 81% in 2009. This is significantly lower than the National Benchmark of 89%, but not statistically different than the rate statewide.

Figure 4.90
Diabetes Screening

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Percent of Diabetic Medicare Enrollees that Receive HbA1c Screening	N/A		

Immunizations

Immunizations are a primary means of providing individuals and children protection from potentially fatal illnesses.

Adult Flu

- Between 2006 and 2010 there was a decline in the percent of adults 65+ who failed to get a flu shot in Monmouth County from 38.2% to 31.6%.
- The *Healthy People 2020* goal is to have no more than 10% go without this vaccine.






Adult Pneumonia

- Between 2006 and 2010, the percent of adults 65+ who have never had a pneumonia vaccine slightly declined by 1.3 percentage points from 38.5% to 37.2%.
- The *Healthy People 2020* goal is for no more than 10% to go without this vaccine.

Childhood Immunizations for Ages 19-35 Months (DPT, polio, MMR and Hib)

- The childhood immunization rate declined statewide and in Monmouth County between 2005 and 2008.
- The percentage in Monmouth County is statistically similar to New Jersey.

**Figure 4.91
Immunizations**

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Percent of Adults Age 65+ Who Have NOT Had a Flu Shot in the Past Year		N/A	
Percent of Adults Age 65+ Who Have NOT Ever Had a Pneumonia Vaccination.		N/A	
Biennial Childhood Immunization for Ages 19-35 Months for 4:3:1:3 Vaccination Series	N/A	N/A	

5. Physical Environment

Humans interact with the environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities. The World Health Organization (WHO) defines environment, as it relates to health, as “all the physical, chemical, and biological factors external to a person, and all the related behaviors.” Environmental health consists of preventing or controlling disease, injury, and disability related to the interactions between people and their environment.

Air Quality

According to the CHR, the negative impact of air pollution on people’s health include: decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary consequences. Exposure to excess levels of ozone or fine particulate matter are correlated with increased hospital emergency room visits and admissions among asthmatics or others with compromised respiratory function. Increases in these pollutants are associated with high risks of death due to cardiopulmonary and cardiovascular conditions and ischemic heart disease. All-cause mortality is also associated with higher concentrations of these pollutants.

- The number of unhealthy air quality days due to fine particulate matter remained stable at two days between 2005-2007 in Monmouth County, and is lower than New Jersey, which increased from four to six days between 2005 and 2006, before declining to five days in 2007.
- The annual number of unhealthy air quality days due to ozone in Monmouth County improved with a drop from 18 days to 8 days.
- This is significantly worse than the CHR benchmark of 0.

Figure 4.92
Annual Number of Unhealthy Air Days Due to Fine Particulate Matter

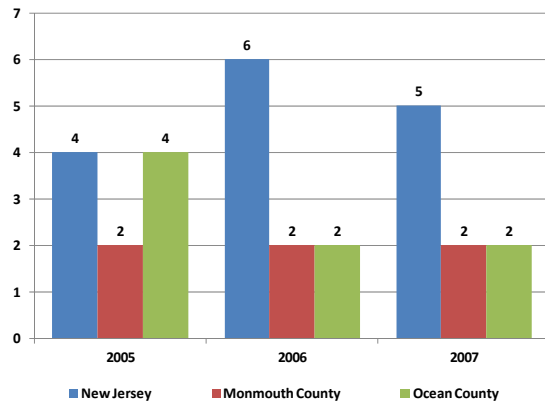
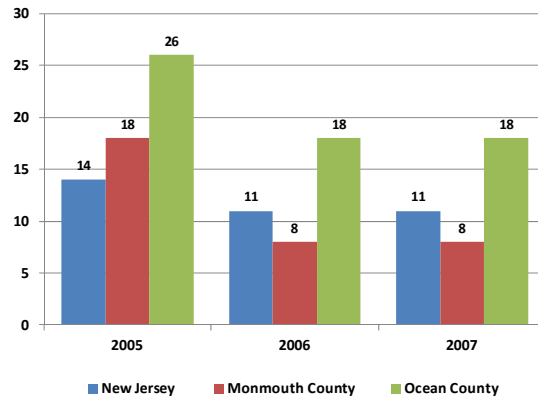


Figure 4.93
Annual Number of Unhealthy Air Days Due to Ozone



Source: County Health Rankings, PHASE project, a collaborative effort between the CDC and EPA

Lead Hazards

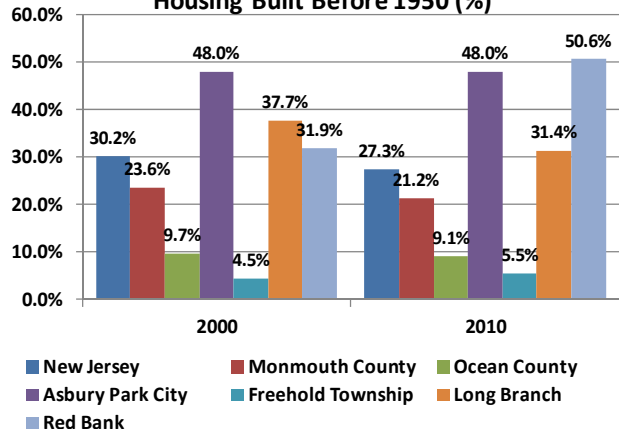
Lead poisoning is a medical condition caused by increased levels of heavy metal lead in the body. Lead interferes with a variety of body processes and is toxic to many organs and tissue including heart, bones, intestines, kidneys, and reproductive and nervous systems. The main tool for the diagnosis is the measurement of blood lead levels or a urine test. The results of these tests indicate how much lead is circulating within the blood stream. The Centers for Disease Control (CDC) sets the standard for elevated blood lead levels for adults to 25 micrograms per deciliter (ug/dl) of whole blood, and 5 (ug/dl) of whole blood as of 2012 for children; down from the previous 10 ug/dl. Children are especially prone to the ill health effects of lead exposure. Scientists have found that lead in children can disrupt growth and development of a child's brain and central nervous system. The first 3-6 years of life is when the human brain grows the fastest and when critical connections in the brain that control thought, learning, hearing, movement, behavior and emotions are being formed.

Lead Exposure

The most common source of lead in New Jersey is paint that was used in interior or exterior surfaces of homes built before 1978. The most common form of exposure in adults occurs from occupational exposure. Young children can be exposed by:

- Swallowing leaded dust or soil that gets on their hands, or other objects, that they put into their mouths such as toys.
- Swallowing leaded paint chips.

Figure 4.94
Housing Built Before 1950 (%)



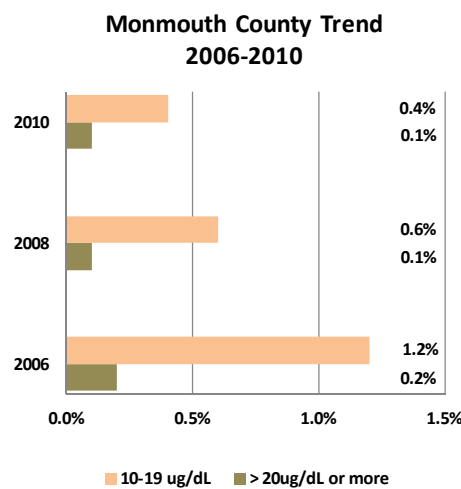
Source: U.S. Census Bureau; County Health Rankings, United States Department of Agriculture (USDA), Food Environment Atlas
Note: 2010 City-Wide data for Housing Built Before 1950 is representative of a 5 year estimate ranging from 2006 to 2010.

- Breathing leaded dust or lead contaminated air.
- Eating food or drinking water that is contaminated with lead.

Monmouth County

- Overall, 21% of the housing in Monmouth County was built before 1950 and poses a potential lead paint hazard. This percentage is significantly lower than the statewide rate of 27%.
- Asbury Park (48%), Red Bank (51%) and Long Branch (31%) have significantly higher percentages of housing built before 1950.
- The high and very high blood lead levels of children in Monmouth County declined by 67% and 50%, respectively between 2000 and 2010.

Figure 4.95
Blood Lead Levels of Children (less than 17 years old)
Tested for Lead Poisoning (2010) – Trend (%)



Source: NJ Department of Health and Senior Services, Division of Family Health Services, Maternal and Child Health Services, Child and Adolescent Health Program; Centers for Disease Control

Note: The CDC defines a blood lead level of 10 ug/dL as the threshold that should prompt public health actions.




Figure 4.96
Physical Environment

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Annual Number of Unhealthy Air Quality Days Due to Fine Particulate Matter	N/A	Yellow Circle	Yellow Circle
Annual Number of Unhealthy Air Days Due to Ozone	N/A	Red Circle	Yellow Circle
Blood Lead Levels of Children (less than 17 years) Tested for Lead Poisoning: 10-19 ug/DL	N/A	N/A	Yellow Circle
Blood Lead Levels of Children (less than 17 years) Tested for Lead Poisoning: 20+ ug/DL	N/A	N/A	Yellow Circle

Access to Healthy Foods

- In 2006, 6.0% of low income Monmouth County residents did not live close to a grocery store compared to 4.0% in New Jersey.
- In 2009, 44.0% of all restaurants in Monmouth County were fast food restaurants compared to 50% statewide; almost twice the national benchmark.
- In 2006, Monmouth County had 21 liquor stores per 100,000 residents compared to 20/100,000 statewide.

Figure 4.97
Physical Environment

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
People Who Are Low Income and Do Not Live Close to a Grocery Store: Percent of Total Population	N/A	N/A	
Fast Food Establishments: Percent of all Restaurants	N/A	N/A	
Liquor Stores: Rate per 100,000 Population	N/A	N/A	

Crime and Injury Prevention

Healthy People 2020 asserts most events resulting in injury, disability, or death are predictable and preventable. For unintentional injuries, there is a need to better understand the trends, causes, and prevention strategies. Specifically:

- Individual behaviors—choices people make such as alcohol use or risk-taking.
- Physical environment—home and community that affect the rate of injury related to falls, fires and burns, drowning, violence.
- Social environment—individual social relationships, community, societal-level factors.³⁵

Monmouth County

- The violent crimes rate has declined 23.7/100,000 between 2006 and 2010 and remains lower than the statewide rate.
- The violent crime rate in Monmouth County is almost three times higher than the CHR benchmark.
- The burglary rate in Monmouth County (0.86/1,000) is not significantly different from the rate statewide (0.71/1,000).

³⁵ Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives/2020/overview.aspx?topicid=24>. Accessed 5/13/13.

Figure 4.98
Violent Crime Rate per 100,000 Population

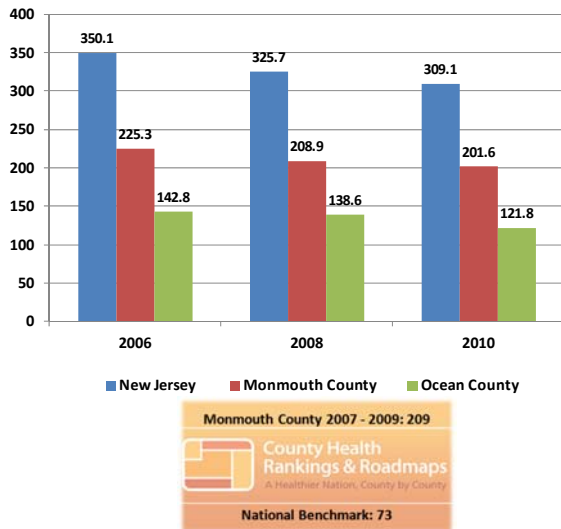
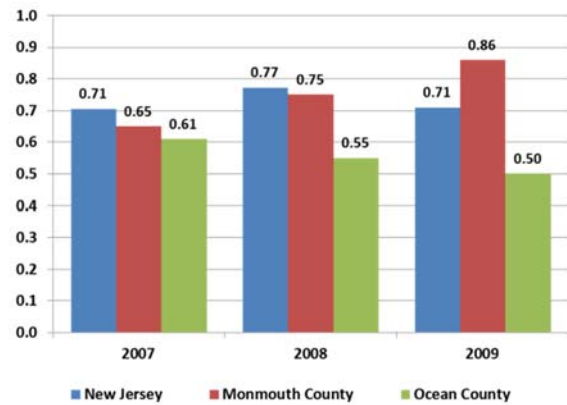


Figure 4.99
Burglary Rate per 1,000 Population



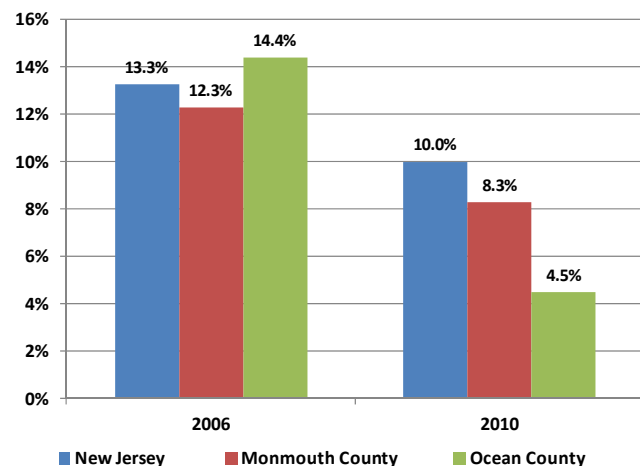
Source: N.J. Department of Law and Public Safety, Uniform Crime Reporting Unit; U.S. Census Bureau, American Community Survey

- Reports of substantiated child abuse/neglect declined by 4.0 percentage points in Monmouth County from 12.3% in 2006 to 8.3% in 2010.
- These percentages were not statistically different from the statewide rate.

Injuries

- The Monmouth County motor vehicle crash rate decreased from 8.4/100,000 to 6.1/100,000 in 2008, and was statistically lower than the *Healthy People 2020* target of 12.4/100,000.
- Monmouth County had an age-adjusted rate of 3.4/100,000 deaths due to falls, which was significantly better than the *Healthy People 2020* target of 7.0/100,000.
- Age-adjusted rates for poisoning in Monmouth County was also significantly better than the *Healthy People 2020* target, despite increasing from 4.4/100,000 to 8.4/100,000 between 2004 and 2008.

Figure 4.100
Substantiated Child Abuse/Neglect Reports (%)



Source: N.J. Department of Children and Families, Child Abuse and Neglect Substantiations; U.S. Census Bureau, American Community Survey
Note: Percentages are based on the total number of children with abuse/neglect reported.

6. Behavioral Health

Behavioral health (mental health and chemical dependency) is increasingly being linked to physical health indicators. Most Monmouth County behavioral health indicators are worse than found in New Jersey. It is expected that the future behavioral health systems will be embedded in new structures such as accountable care organizations, integrated healthcare systems and preferred provider organizations.³⁶

Mental Health

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning.³⁷ There is often a stigma associated with mental health diagnosis and treatment, particularly among African-Americans and Latinos.³⁸

- Mental disorders are among the most common causes of disability.
 - According to the National Institute of Mental Health (NIMH), in any given year, an estimated 1 in 17 Americans have a seriously debilitating mental illness.
- Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25% of all years of life lost to disability and premature mortality.
 - Mental health plays a major role in people'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.³⁹

Monmouth County

- Admission rates for mental/behavioral health conditions exceed the statewide rate and have been on the rise since 2006.
- Rates among all age groups have increased.
- Although higher, Monmouth County's rates for hospital admissions for mental/behavioral health are not significantly different than the rates statewide.
- ED visits due to mental/behavioral health conditions steadily increased among the adult and elderly populations, and remained relatively stable among children at 8.4/1,000.
- The highest rate of ED visits occurs among adults with a rate of 16.5/1,000 within Monmouth County and 19.6/1,000 statewide.
- Monmouth County's rates for ED visits for mental/behavioral health are not significantly different than the rates statewide.

³⁶ Behavioral Health Specialty Services & Integrated Healthcare: Challenges & Opportunities. Presented by David Lloyd, Founder MTIN Services.

³⁷ Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28>.

³⁸ Ibid.

³⁹ Ibid.

Figure 4.101
Mental/Behavioral Health Admissions
by Age (Rate per 1,000)

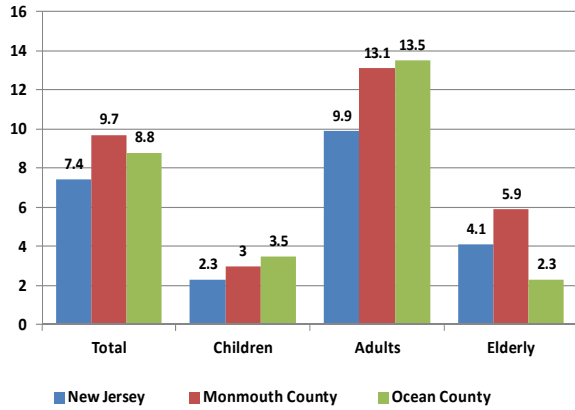
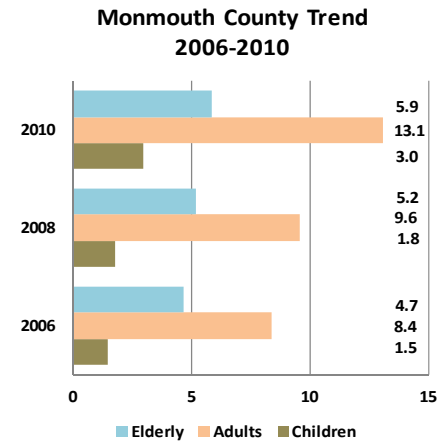


Figure 4.102
Mental/Behavioral Health
Admissions Trends (Rate per 1,000)



*Source: UB-04 2010 Discharges, Census 2010 Population
** Metal Health Defined As MDC 19, Substance Abuse Defined As MDC 20

Figure 4.103
Mental/Behavioral Health ED Visits
by Age (Rate per 1,000)

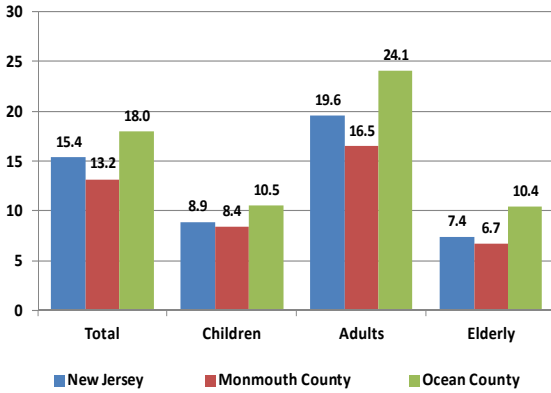
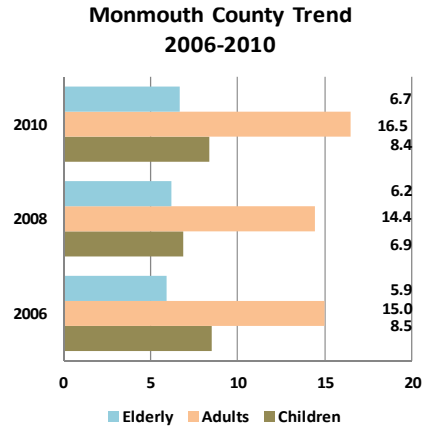


Figure 4.104
Mental/Behavioral Health ED
Visit Trends (Rate per 1,000)



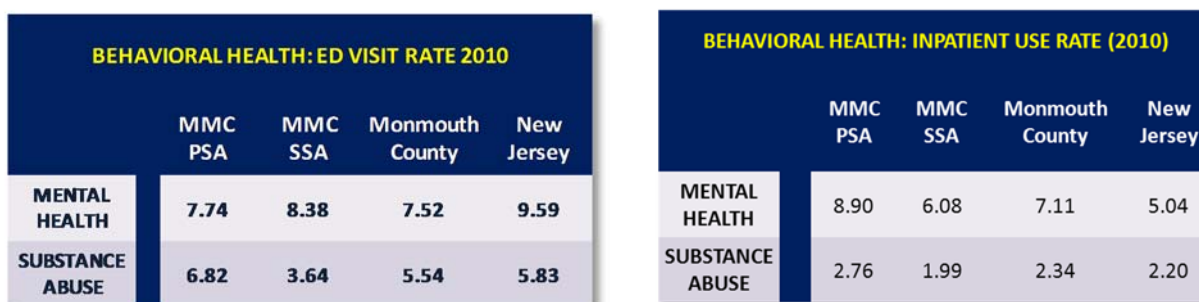
*Source: UB-04 2010 Discharges, Census 2010 Population
** Metal Health Defined As MDC 19, Substance Abuse Defined As MDC 20

Mental Health Utilization in the Service Area

Comparing the inpatient and emergency department (ED) behavioral health use rates for mental health finds higher inpatient use rates for the PSA and SSA than State, and lower ED use rates for the PSA and SSA than the State.

- Inpatient Behavioral Health use rates for Mental Health in the PSA are nearly 1.79 points higher than the County rate and 3.86 points higher than the statewide rate. The SSA rate is lower than the County by 1.03 but still higher than the statewide rate by more than one point.
- ED use rates for mental health in the PSA are .22 points higher than the county and 1.85 points lower than the statewide rate. The SSA rate is .86 points higher than the County rate and 1.21 lower than the state.

Figure 4.105



Substance Use/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. 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.

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem.⁴⁰

Monmouth County

The percent of excessive drinkers combine the percent of people who are heavy drinkers together with binge drinkers.

Between 2006 and 2010, excessive alcohol use declined slightly in Monmouth County.

- Reported excessive drinking in Monmouth County declined from 16.9% to 15.4%. This compared to the statewide percentage of excessive drinking at 18.1% and U.S. at 20.4%.

⁴⁰ Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020.aspx?topicid=40>. Accessed 5/20/13.

- Excessive drinking among Monmouth County residents is significantly higher than the National Benchmark.
- Alcohol treatment admissions increased from 36.1% of all drug treatment admissions to 37.5%, which is significantly higher than the statewide average.

Figure 4.106
Excessive Drinking by County and State (%)

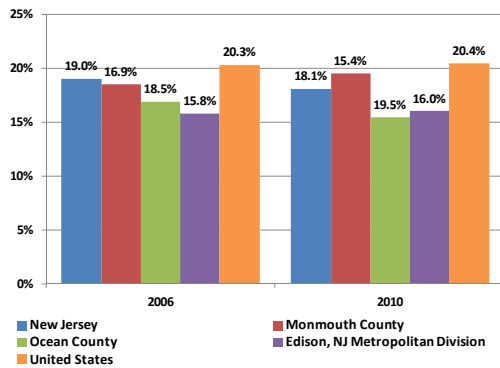
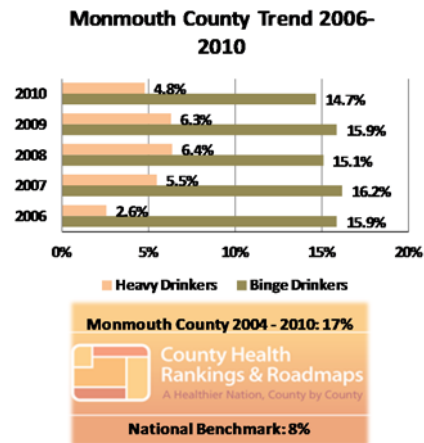


Figure 4.107
Excessive Drinking Trends (%)



Source: CDC, Behavioral Risk Factor Surveillance System

Note: Heavy drinkers are defined as adult men who have more than 2 drinks per day and adult women who have more than one drink per day. Binge drinkers are defined as adult men who have 5 or more drinks on one occasion and females who have 4 or more drinks on one occasion.

- In 2010, the most common drug being treated in Monmouth County was alcohol, which was higher than the statewide rate of 34.0%
- Heroin and Cocaine drug admissions in Monmouth County were not statistically different than statewide admissions.
- The overall rate of substance abuse admissions increased from 727.4/100,000 to 1096.7/100,000, and remains significantly higher than the statewide rate.

Figure 4.108
Primary Drug Treatment Admissions (%)
By Place of Residence (2010)

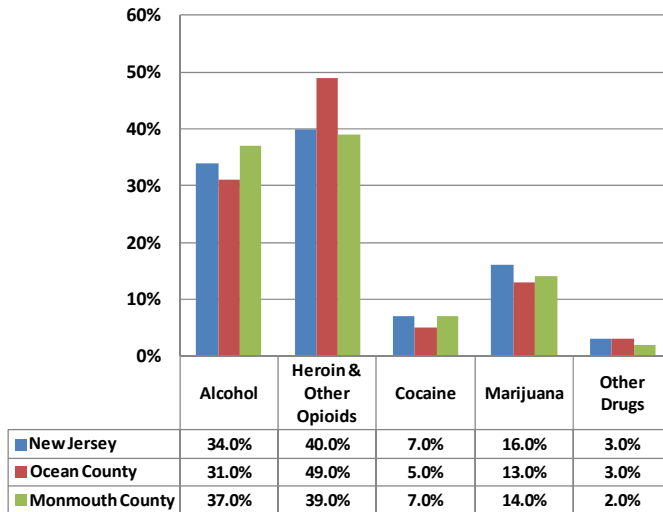
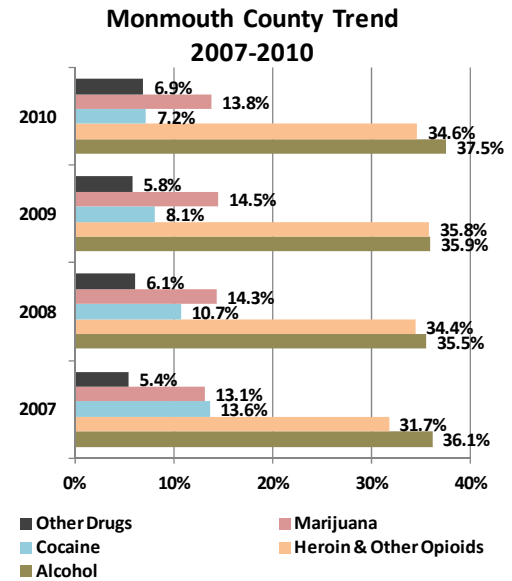


Figure 4.109
Those Treated in Monmouth County (%)



Source: N.J. Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment
Note: The percentages are based on the total number of treatment admissions for all primary drugs.

Figure 4.110
Total Substance Abuse Admissions
per 100,000

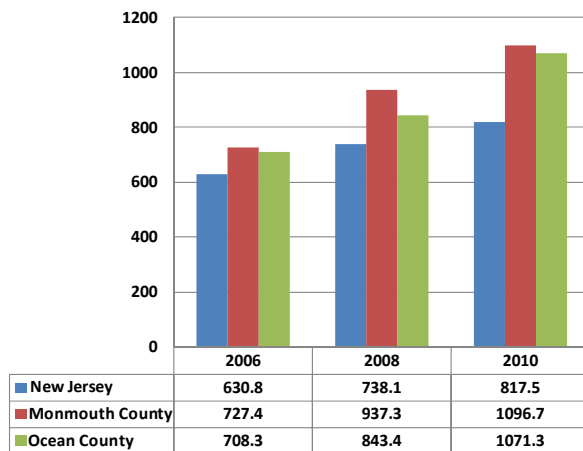
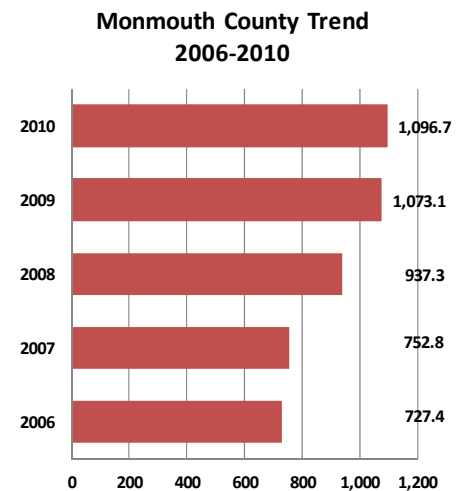










Figure 4.111
Total Substance Abuse Admissions – Trends
per 100,000



Source: N.J. Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment; U.S. Census Bureau, American Community Survey.

**Figure 4.112
Substance Use/Abuse**

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Excessive Drinking: Heavy Drinkers Plus Binge Drinkers	N/A		
Treatment Admissions for Alcohol: Percentage of Total Treatment Admissions	N/A	N/A	
Treatment Admissions for Heroin/Other Opioids: Percentage of Total Treatment Admissions	N/A	N/A	
Treatment Admissions for Cocaine: 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 per 100,000 Population	N/A	N/A	

- Alcohol dependence resulted in a significantly higher rate of adult ED visits than for other mental disorders; however, these results were not statistically different than the statewide rates.
- Between 2006 and 2010 the rate per 1,000 for ED visits among adults for alcohol dependence increased from 19.3/1,000 to 24.9/1,000.

Alcohol Dependence and Other Mental Disorders

- Monmouth County residents have a lower level of ED visits for alcohol dependence than found among New Jersey residents overall, 24.9/1,000 for the former and 26.6/1,000 for the latter.
- The trend in alcohol dependence among Monmouth County residents increased between 2006 and 2010 by 29%.
- Monmouth County residents have fewer ED visits for mental disorders than New Jersey residents, 9.3/1,000 for the former and 13.3/1,000 for the latter.
- ED visits for mental disorders among Monmouth County residents declined between 2006 and 2010.

Figure 4.113
2010 Adult (18 – 65 year)
Primary Care Conditions
(Rate per 1,000 Population)

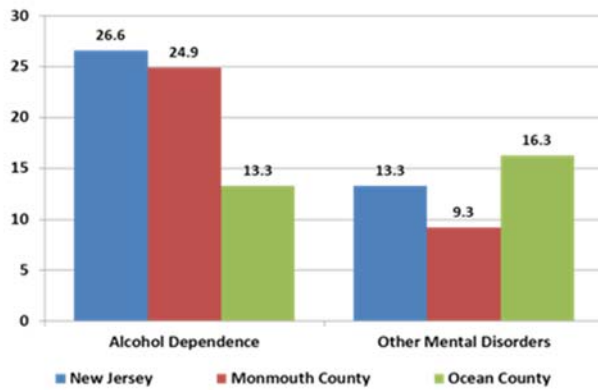
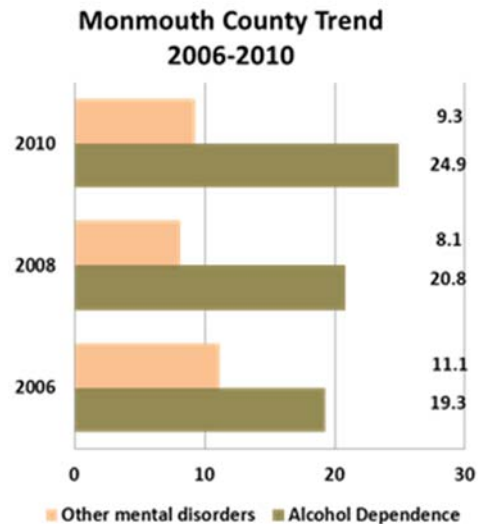


Figure 4.114
(per 1,000)



Source: New Jersey Discharge Data Collection System

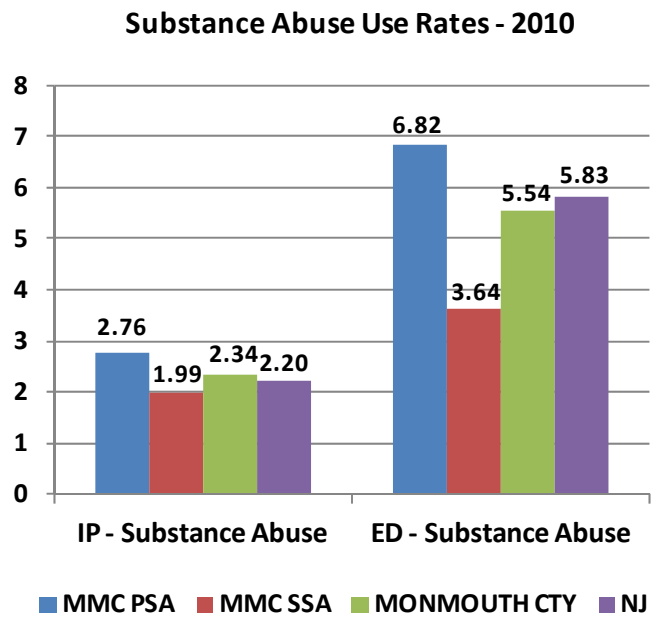
Note: Other mental disorders excludes drug or alcohol dependence and include: represent two of the top ten ED visits for primary care conditions for adults.

Substance Abuse Utilization in the Service Area

Comparing the inpatient and emergency department (ED) behavioral health use rates for substance abuse finds higher inpatient use rates in the PSA than State and lower rates in the SSA. The ED substance abuse use rate is higher in the PSA than the County and State.

- Inpatient substance abuse use rate in the PSA is 0.42 points higher than the County rate and 0.56 points higher than the statewide rate. The SSA inpatient rate is lower than the County rate by 0.35 points and the statewide rate by 0.21 points.
- ED use rates for substance abuse in the PSA are 1.28 points higher than the county and .99 points higher than the State. The use rate in the SSA is lower by 1.9 points when compared to the County rate and 2.19 points when compared to the State rate.

Figure 4.115



*Source: UB-04 2010 Discharges, Census 2010 Population

** Mental Health Defined As MDC 19, Substance Abuse Defined As MDC 20

5. **ASSETS AND GAPS ANALYSIS**

Assets and gaps in Monmouth County are discussed below in terms of the health outcomes and health factors which influence these outcomes. The review of assets and gaps integrates results of this CHNA for each topic and includes information gathered through data analysis, resource inventories, and meetings with key county leaders.

Premature Deaths, Leading Causes of Death, and Behavioral Health-Related Deaths

Assets

- In Monmouth County, the Years of Potential Life Lost (premature deaths) decreased 5% between 2006 and 2008, and have consistently ranked better than the State or national benchmark.
- Deaths due to disease of the heart and cancers, the two leading causes of death, decreased between 2004 and 2008.
- Monmouth County's suicide rate is lower than the *Healthy People 2020* target.

Gaps

- Deaths due to heart disease are significantly higher than the *Healthy People (HP) 2020* target.
- Despite a declining trend, cancer deaths in Monmouth County remained significantly higher than the *Healthy People 2020* target.
- Mortality due to chronic lower respiratory disease increased between 2004 and 2008, and is significantly higher than the statewide rate.
- Monmouth County's suicide rate is significantly lower than the *Healthy People 2020* target.
- Community leaders raised concerned about an increasing number of teen suicides in the Bayshore and southern part of Monmouth County.

Infant Mortality and Low Birth Weight Infants

Assets

- Monmouth County's infant mortality rate ranks consistently below the rates for New Jersey and the *Healthy People 2020* target. Monmouth County's rate in 2004 and 2008 was significantly lower than the *Healthy People 2020* target rate.
- The percentage of low and very low birth weight babies born to Black women declined between 2004 and 2008.

Gaps

- Black women in Monmouth County gave birth to a significantly higher number of low birth weight babies than women of all races in the county.
- Between 2004 and 2008, the percentage of low and very low birth weight babies increased among Whites and Hispanics.

General and Mental Health Status

Assets

- Between 2006 and 2010, the percentage of Monmouth County residents reporting their health as fair or poor declined from 16.2% to 14.7%.

- The percentage of the population in Monmouth County reporting any disability was significantly lower than the statewide percentage.

Gaps

- Monmouth County residents reported an average of 3.1 physically unhealthy days per month, which was significantly worse than the County Health Rankings Benchmark of 2.6 days.
- Monmouth County residents reported 3.3 mentally unhealthy days per month or a full day longer than the County Health Rankings Benchmark of 2.3 days.
- Community leaders believe that establishing a prevention coalition could influence policymakers about the importance of building a healthy environment.

Morbidity

Assets

- Between 2007 and 2010, Monmouth County residents reporting heart attacks decreased 40% and are now similar to those reported by residents of the State.
- Reports of stroke remained stable between 2007 and 2010 in the county.
- Reports of arthritis declined among residents of Monmouth County.

Gaps

- The percentage of residents impacted by heart disease or angina increased between 2007 and 2010.
- Reports of asthma increased 22% between 2006 and 2010.
- Reports of diabetes increased in Monmouth County between 2006 and 2010.
- Invasive cancer morbidity increased between 2006 and 2009, and is higher than the New Jersey rate.
- Community leaders mentioned the need for increased efforts in the prevention and management of chronic diseases.

Socio-Demographics and Economic Factors

Assets

- Monmouth County is a marginally growing population area with a strong economic base.
- Between 2000 and 2010 the population of Monmouth County grew by 2.4% to more than 630,000 people.
- Monmouth County residents have higher per capita and median family incomes than residents statewide.
- In 2010, a significantly lower percentage of Monmouth County residents were impoverished.
- Between 2007 and 2011, the percent of the county's population receiving Temporary Assistance to Needy Families (TANF) benefits remained stable.
- Monmouth County has a higher percentage of combined Bachelor's, Professional and Graduate Degrees and a significantly lower percentage of persons without a high school diploma than New Jersey.
- Monmouth County's percentage of the population with limited English proficiency (7.7%) in 2009, was significantly lower than the statewide level of 22.1%.
- Residents of MMC's primary service area have median incomes that are \$17,000 above the statewide median household income.

- Monmouth County had a significantly lower rate of children under Division of Youth & Family Services (DYFS) supervision than the State and a significantly lower rate of children receiving in-home DYFS services in 2010.
- Monmouth County had a lower motor vehicle death rate than the County Health Ranking Benchmark and the *Healthy People 2020* Benchmark.
- The age-adjusted mortality rate due to falls and poisonings were lower than the *Healthy People 2020* target.

Gaps

- While overall, Monmouth County residents enjoy economic standards that exceed those of the State, the communities which make up MMC's service area reflect populations with diverse economic backgrounds.
 - Pockets of poverty exist in Asbury Park (13.7%), Long Branch (12.2%), and Atlantic Highlands (11.8%), which are nearly double the statewide percentage of families below poverty.
 - In 2011, 8.6% of Monmouth County residents were unemployed, which was below the statewide percentage (9.3%). But, the unemployment rate in Asbury Park was 19.8%.
 - Several towns including Asbury Park and Long Branch perform worse than the overall service area in terms of residents who failed to complete the 9th grade.
- Fifteen percent of the Hospital's primary service area is made up of seniors compared to 13% in the State. These seniors have more significant needs for chronic disease treatment and management.
- Community leaders mentioned that many Monmouth County residents still remain homeless as a result of super storm Sandy.
- The violent crime rate in Monmouth County was significantly higher than the National Benchmark.

Access to Care

Assets

- Monmouth County has a significantly higher rate of total physicians/1,000 than the State.
- In 2010, the rate of children seen in an ED for an Ambulatory Care Sensitive Condition (ACSC) was significantly lower than the New Jersey rate.

Gaps

- Community leaders believe that there is a lack of dental health services for the uninsured and underinsured.
- Monmouth County ranks worse than the *Healthy People 2020* target for residents reporting no health insurance coverage.
- The rate of primary care physicians practicing in Monmouth County is significantly lower than the County Health Ranking National Benchmark.
- Community residents also mentioned the lack of sufficient psychiatric resources in the county including psychiatrists, child psychiatrists and mid-level practitioners, and the long waiting lists at mental health clinics.
- The need for better integration with the FQHCs and of the Health Center's need for greater resources to care for the county's poor was also mentioned by community leaders.
- Additional gaps in services mentioned by leaders were for cultural competency in light of the large number of undocumented poor in the community.
- MMC's PSA (200/1,000) exhibited a higher inpatient use rate than the State (164/1,000) and the county (194/1,000).

- Within the PSA, Ocean Grove (253/1,000), Neptune (237/1,000), Eatontown (236/1,000), and Asbury Park (209/1,000) use rates exceeded those in the PSA.
- MMC's PSA (356/1,000) exhibited a higher ED use rate than the State (316/1,000).
 - Several zip codes in the PSA had use rates that were particularly high including Long Branch (502/1,000), Asbury Park (491/1,000), Neptune (456/1,000), and Ocean Grove (425/1,000).
- The PSA Adult ED ACSC rate is 61/1,000 compared to 51/1,000 statewide.
- Within the PSA, Asbury Park (96/1,000), Long Branch (90/1,000), Neptune (80/1,000), and Ocean Grove (72/1,000) have among the highest adult ACSC ED use rates.
- The PSA Pediatric ACSC rate is 97/1,000 compared to 65/1,000 statewide.
 - Asbury Park (142/1,000) and Neptune (133/1,000) have among the highest rates in the PSA.
- MMC's PSA Inpatient ACSC rate is 25/1,000 compared to 23/1,000 statewide.
 - Deal (40/1,000) and Neptune (34/1,000) have among the highest rates in the PSA.
- Community leaders also believe that geriatric patients need pharmacy counseling services.
- One of the top priorities mentioned by community leaders was to ensure all residents had a regular source of care.
- Community leaders also spoke of the need to make resources available to primary care physicians so they could better manage care (e.g., care teams, smoking cessation, diet, etc.).
- The bulk of health and social service provider resources are located in the eastern part of the County.

Clinical Care Measures

Assets

- The percentage of primary C-Sections in Monmouth County (9.3%) was significantly lower than the rate for New Jersey (12.0%).
- Several zip codes in MMC's PSA, including Long Branch (34.8%), Neptune (37.5%), Asbury Park (40.0%), and Red Bank (44.4%), have total C-Section rates that are below the county rate.
- MMC's readmission penalty rate was better than the statewide readmission rate.

Gaps

- The percentage of repeat C-Sections in Monmouth County (31.4%) was significantly higher than the rate in New Jersey.
- Total C-Section rates in 2010 were up over 2008 at 45.2%, and are higher than the statewide rate of 43.4%. Only Middletown, in the PSA, had the highest rate (51.5%).
- Community leaders expressed concerns over poor breastfeeding rates across the county.
- Community leaders believe a top priority for providers is to better deal with the needs of the "frequent flyers" and those requiring transitions to care settings.

Health Behaviors – Screenings and Vaccinations

Gaps

- The percentage of Monmouth County adults reporting high cholesterol was 2-1/2 times greater than the *Healthy People 2020* target.
- A significantly lower percentage of women 40+ had a pap test in the last three years than the *Healthy People 2020* target.

- Between 2006 and 2010, Monmouth County had a lower percentage of 50+ residents receiving a sigmoidoscopy or colonoscopy than the *Healthy People 2020* target.
- The percentage of seniors 65+, who have not received a flu shot in the last year, is three times higher than the *Healthy People 2020* target.
- The percentage of seniors who have never had a pneumonia vaccination in Monmouth County is four times higher than the *Healthy People 2020* target.

Behaviors – Maternal Health and High Risk Sexual Behaviors

Assets

- The percentage of Monmouth County live births with first trimester prenatal care was significantly better than the New Jersey rate and the *Healthy People 2020* target.
- Teen birth rates in Monmouth County were significantly lower than New Jersey and the National Benchmarks.
- Monmouth County residents have lower rates of gonorrhea and syphilis than was found among New Jersey residents.
- HIV prevalence and the rate of new HIV/AIDS cases reported are significantly lower than the rates statewide.

Gaps

- In 2010, the teen birth rates in Asbury Park, Neptune and Long Branch were three to four times higher than the county rate of 11/1,000.
- Chlamydia rates in Monmouth County were significantly higher; more than double the County Health Rankings Benchmark.

Health Behaviors – Tobacco, Alcohol and Drug use

Assets

- Despite having a high rate for substance abuse treatment, Monmouth County's rate of treatment admissions for heroin/other opioids, other marijuana were slightly lower than the statewide rates.

Gaps

- The percentage of Monmouth County smokers exceeds the County Health Rankings Benchmark.
- Monmouth County's percent of excessive drinkers is more than double the County Health Rankings Benchmark.
- Treatment admission for alcohol and for total substance abuse admissions remains higher in Monmouth County than in New Jersey.
- Community residents expressed concerns regarding the increasing number of people who were addicted to prescription drugs and the need for physicians to re-examine prescribing patterns with regard to these medications.

Health Behaviors – Diet and Exercise

Assets

- Although obesity rates rose in Monmouth County between 2006 and 2010, the Monmouth County rate was lower than the County Health Rankings Benchmark and the *Healthy People 2020* target.

- Monmouth County had a higher proportion of residents who engaged in physical activity in the past month than residents of the State.

Gaps

- Although increasing participation in Supplementary Nutrition Assistance Program (SNAP) is still significantly lower than participation statewide.
- Community leaders raised concerns about the increase in childhood obesity.

Physical Environment

Assets

- Monmouth County has a lower percentage of housing (built prior to 1950) that poses a lead poisoning hazard than the State.
- Monmouth County has a lower percentage of fast food restaurants as a percentage of total food establishments (44%) than the State at 50%.

Gaps

- Monmouth County recorded eight days of unhealthy air quality due to ozone concentrations. This is significantly higher than the County Health Rankings Benchmark.
- Many leaders believe that some towns have high concentrations of liquor stores and fast food establishments that are masked when looking only at county-wide statistics.

Behavioral Health

Assets

- Between 2006 and 2010, ED visits for alcohol dependence increased while ED visits for mental health decreased.
- MMC's PSA exhibited lower ED use rates for mental health services than the county in 2010.

Gaps

- The rate of hospital admissions for mental health/behavioral health admissions increased between 2006 and 2010.
- The rate of hospitalizations for children doubled.
- ED visits for mental health behavioral health increased between 2006 and 2010 among adults and the elderly.
- In 2010, inpatient mental health and substance abuse use rates and ED rates for substance abuse in the PSA were higher than the State or county use rates.

**APPENDIX A
SECONDARY SOURCES**

Source
1. Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS)
2. CDC BRFSS & Youth BRFSS
3. CDC's National Center for Hepatitis, HIV, STD, and TB Prevention
4. Claritas
5. Corporation for Supportive Housing
6. County Business Patterns
7. County Health Rankings
8. FBI/Interuniversity Consortium for Political and Social Research (ICPSR) National Archive of Criminal Justice Data
9. Health Resources and Services Administration's Area Resource File
10. Healthy People 2020
11. Medicare/Dartmouth Atlas of Health Care
12. National Center for Chronic Disease Prevention and Health Promotion/CDC/BRFSS (CHR)
13. National Center for Educational Statistics/ACS (CHR)
14. National Center for Health Statistics
15. National Vital Statistics System (NVSS), National Center for Health Statistics
16. NCHS Ambulatory Care Survey
17. New Jersey Cancer Registry
18. New Jersey Department of Banking and Insurance; New Jersey Hospital Association, Payer Information Resource System
19. New Jersey Department of Children and Families, Child Abuse and Neglect Substantiations
20. New Jersey Department of Health and Human Services
21. New Jersey Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment
22. New Jersey Department of Health and Senior Services, Center for Health Statistics
23. New Jersey Department of Health and Senior Services, County Health Profiles
24. New Jersey Department of Health and Senior Services, Division of Family Health Services
25. New Jersey Department of Labor
26. New Jersey Discharge Data Collection System
27. PHASE project, a collaborative effort between the CDC and EPA, County Health Rankings
28. Small Area Health Insurance Estimates/ACS/CPS ASEC
29. Small Area Income and Poverty Estimates (SAIPE)
30. UB - 04 Hospital and Emergency Room Discharge Data - Multiple Years (NSI)
31. U.S. Census
32. USDA Food Environment Atlas
33. USDA Food Environment Atlas/County Business Patterns
34. U.S Department of Health and Human Services

APPENDIX B METHODS USED TO DEFINE STATISTICAL SIGNIFICANCE

- A. In cases where the data source provided error ranges or confidence intervals for both county and state (New Jersey) level data, sets of intervals for counties were compared to those of the state. If the sets of intervals overlapped, the comparison was determined to be not significant. If they did not overlap at all, the comparison was determined to be significant.
- B. In cases where the data source provided error ranges or confidence intervals for county level data but not state (New Jersey) level data, the intervals for counties were compared to the state data point. If the state data point fell inside the county confidence interval, it was determined to be not significant. If the state data point fell outside the county confidence interval, it was determined to be significant. This method of determining significance assumes that state data points are true values.
- C. In cases where the data source provided error ranges or confidence intervals for county level data, and the county level data was to be compared to a national benchmark or target (*Healthy People 2020* target, County Health Rankings National Benchmark,) the intervals for the counties were compared to the national benchmark/target data point. If the benchmark/target data point fell inside the county confidence interval, it was determined to be not significant. If the benchmark/target data point fell outside the county confidence interval, it was determined to be significant.
- D. In cases where the data source did not provide error ranges or confidence intervals, poisson or binomial tests were done for count data, and Z test for proportion data, using sample sizes.
- E. In cases where the data source did not provide error ranges/confidence intervals or sample sizes, all New Jersey counties were ranked. Counties falling in the highest or lowest quarter percentile were determined to be significant.

APPENDIX C
PUBLIC HEALTH & COMMUNITY STAKEHOLDERS WORK GROUP

Attendees	Title	Affiliation
David Richardson	Health Officer	Manalapan Health Department
Barry Johnson	Director	Monmouth County Division of Mental Health, Alcohol & Drug Abuse
Mike Meddis	Health Officer	Monmouth County Health Department
Marta Silverberg	Director	Monmouth Family Health Center
Sandy Van Sant	Health Officer	Monmouth Regional Health Commission
Kathleen O'Keefe	Department Director	Central New Jersey Family Health Consortium, Inc.
Kathleen Guadagno	Assistant Vice President	Monmouth Medical Center
Charlene Harding	Regional Director	Barnabas Health
Catherine Ainora	Senior Vice President	Barnabas Health
Nancy Erickson	Principal	New Solutions, Inc.

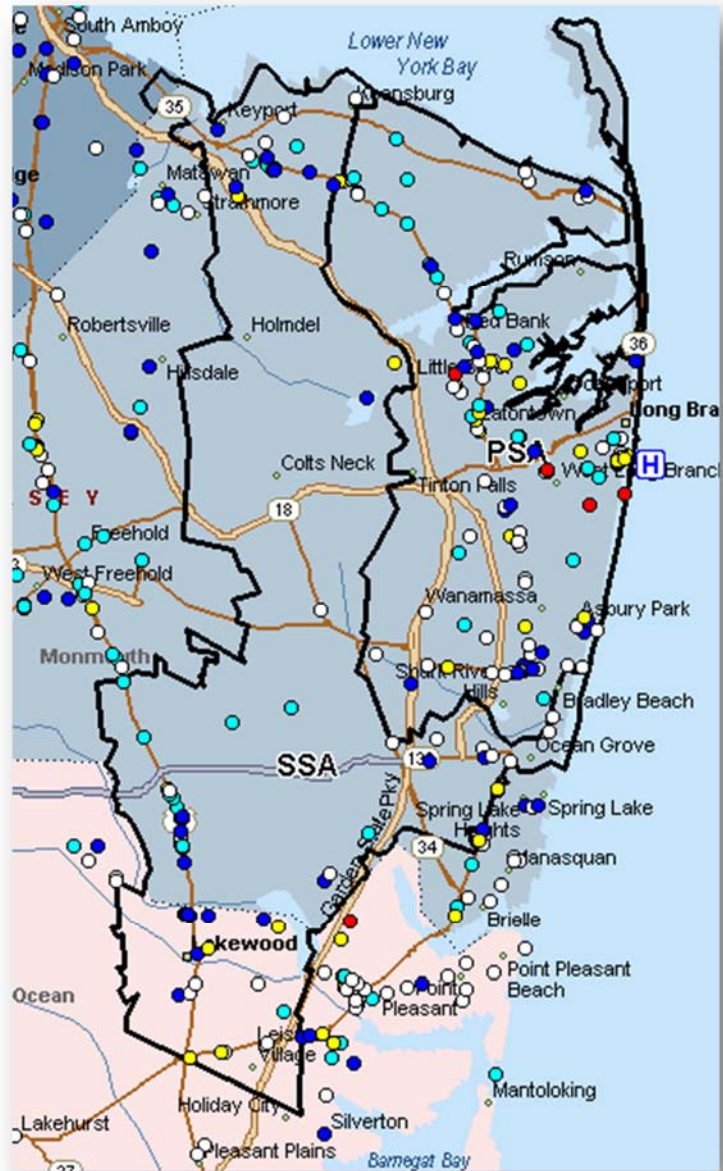
APPENDIX D RESOURCE INVENTORY

Providers in MMC's Service Area

Primary Care Physicians

- Family Practice
- Geriatrics
- Internal Medicine
- OB/Gyn
- Pediatrics

Locators may represent multiple practitioners

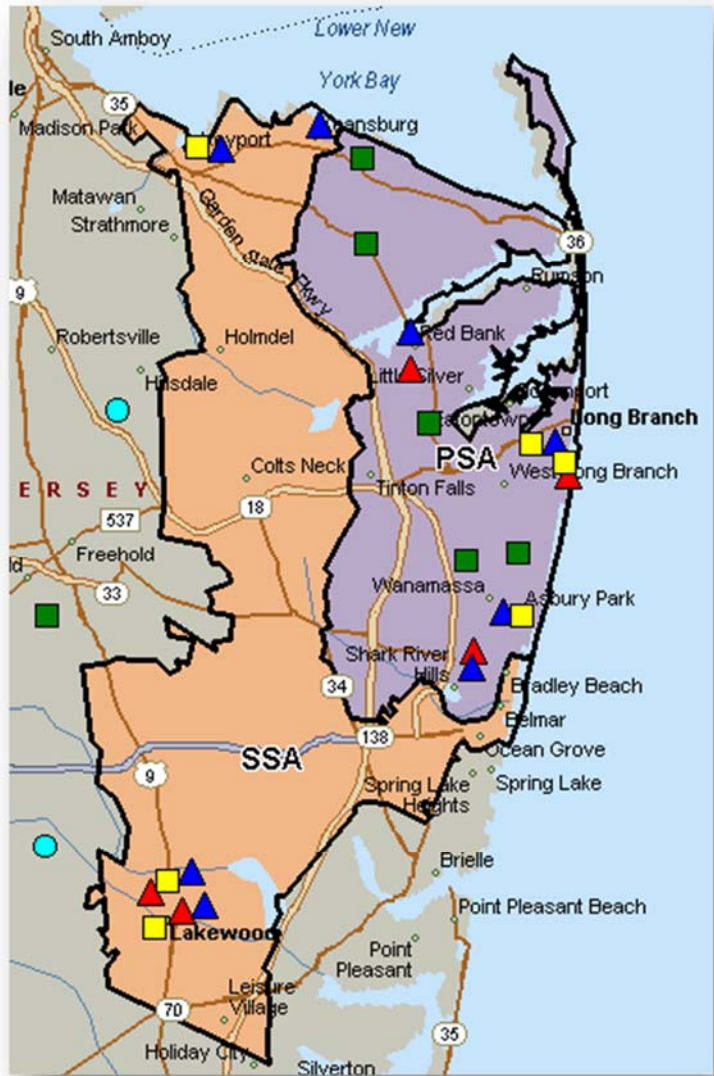


Providers in MMC's Service Area

Clinical Care Provider Locations

Provider Type

-  Urgent Care (5 in PSA)
-  OP Primary Care & FQHC (4 in PSA)
-  After Hours Clinic (3 in PSA)
-  Dental (3 in PSA)
-  Minute Clinic (0 in PSA)

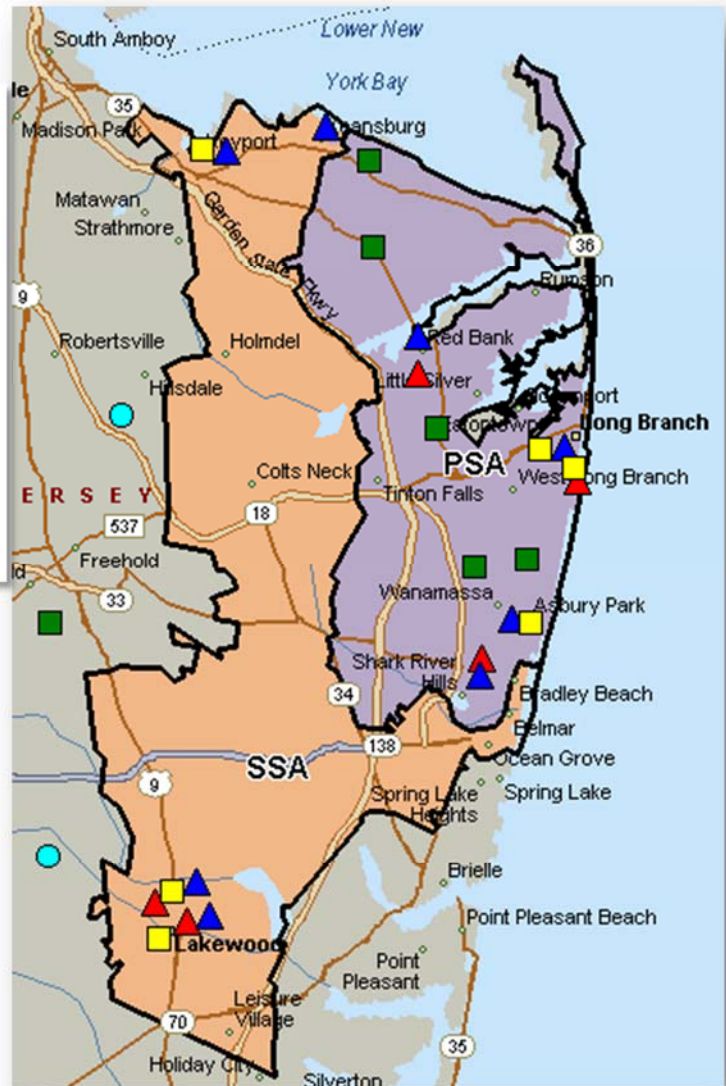


Providers in MMC's Service Area

Clinical Care Provider Locations

Provider Type

- Urgent Care (5 in PSA)
- ▲ OP Primary Care & FQHC (4 in PSA)
- After Hours Clinic (3 in PSA)
- ▲ Dental (3 in PSA)
- Minute Clinic (0 in PSA)

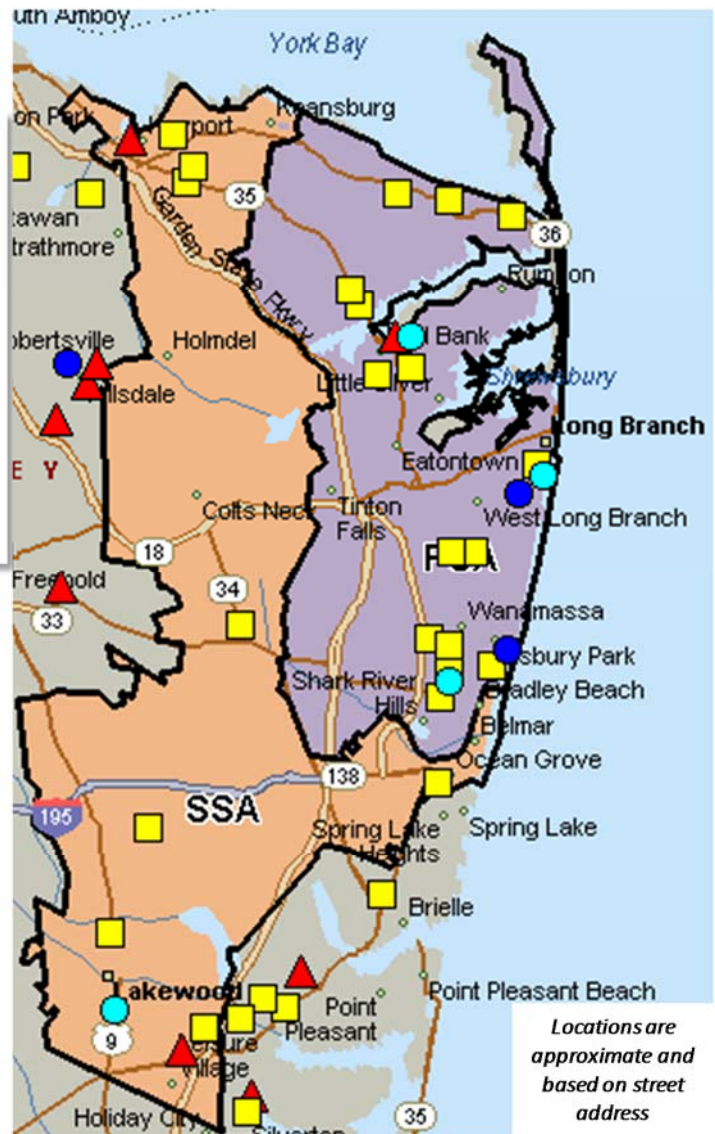


Providers in MMC's Service Area

Behavioral Health Locations

Provider Type



- Residential (2 in PSA)
- ▲ Outpatient & Residential (1 in PSA)
- Outpatient (15 in PSA)

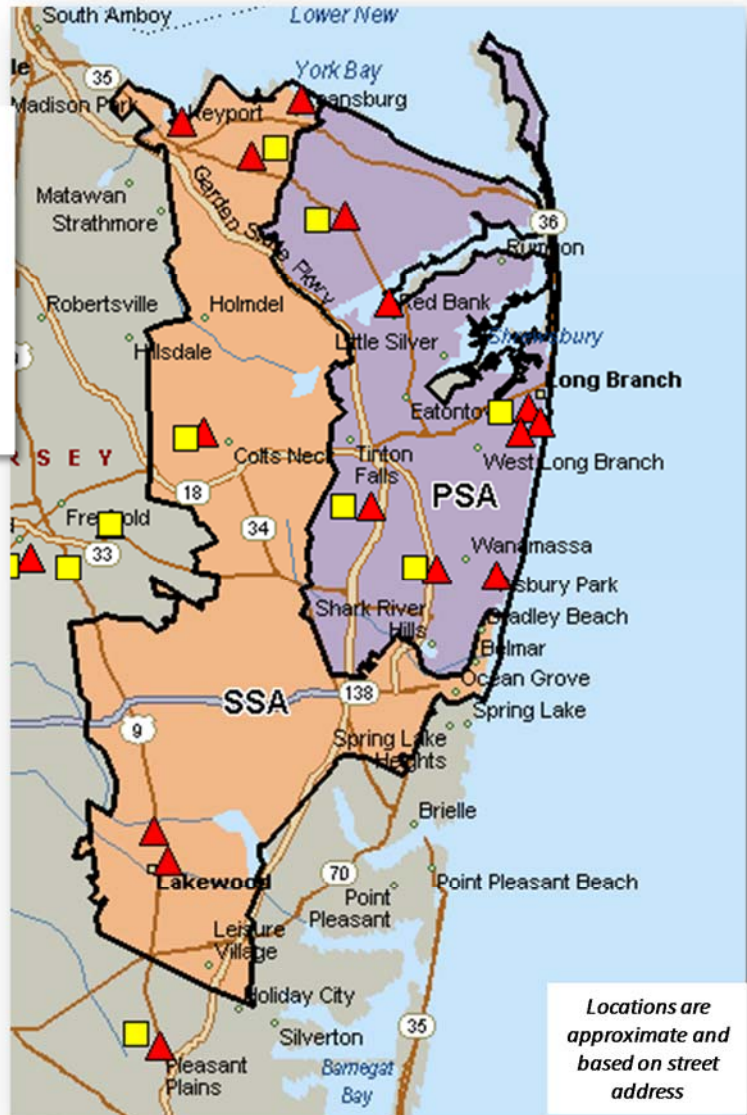


Providers in MMC's Service Area

Communicable Disease Services

Provider Type

-  TB Center (4 in PSA)
-  Immunizations (8 in PSA)

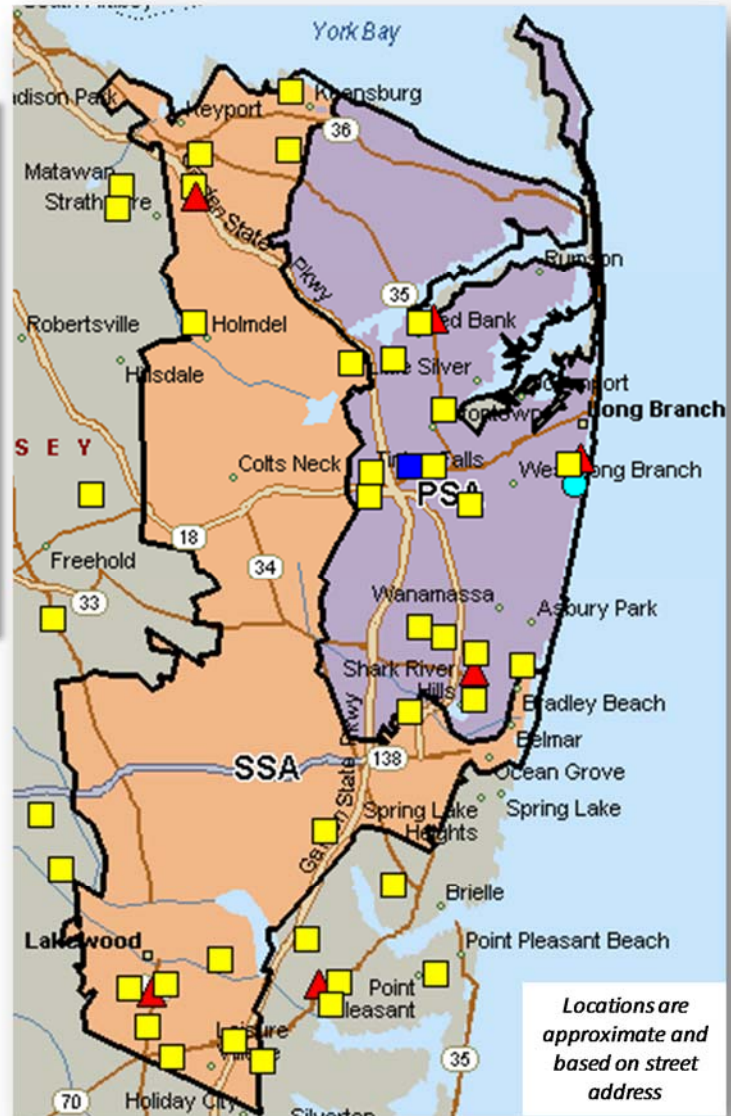


Providers in MMC's Service Area

Inpatient Rehabilitation & Long Term Care

Provider Type




- Nursing Home Based (13 in PSA)
- Hospital Based (3 in PSA)
- LTACH (1 in PSA)
- Comprehensive Rehab Hospital (1 in PSA)

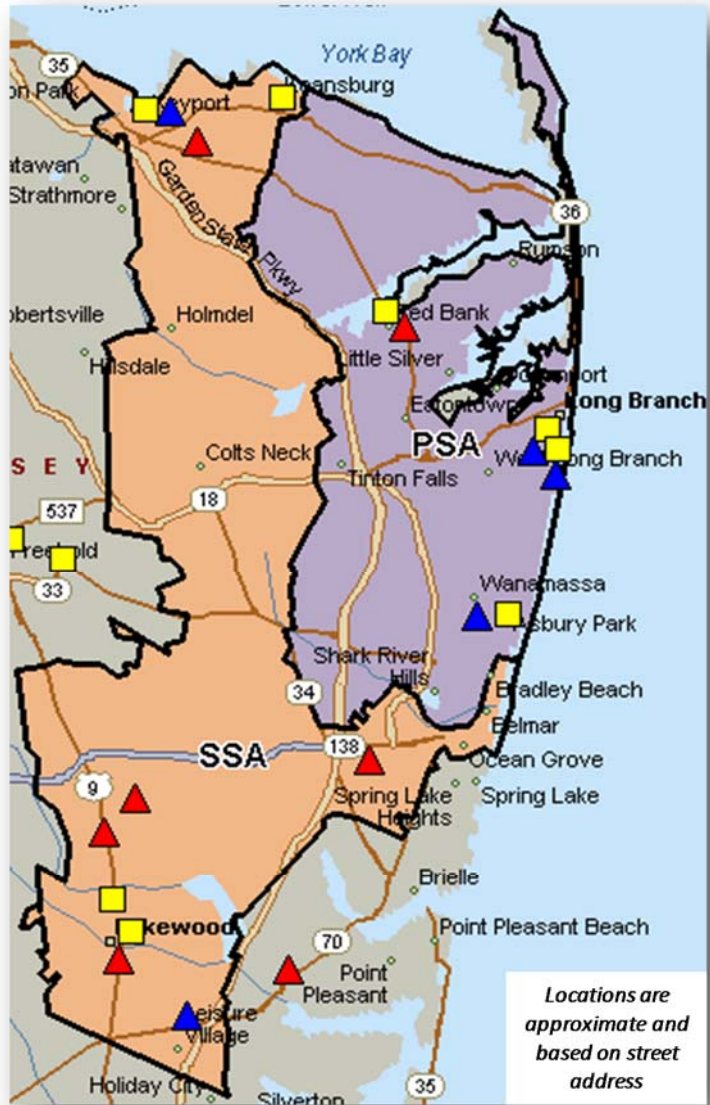


Providers in MMC's Service Area

Maternal & Pediatric

Provider Type

-  Clinical Pediatric (4 in PSA)
-  Clinical Prenatal (3 in PSA)
-  Family Planning/Women's Health Center (1 in PSA)

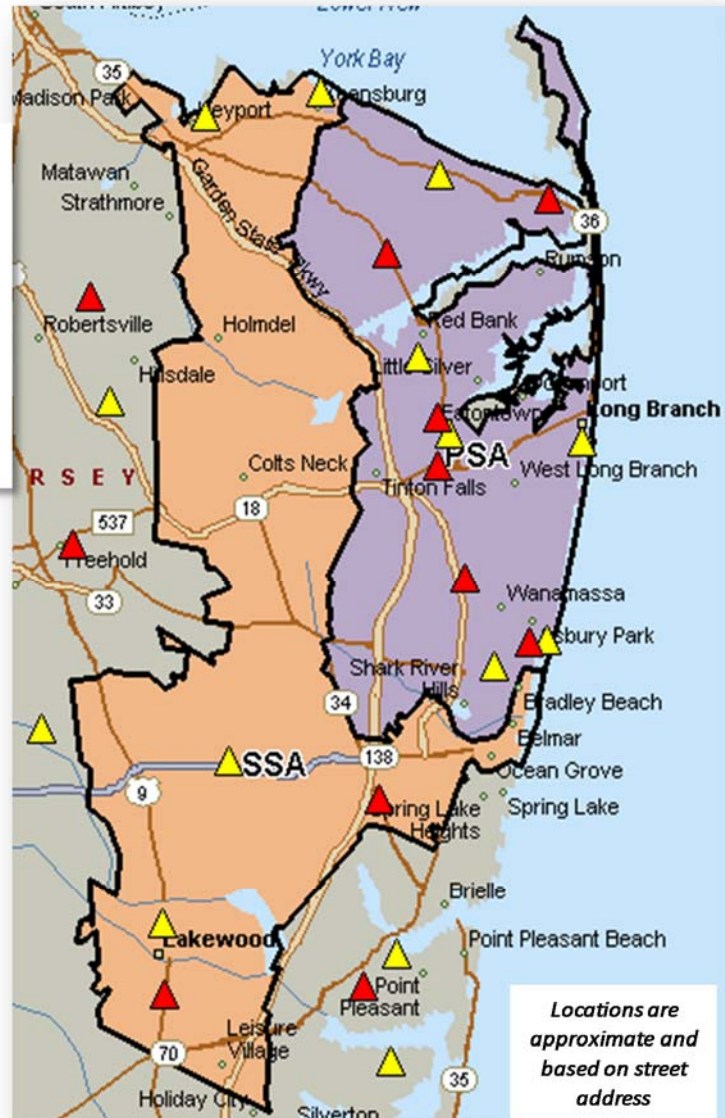


Providers in MMC's Service Area

Senior Services

Provider Type


-  Social & Health (6 in PSA)
-  Medical (6 in PSA)

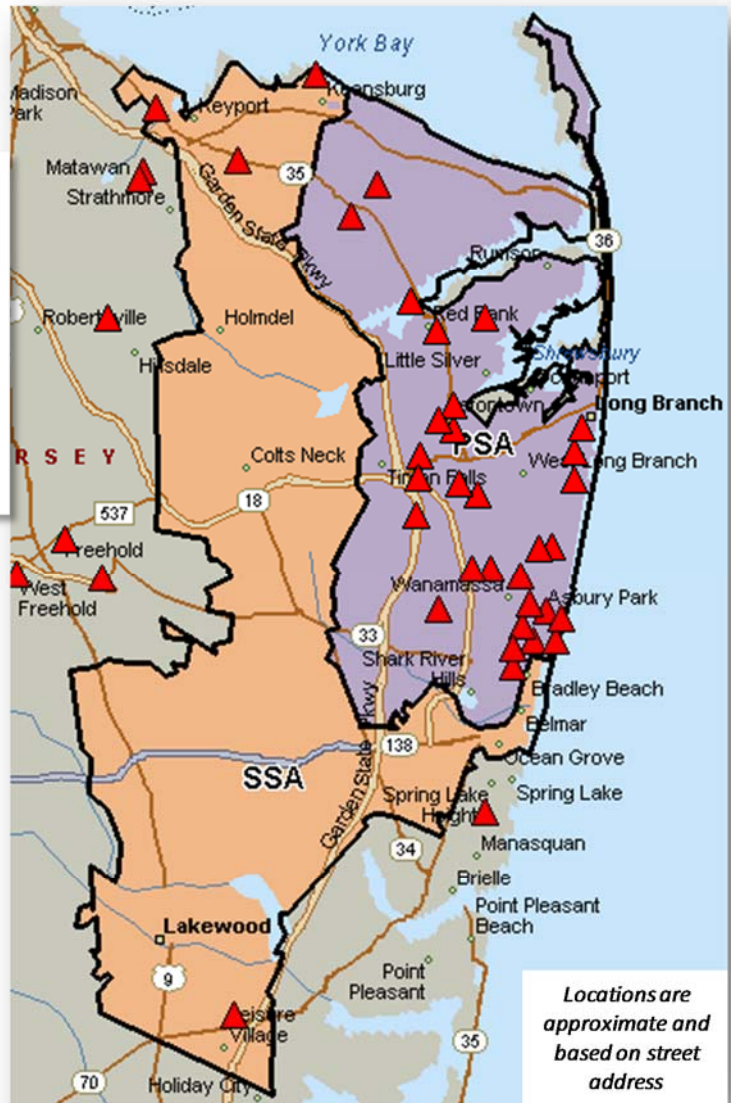


Providers in MMC's Service Area

Family & Social Support Services

Provider Type

-  Family & Social Support Services (30 in PSA)



MAP GROUP	PROVIDER TYPE	PROVIDER NAME	STREET ADDRESS	TOWN	ZIP CODE	PHONE #	COUNTY	SERVICE AREA
Clinical Care	Urgent Care	EMedical Offices	2 Kings Highway	Middletown	07748	(732)-957-0707	Monmouth	PSA
Clinical Care	Urgent Care	Family First Urgent Care	1910 Highway 35 South	Oakhurst	07755	(732)-531-0100	Monmouth	PSA
Clinical Care	Urgent Care	IMA Medical Care	363 State Hwy 36	Port Monmouth	07758	(732)-471-0400	Monmouth	PSA
Clinical Care	Urgent Care	IMA Medical Care	30 Shrewsbury Plaza	Shrewsbury	07702	(732)-542-0002	Monmouth	PSA
Clinical Care	Urgent Care	Immediate Medical Services	240 Monmouth Road	Oakhurst	07755	(732)-531-7711	Monmouth	PSA
Clinical Care	OP Primary Care & FQHC	Monmouth Family Health Center - Main site	270 Broadway	Long Branch	07740	(732)-923-7100	Monmouth	PSA
Clinical Care	OP Primary Care & FQHC	Our Lady of Providence Clinic	300 W Sylvania Ave	Neptune	07753	(732) 776-5335	Monmouth	PSA
Clinical Care	OP Primary Care & FQHC	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	176 Riverside Avenue	Red Bank	07701	(732)-774-6333	Monmouth	PSA
Clinical Care	OP Primary Care & FQHC	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	1301 Main Street	Asbury Park	07712	(732)-774-6333	Monmouth	PSA
Clinical Care	OP Primary Care & FQHC	Center for Health Education, Medicine, & Dentistry (CHEMED)	1771 Madison Avenue	Lakewood	08701	(732)-364-2144	Ocean	SSA
Clinical Care	OP Primary Care & FQHC	Ocean Health Initiatives, Inc.	101 2nd Street	Lakewood	08701	(732)-719-9026	Ocean	SSA
Clinical Care	OP Primary Care & FQHC	Visiting Nurse Association of Central Jersey - Keansburg Community Health Center	100 Main Street	Keansburg	07734	(732)-787-1250	Monmouth	SSA
Clinical Care	OP Primary Care & FQHC	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732)-888-4149	Monmouth	SSA
Clinical Care	After Hours Clinic	Monmouth Family Health Center - Main site	270 Broadway	Long Branch	07740	(732)-923-7100	Monmouth	PSA
Clinical Care	After Hours Clinic	Monmouth Family Health Center - Monmouth Medical Center	300 Second Ave.	Long Branch	07740	(732)-923-6585	Monmouth	PSA
Clinical Care	After Hours Clinic	Visiting Nurse Association of Central Jersey - Main Facility	1301 Main Street	Asbury Park	07712	(732)-774-6333	Monmouth	PSA
Clinical Care	After Hours Clinic	Center for Health Education, Medicine, & Dentistry (CHEMED)	1771 Madison Avenue	Lakewood	08701	(732)-364-2144	Ocean	SSA
Clinical Care	After Hours Clinic	Ocean Health Initiatives, Inc.	101 2nd Street	Lakewood	08701	(732)-719-9026	Ocean	SSA
Clinical Care	After Hours Clinic	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732)-888-4149	Monmouth	SSA
Clinical Care	Dental	Jersey Shore Medical Center	71 Davis Ave.	Neptune	07753	(732)-776-4212	Monmouth	PSA
Clinical Care	Dental	Monmouth Family Health Center	300 Second Ave	Long Branch	07740	(732)-923-6585	Monmouth	PSA
Clinical Care	Dental	Parker Family Health Center	211 Shrewsbury Ave	Red Bank	07701	(732)-212-0777	Monmouth	PSA
Clinical Care	Dental	Center for Health Education, Medicine, & Dentistry (CHEMED)	1771 Madison Avenue	Lakewood	08701	(732)-364-2144	Ocean	SSA
Clinical Care	Dental	Ocean Health Initiatives, Inc.	101 2nd Street	Lakewood	08701	(732)-363-6655	Ocean	SSA
Behavioral Health Locations	Residential	Epiphany House (Asbury Park)	300 4th Ave	Asbury Park	07712	732-775-0720	Monmouth	PSA
Behavioral Health Locations	Residential	Epiphany House (Long Branch)	373 Brighton Ave.	Long Branch	07740	732-870-9113	Monmouth	PSA
Behavioral Health Locations	Outpatient & Residential	Riverview Medical Center	1 Riverview Plaza	Red Bank	07701	732-530-2451	Monmouth	PSA
Behavioral Health Locations	Outpatient & Residential	Endeavor House	6 Broadway	Keyport	07735	732-264-3824	Monmouth	SSA
Behavioral Health Locations	Outpatient	Alan E Matonti BSW LCADC	64 7th Avenue	Atlantic Highlands	07716	(732)-291-7997	Monmouth	PSA
Behavioral Health Locations	Outpatient	Bradley Therapy Associates	79 Oak Hill Road	Red Bank	07701	(732)-936-0606	Monmouth	PSA
Behavioral Health Locations	Outpatient	Catholic Charities - Project Free	238 Neptune Boulevard	Neptune	07753	(732)-897-7705	Monmouth	PSA
Behavioral Health Locations	Outpatient	CPC Behavioral Healthcare H. Hermann Counseling Ctr.	270 Highway 35	Red Bank	07701	(732)-842-2000	Monmouth	PSA
Behavioral Health Locations	Outpatient	Crossroads at Croydon Hall	900 Leonardville Road	Leonardo	07737	(732)-615-2269	Monmouth	PSA
Behavioral Health Locations	Outpatient	Guiding Light Drug and Alcohol Treatment Services	1930 Heack Ave	Neptune	07755	(732)-774-0911	Monmouth	PSA

MAP GROUP	PROVIDER TYPE	PROVIDER NAME	STREET ADDRESS	TOWN	ZIP CODE	PHONE #	COUNTY	SERVICE AREA
Behavioral Health Locations	Outpatient	Jersey Shore University Medical Center Behavioral Health	1945 Route 33	Neptune	07754	(732)-530-3802	Monmouth	PSA
Behavioral Health Locations	Outpatient	JSAS Healthcare Inc.	685 Neptune Blvd	Neptune	07753	(732)-988-8877	Monmouth	PSA
Behavioral Health Locations	Outpatient	Mary Anne Ruane LCSW CADC	30 Linden Place	Red Bank	07701	(732)-747-4333	Monmouth	PSA
Behavioral Health Locations	Outpatient	Milestone Group LLC	1041 Highway 36	Atlantic Highlands	07716	(732)-291-1993	Monmouth	PSA
Behavioral Health Locations	Outpatient	Monmouth County Division of Social Services	2405 Route 66	Asbury Park	07712	(732)-431-6000x5854	Monmouth	PSA
Behavioral Health Locations	Outpatient	New Hope Foundation- Philip House	190 Chelsea Avenue	Long Branch	07740		Monmouth	PSA
Behavioral Health Locations	Outpatient	Ocean Twp Human Services	601 Deal Rd	Oakhurst	07755	(732)-531-2600	Monmouth	PSA
Behavioral Health Locations	Outpatient	Project Free Catholic Charities	305 Bond Street	Asbury Park	07712	(732)-897-7701x2	Monmouth	PSA
Behavioral Health Locations	Outpatient	Recovery Innovations Inc.	628 Shrewsbury Ave	Tinton Falls	07701	(732)-576-8581	Monmouth	PSA
Behavioral Health Locations	Outpatient	180 Turning Lives Around Inc Outpatient Alcohol/Drug Counseling	1 Bethany Road	Hazlet	07730	(732)-264-4111	Monmouth	SSA
Behavioral Health Locations	Outpatient	Center for Health Education, Medicine, & Dentistry (CHEMED)	1770 Madison Avenue	Lakewood	08701	(732)-364-2144	Ocean	SSA
Behavioral Health Locations	Outpatient	Daniel Struble LCSW CADC	32 Village Court	Hazlet	07730	(732)-335-1675	Monmouth	SSA
Behavioral Health Locations	Outpatient	Elaine Hopkins LCSW Psychotherapy Services	415 Route 34	Colts Neck	07722	(732)-546-5138	Monmouth	SSA
Behavioral Health Locations	Outpatient	Howell Township Youth and Family Counseling Services	452 Adelpia Road	Howell	07731	(732)-938-3747	Monmouth	SSA
Behavioral Health Locations	Outpatient	New Life Counseling	25 E. Front St	Keyport	07735	(732)-264-3824	Monmouth	SSA
Behavioral Health Locations	Outpatient	Wall Youth Center and Community Services	1824 South M Street	Wall	07719	(732)-681-1375	Monmouth	SSA
Behavioral Health Locations	Inpatient	Jersey Shore University Medical Center	1945 RTE 33	Neptune	07754	(732) 775-5500	Monmouth	PSA
Behavioral Health Locations	Inpatient	Monmouth Medical Center	300 SECOND AVENUE	Long Branch	07740	(732) 222-5200	Monmouth	PSA
Behavioral Health Locations	Inpatient	RIVERVIEW MEDICAL CENTER	ONE RIVERVIEW PLAZA	Red Bank	07701	(732) 741-2700	Monmouth	PSA
Behavioral Health Locations	Inpatient	Kimball Medical Center	600 RIVER AVE	Lakewood	08701	(732) 363-1900	Ocean	SSA
Communicable Disease Services	TB Center	Long Branch Dept of Health	344 Broadway	Long Branch	07740	(732)-571-5665	Monmouth	PSA
Communicable Disease Services	TB Center	Middletown Township Health Dept	1 Kings Highway	Middletown	07748	(732)-615-2096	Monmouth	PSA
Communicable Disease Services	TB Center	Monmouth County Reg Health Commission #1	1540 West Park Avenue	Ocean Township	07712	(732)-493-9520	Monmouth	PSA
Communicable Disease Services	TB Center	Monmouth Social Services Building	2405 Rte 66	Ocean Township	07712	(732)-294-5458	Monmouth	PSA
Communicable Disease Services	Immunizations	Long Branch Dept of Health	344 Broadway	Long Branch	07740	732-571-5665	Monmouth	PSA
Communicable Disease Services	Immunizations	Middletown Township Health Dept	1 Kings Highway	Middletown	07748	732-615-2096	Monmouth	PSA
Communicable Disease Services	Immunizations	Monmouth County Reg Health Commission #1	1540 West Park Avenue	Ocean Township	07712	732-493-9520	Monmouth	PSA
Communicable Disease Services	Immunizations	Monmouth Family Health Center - Main site	270 Broadway	Long Branch	07740	732-923-7100	Monmouth	PSA
Communicable Disease Services	Immunizations	Monmouth Family Health Center - Women's Wellness Center	80 Pavillion Avenue	Long Branch	07740	732-963-0114	Monmouth	PSA
Communicable Disease Services	Immunizations	Monmouth Social Services Building	2405 Rte 66	Ocean Township	07712	732-294-5458	Monmouth	PSA
Communicable Disease Services	Immunizations	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	176 Riverside Avenue	Red Bank	07701	732-774-6333	Monmouth	PSA
Communicable Disease Services	Immunizations	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	1301 Main Street	Asbury Park	07712	732-774-6333	Monmouth	PSA
Communicable Disease Services	Immunizations	Colts Neck Township Health Dept	124 Cedar Drive	Colts Neck	07722	732-462-5470	Monmouth	SSA
Communicable Disease Services	Immunizations	Hazlet Health Department	1766 Union Avenue	Hazlet Township	07730	732-264-1700	Monmouth	SSA

MAP GROUP	PROVIDER TYPE	PROVIDER NAME	STREET ADDRESS	TOWN	ZIP CODE	PHONE #	COUNTY	SERVICE AREA
Communicable Disease Services	Immunizations	Visiting Nurse Association of Central Jersey - Keansburg Community Health Center	100 Main Street	Keansburg	07734	732-787-1250	Monmouth	SSA
Communicable Disease Services	Immunizations	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad Street	Keyport	07735	732-888-4149	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Chapin Hill at Red Bank	100 Chapin Avenue	Red Bank	07701	(732)-741-8811	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Gateway Care Center	139 Grant Ave	Eatontown	07724	(732)-542-4700	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Imperial Care Center	919 Green Grove Road	Neptune	07753	(732)-922-3400	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Jersey Shore Center	3 Industrial Way East	Eatontown	07724	(732)-544-1557	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	King Manor Care and Rehabilitation Center	2303 West Bangs Ave	Neptune	07753	(732)-774-3500	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Liberty Royal Rehabilitation and Health Care Center	524 Wardell Road	Tinton Falls	07753	(732)-922-9330	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Medicenter Rehabilitation and Nursing	2050 Sixth Ave	Neptune City	07753	(732)-774-8300	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Meridian Nursing & Rehabilitation at Shrewsbury	89 Avenue At The Common	Shrewsbury	07702	(732)-676-5800	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Meridian Nursing and Rehabilitation at Ocean Grove	160 Main Street	Ocean Grove	07756	(732)-481-8300	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Monmouth Care Center	229 Bath Avenue	Long Branch	07740	(732)-229-4300	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Neptune Rehabilitation And Care Center	101 Walnut St	Neptune	07753	(732)-774-3550	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Seabrook Village Renaissance Gardens	3002 Essex Road	Tinton Falls	07753	(732)-643-2000	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	The Atrium at Navesink Harbor	40 Riverside Avenue	Red Bank	07701	(732)-842-3400	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Arnold Walter Nursing Home	622 S Laurel Avenue	Hazlet	07730	(732)-787-6300	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Bayshore Health Care Center	715 North Beers Street	Holmdel	07733	(732)-739-9000	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Brandywine Senior Living	2621 Highway 138	Wall	07719	(732)-282-1910	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Care One	2621 Highway 138	Wall	07719	(732)-556-1060	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Care One at Holmdel	188 Highway 34	Holmdel	07733	(732)-946-4200	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	De La Salle Hall	810 Newman Springs Rd	Lincroft	07738	(732)-530-9470	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Laurel Bay Health & Rehabilitation Center	32 Laurel Avenue	Keansburg	07734	(732)-787-8100	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Meridian Subacute Rehabilitation	1725 Meridian Trail	Wall	07719	(732)-312-1800	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Regency Park Nursing Center	3325 Highway 35	Hazlet	07730	(732)-264-5800	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Nursing Home Based	Tower Lodge Care Center	1506 Gully Road	Wall	07719	(732)-681-1400	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	Hospital Based	Jersey Shore University Medical Center	1945 Route 33	Neptune	07754	(732)-775-5500	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Hospital Based	Monmouth Medical Center	300 Second Avenue	Long Branch	07740	(732)-222-5200	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Hospital Based	Riverview Medical Center	One Riverview Plaza	Red Bank	07701	(732)-741-2700	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Hospital Based	Bayshore Community Hospital	727 North Beers Street	Holmdel	07733	(732)-739-5900	Monmouth	SSA
Inpatient Rehabilitation & Long Term Care	LTACH	AcuteCare Health System, LLC Specialty Hospital at Monmouth	300 2nd Avenue	Long Branch	07740	(732)-923-5037	Monmouth	PSA
Inpatient Rehabilitation & Long Term Care	Comprehensive Rehab Hospital	HEALTHSOUTH Rehabilitation Hospital of Tinton Falls	2 Centre Plaza	Tinton Falls	07724	(732)-460-5320	Monmouth	PSA
Maternal & Pediatric	Clinical Pediatric	Monmouth Family Health Center - Main site	270 Broadway	Long Branch	07740	(732)-923-7100	Monmouth	PSA
Maternal & Pediatric	Clinical Pediatric	Monmouth Family Health Center - Monmouth Medical Center	300 Second Street	Long Branch	07740	(732)-923-6585	Monmouth	PSA
Maternal & Pediatric	Clinical Pediatric	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	176 Riverside Avenue	Red Bank	07701	(732)-774-6333	Monmouth	PSA

Monmouth Medical Center
Community Health Needs Assessment

MAP GROUP	PROVIDER TYPE	PROVIDER NAME	STREET ADDRESS	TOWN	ZIP CODE	PHONE #	COUNTY	SERVICE AREA
Maternal & Pediatric	Clinical Pediatric	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	1301 Main Street	Asbury Park	07712	(732)-774-6333	Monmouth	PSA
Maternal & Pediatric	Clinical Pediatric	Center for Health Education, Medicine, & Dentistry (CHEMED)	1770 Madison Avenue	Lakewood	08701	(732)-364-2144	Ocean	SSA
Maternal & Pediatric	Clinical Pediatric	Ocean Health Initiatives	101 Second Street	Lakewood	08701	(732)-363-6655	Ocean	SSA
Maternal & Pediatric	Clinical Pediatric	Visiting Nurse Association of Central Jersey - Keansburg Community Health Center	100 Main Street	Keansburg	07734	(732)-787-1250	Monmouth	SSA
Maternal & Pediatric	Clinical Pediatric	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732)-888-4149	Monmouth	SSA
Maternal & Pediatric	Clinical Prenatal	Monmouth Family Health Center - Monmouth Medical Center	300 Second Street	Long Branch	07740	(732)-923-6585	Monmouth	PSA
Maternal & Pediatric	Clinical Prenatal	Monmouth Family Health Center - Women's Wellness Center	80 Pavillion Avenue	Long Branch	07040	(732)-963-0114	Monmouth	PSA
Maternal & Pediatric	Clinical Prenatal	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	1301 Main Street	Asbury Park	07712	(732)-774-6333	Monmouth	PSA
Maternal & Pediatric	Clinical Prenatal	Central Jersey Family Health Consortium	725 Airport Road, Suite 1C	Lakewood	08701	732-363-5400	Ocean	SSA
Maternal & Pediatric	Clinical Prenatal	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732)-888-4149	Monmouth	SSA
Maternal & Pediatric	Family Planning / Women's Health Centers	National Womens Healthresource	157 Broad St	Red Bank	07701	732-530-3425	Monmouth	PSA
Maternal & Pediatric	Family Planning / Women's Health Centers	Family Planning Center of Ocean County, Inc.	290 River Avenue	Lakewood	08701	(732) 364-9696	Ocean	SSA
Maternal & Pediatric	Family Planning / Women's Health Centers	Monmouth County Associates- Healthcare for Women	4788 Route 9 South	Howell	07731	732-905-9802	Monmouth	SSA
Maternal & Pediatric	Family Planning / Women's Health Centers	Old Tudor Village-Healthcare for Women	1924 State Highway 35	Wall	07719	732-974-8404	Monmouth	SSA
Maternal & Pediatric	Family Planning / Women's Health Centers	Planned Parenthood-Hazlet Center	Bethany Commons	Hazlet	07730	732-888-4900	Monmouth	SSA
Maternal & Pediatric	Family Planning / Women's Health Centers	Women's Surgicare of Howell	600 Candlewood Commons	Howell	07731	732-367-6200	Monmouth	SSA
Senior Services	Social & Health	Asbury Park Senior Center	206 First Avenue	Asbury Park	07712	(732)-504-5040	Monmouth	PSA
Senior Services	Social & Health	Eatontown Senior Center	72 Broad Street	Eatontown	07724	(732)-389-7666	Monmouth	PSA
Senior Services	Social & Health	Long Branch Senior Center	85 Second Avenue	Long Branch	07740	(732)-571-6542	Monmouth	PSA
Senior Services	Social & Health	Middletown Senior Center	900 Leonardville Road	Middletown	07737	(732)-615-2265	Monmouth	PSA
Senior Services	Social & Health	Neptune Township Department of Senior Services and Senior Center	1607 Corlies Avenue	Neptune	07753	(732)-988-8855	Monmouth	PSA
Senior Services	Social & Health	Red Bank Senior Center	80 Shrewsbury Avenue	Red Bank	07701	(732)-747-5204	Monmouth	PSA
Senior Services	Social & Health	Bayshore Senior Day Center	100 Main Street	Keansburg	07734	(732)-495-2454	Monmouth	SSA
Senior Services	Social & Health	Howell Department of Senior Services	251 Preventorium Road	Howell	07731	(732)-938-4500 ext. 2550	Monmouth	SSA
Senior Services	Social & Health	Keyport Senior Center	110 Second Street	Keyport	07735	(732)-264-4916	Monmouth	SSA
Senior Services	Social & Health	Lakewood Community Services Corp.	415 Carey Street	Lakewood	08701	(732)-901-6001	Ocean	SSA
Senior Services	Medical	Jersey Shore Adult Day Health Care Center	600 Main Street	Asbury Park	07712	(732)-775-4451	Monmouth	PSA
Senior Services	Medical	Kensington Court	864 Shrewsbury Avenue	Tinton Falls	07724	(732)-784-2400	Monmouth	PSA
Senior Services	Medical	LADACIN Network	1701 Kneeley Blvd.	Wanamassa	07712	(732)-493-5900	Monmouth	PSA
Senior Services	Medical	Royal Senior Care	1041 (500) Highway 36	Atlantic Highlands	07716	(732)-291-0710	Monmouth	PSA
Senior Services	Medical	We Care Adult Care, Inc	552a Highway 35 South	Middletown	07748	(732)-741-7363	Monmouth	PSA
Senior Services	Medical	Young at Heart of Eatontown	139 Grant Avenue	Eatontown	07724	(732)-578-1888	Monmouth	PSA
Senior Services	Medical	Allaire Center Senior Day Care	1979 Route 34 South	Wall	07719	(732)-974-7666	Monmouth	SSA
Senior Services	Medical	Ambassador Medical Day Care LLC	619 River Avenue	Lakewood	08701	(732)-367-1133	Ocean	SSA

MAP GROUP	PROVIDER TYPE	PROVIDER NAME	STREET ADDRESS	TOWN	ZIP CODE	PHONE #	COUNTY	SERVICE AREA
Family & Social Support Services	Family & Social Support Services	Affordable Housing Alliance	59 Broad St.	Eatontown	07724	(732)-389-2958	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Aslan Youth Ministries	P.O. Box 270	Red Bank	07701	(732)-741-7824	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	BBBS of Monmouth & Middlesex Counties	305 Bond Street	Asbury Park	07712	(732)-544-2224	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Boys & Girls Club of Monmouth Cty	138 Drs. James Parker Blvd	Red Bank	07701	(732)-530-0065	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Boys & Girls Club of Monmouth Cty	1201 Monroe Avenue	Asbury Park	07712	(732)-775-7862	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Community Affairs and Resource Center	913 Sewall Avenue	Asbury Park	07712	(732)-774-3282	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Community YMCA	113 Tindall Road	Middletown	07748	(732)-671-5505	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Family & Children's Service	191 Bath Avenue	Long Branch	07740	(732)-222-9111	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Family Based Services Association of NJ	6 Industrial Way West	Eatontown	07724	(732)-542-4502	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Family Promise of Monmouth County	PO Box 70	Middletown	07748-0070	(732)-495-1050	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	The FoodBank of Monmouth and Ocean Counties	3300 Route 66	Neptune	07753	(732)-918-2600	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	HABcore	P.O. Box 2361	Red Bank	07701	(732)-544-1975	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Habitat for Humanity of Northeast Monmouth County	P.O Box 3306	Long Branch	07740	(732)-728-0441	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Interfaith Neighbors	810 Fourth Ave.	Asbury Park	07712	732-775-0525	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Jewish Community Center of Greater Monmouth County	100 Grant Avenue	Deal Park	07723	(732)-531-9100	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Jewish Family & Children's Service of Greater Monmouth County	705 Summerfield Avenue	Asbury Park	07712	(732)-774-6886	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Jewish Family & Children's Service of Greater Monmouth County	1 Main Street	Eatontown	07724	(732)-935-1881	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	LADACIN Network, Inc.	1703 Kneeley Blvd	Wanamassa	07712	(732)-493-5900	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Literary Volunteers of Monmouth Cty	213 Broadway	Long Branch	07740	(732)-571-0209	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Love INC	15 Meridian Road	Eatontown	07724	(732)-542-7012	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	MHA of Monmouth County	119 Avenue at the Commons	Shrewsbury	07702	(732)-542-6422	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Mercy Center	1106 Main St	Asbury Park	07712	(732)-774-9397	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Monmouth Day Care Center	9 Drs. James Parker Blvd.	Red Bank	07701	(732)-741-4313	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	National MS Society	246 Monmouth Road	Oakhurst	07755	(732)-660-1005	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	Prevention First	1405 Hwy. 35 North	Ocean	07712	(732)-663-1800	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	SEARCH Day Program	73 Wickapecko Drive	Ocean Township	07712	(732)-531-0454	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	SCAN Adult Education Center	180 New Jersey 35	Eatontown	07724	(732)-542-1326	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	The Arc of Monmouth	1158 Wayside Road	Tinton Falls	07712	(732)-493-1919	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	The Center in Asbury Park	806 Third Avenue	Asbury Park	07712	(732)-774-3416	Monmouth	PSA
Family & Social Support Services	Family & Social Support Services	The Source Foundation @ Red Bank Regional High School	101 Ridge Road	Little Silver	07739	(732)-842-8000 ext. 236	Monmouth	PSA