

**Newark Beth Israel | RWJBarnabas
Medical Center HEALTH**

**COMMUNITY HEALTH
NEEDS ASSESSMENT**

**NEWARK BETH ISRAEL
MEDICAL CENTER**

2019

ACKNOWLEDGMENTS

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

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

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NBIMC-CHNA Oversight Committee

External stakeholders

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2. Dr. Pamela Clark, CEO, NCHC
3. Dr. Marguerite Leuze, Newark Board of Ed. (Nursing)
4. Mildred Crump, Newark City Council President
5. Rev. Philip Gilmore, Pastor, St. John’s Community Baptist Church
6. Chris Hellwig, Irvington Health Dept.
7. Daniela Lewy, LISC
8. Judith Morris, LISC
9. Victor Kuteyi, E.O. Health Dept.
10. Michael Hodges, Exec. Director, E. O. Health Dept.
11. Jack Santos, City of Newark – Dept. of Health and Child Welfare
12. Sabrina Ross, Unified Vailsburg Service Org.
13. Hasani Council, Councilman James’ office (South Ward)

Invited:

1. Councilman John James (South Ward)
2. Ronice Bruce, Executive Direct, So. Ward Special Improvement District
3. Pamela Daniels, Acting Executive Director, Unified Vailsburg Service Organization
4. Dr. Mark Wade, Medical Director, Newark Health Department
5. Deborah Edwards, City of Newark
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Questions regarding the Community Needs Assessments should be directed to RWJ Barnabas Health System Development/Planning at BHPLanningDept@RWJBH.org.

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 two are Ph.D. prepared, includes: planning consultants, market researchers, epidemiologists, computer programmers and data analysts. NSI has extensive regional and local community knowledge of health issues, community services and provider resources for the community reviewed by this assessment. This expertise, as well as the methodological and technical skills of the entire staff, was brought to bear in conducting this Needs Assessment and Health Improvement Plan.

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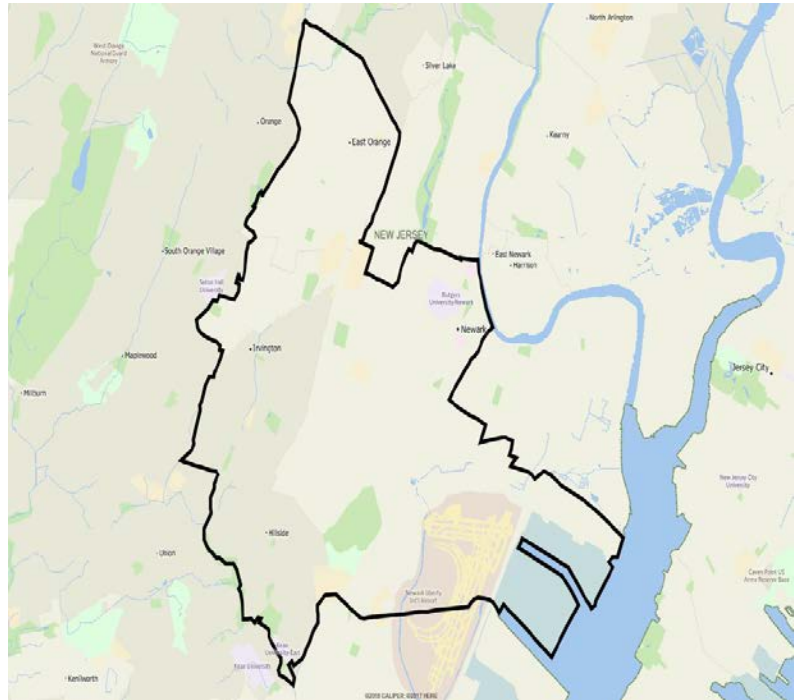
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EXECUTIVE SUMMARY

Background

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

NBIMC Service Area



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

Service Area

The service area is determined by considering three factors: patient origin, market reliance on the hospital (market share), and geographic continuity and proximity. Zip codes representing approximately 50% of the NBIMC patient origin form the initial primary service area (PSA); any zip code in which the Hospital has a high market share presence is also included. Zip codes with lower market share are deleted from the PSA definition and included in the secondary service area (SSA). Geographic proximity is used to create a contiguous area and completes the service area determination. NBIMC's PSA is predominantly located in the southeastern portion of Essex County and borders on Hillside in Union County. The SSA is comprised of small sections of Hudson and Union Counties. For purposes of this assessment, Essex County, NBIMC's home county, was selected to best represent the communities it serves in reviewing secondary data sources presented at the county level.

NBIMC Primary Service Area	
ZIP Code	ZIP Name
07102	Newark
07103	Newark
07106	Newark
07108	Newark
07111	Irvington
07112	Newark
07114	Newark
07017	East Orange
07018	East Orange
07205	Hillside

Essex County encompasses a land mass of 127 square miles comprised of 22 urban and suburban municipalities. The county's municipalities are diverse, encompassing large inner-city communities, such as Newark, Irvington, East Orange and Orange in the southeast, and the suburban communities of Livingston, Essex Fells and Roseland to the west. Economic wealth is not uniformly distributed across municipalities; urban areas include a high number of poor and minority populations. Newark Beth Israel Medical Center (NBIMC), located in Newark, New Jersey is one of seven acute care hospitals operating in Essex County.

Essex County's economic wealth is not uniformly distributed across municipalities, it includes urban areas with large numbers of poor and minority populations. NBIMC's PSA is primarily composed of urban communities with low socioeconomic status (SES) and disparities in health status and access to services. These disparities are evidenced by higher utilization of hospital and emergency department use for problems that could have been minimized or avoided with preventive and primary care.

- Essex County has a larger proportion of African-American and Hispanic/Latino residents than New Jersey.²
 - Essex County's population is 37.8% African-American, compared to 12.8% statewide.
 - Essex County's population is 23.5% Hispanic/Latino, compared to 20.7% statewide.
 - Essex County's population is 30.3% White, compared to 54.4% statewide.
- In 2016, 17.2% of people and 14.0% of Essex County families were living in poverty compared to 10.9% of people and 8.1% of families statewide.
 - In 2016, 23.6% of people and 22.2% of families were living in poverty in Newark 07112.
 - In 2016, 35.6% of families were living in poverty in the Newark 07114 zip code. This was more than five times the State (8.1%).³
- In 2016, 8.0% of Essex County residents were unemployed, higher than the State (5.2%).
 - The unemployment rate in East Orange (11.7%) exceeded the county rate (8.0%) and was more than double the State rate (5.2%).
 - The unemployment rate in Irvington was 12.8%, higher than the State (5.2%), and the Essex County rate of 8.0%.
- In 2016, the Essex County median household income was \$54,860, more than \$18,000 below the state average.⁴
 - The 2016 median household income of Newark 07112 residents (\$34,625) was less than half the statewide figure (\$73,702).⁵
 - Between 2014-2016, income levels across the county and the NBIMC Service Area zip codes showed little change.

TOP FOUR HEALTH ISSUES

The NBIMC Oversight Committee considered primary and secondary data to determine four top health issues based on capacity, resources, competencies, and needs specific to the populations it serves. These

2 United States Census Bureau American Community Survey 2014

3 United States Census Bureau American Community Survey 2014

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP03&prodType=table

4 United States Census Bureau 2014

5 United States Census Bureau American Community Survey 2014

issues are within the hospital's purview, competency and resources to impact in a meaningful manner: obesity, maternal/infant mortality, health care disparities, and violence and safety.

1. Obesity

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

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

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

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

- In 2015, Essex County residents ranked 7.5 out of 10 on an index of factors that contribute to access to healthy foods, lower than statewide (9.2).
- In 2016, 41.7% of Newark adults reported no physical exercise within the past month, higher than New Jersey (29.8%) and CHR national benchmark.⁶
- In 2016, 38.7% of Essex County residents were obese, more than 27.3% statewide and an increase from 32.0% in 2012.⁷
- The 2016 Essex County age-adjusted mortality rate due to diabetes (26.3/100,000) was higher than the statewide rate (17.6/100,000).⁸

⁶ Behavioral Risk Factor Surveillance System 2012

⁷ New Jersey State Health Assessment Data 2012

⁸ New Jersey Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health; Population Estimates: New Jersey Department of Labor and Workforce Development, State Data Center

- In Newark the AAMR was 34.4/100,000.
- Diabetes is the third most common inpatient Ambulatory Care Sensitive Condition in Essex County.⁹

Community residents identified obesity as the top health-related concerns in the primary service area. NBIMC offers a variety of health screenings and educational programs to community residents and employees (blood pressure, cardiac risk, foot disorders and comprehensive blood screenings). Health education presentations are available to community groups, organizations and clubs through a speaker's bureau. Additional programs are available through collaborative efforts with local health departments and community agencies.

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

2. Maternal/Infant Mortality

Maternal and Infant Mortality are leading indicators of the overall health of a nation. In 2017, the infant death rate in United States was 5.8 per 1,000 far above that of other developed nation. The five leading causes of infant deaths include: congenital malformation and chromosomal abnormalities, low birth weight and pre-term birth, maternal complications during pregnancy, sudden infant death syndrome and accidents. While some of the difference in infant death rates maybe attributable to reporting (specifically how live births are counted) major differences occur due to higher poverty rates and other social determinants of health in the U.S. Mortality rates across and within the 50 States differ dramatically as do racial characteristics. While not all causes of infant mortality are preventable, the U.S. as a whole, tends to fare poorly on many measures of public health and social determinants considered risk factors for infant mortality. Infant mortality rates among Blacks have been, and continues to be, higher than for non-Hispanic Whites. For example, White babies in New Jersey have mortality rates of 3 deaths per 1,000 live births. Black infants have a mortality rate more than 3 times as high 9.7% per 1,000.

As with infant mortality, maternal mortality varies widely by state, with New Jersey among the top 5 states with the worst maternal mortality rates in the nation. A USA Today published report in 2018 cited a lack of attention to safety recommendation and a failure to protect new mothers. It also found that many caregivers were neglecting to perform basic tasks such as tracking blood or giving blood pressure medication with hours of detecting high blood pressure levels to prevent strokes.

While maternal mortality is significantly more common among African American, low income women and in rural areas, pregnancy and childbirth complications kill women of every race and ethnicity, education and income level in every part of the US. The reason for the higher maternal mortality rates are many. New mothers are older, with more complex medical histories. Fifty percent of all U.S. pregnancies are unplanned so many women don't address chronic health issues beforehand. A greater prevalence of C-sections leads to more life-threatening complications. A fragmented health system makes it more difficult for new mother's especially those without good insurance to access the services they need. Confusion

⁹ Health Care Decision Analyst Internal Data 2014

about how to recognize women's symptoms and treat obstetric emergencies makes caregivers more prone to errors.

New Jersey health care providers are working together to focus attention on the high maternal mortality rates and are working with parents, families and policy makers to reduce preventable deaths. A campaign to underscore the importance of healthy pregnancies and implications of evidence-based protocol to ensure positive outcomes for mothers and babies is currently in effect in the State.

- From 2014-2016 the infant mortality rate in Essex County was 6.3/1,000 compared to 4.4/1,000 for the State.
- Newark had the highest infant mortality rate 9.1 per 1,000 live births.
- Infant mortality rates among Blacks in Essex County for the years 2013-2015 was 9.6/1,000 compared to 2.7/1,000 for White infants.
- Both Essex County and Newark had C-section rates (27.5% and 26.5%) that were higher than the rate statewide.
- Only 55.4% of women in Newark received prenatal care in the first trimester and 3.8% of Newark women received no prenatal care more than double the statewide rate.
- The percentage of low birth weight in Black infants (13.1%) was higher than Whites (6.4%) and Hispanics (7.8%) in 2016.
- In 2016, Newark (2.5%) had the highest rate of very low birth weight infants than the State or county and surrounding areas.

Newark Beth Israel Medical Center offers comprehensive care for Moms and infants. Over 1,500 obstetrical patients receive care from full-time attendings and residents. Located within the Women's Center is a Women, Infant and Children (WIC) program. Other programs and services include labor and delivery services, Level III neonatal nursery, care for high-risk maternity patients, education and parenting support services, and support groups.

3. Health Care Disparities

Costs, culture and education cause disparities in the provision and access of health care across racial, ethnic and socioeconomic groups.¹⁰ The Office of Minority Health's "National Standards for Culturally and Linguistically Appropriate Services in Health Care" (CLAS), defines full access as care that "recognizes and responds to health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy."¹¹ In order to achieve optimal access, effective patient communication is essential. Language differences, diverse cultures, and low health literacy are barriers to high quality care. Linguistic skill, cultural norms and health literacy strategies are integral to ensure quality patient care plans. NBIMC is sensitive to these barriers and strives to ensure patient access to quality care by addressing low health literacy, cultural differences, and limited English proficiency.

By 2050, minority populations are predicted to become the majority population in the United States. People of color make up a disproportionate share of the low-income and uninsured. Addressing health disparities is amplified by the size of this population and its' growth. New Jersey has a higher percentage of foreign-born residents than nationwide. According to the Agency for Healthcare Research and Quality's

10 <http://kff.org/disparities-policy/issue-brief/disparities-in-health-and-health-care-five-key-questions-and-answers/>
11 Office of Minority Health National Standards for Culturally and Linguistically Appropriate Services in Health Care
<http://minorityhealth.hhs.gov/assets/pdf/checked/finalreport.pdf>

(AHRQ), low-income individuals and people of color experience more barriers to care and receive poorer quality care.¹² Research has found differing patient experiences and levels of satisfaction by race, gender, education levels, and language. This is especially important, given the growth of diverse populations in Essex County. People of color frequently report higher prevalence of health conditions, such as diabetes and obesity; diabetes and obesity are identified as needs and opportunities through the strategic planning SWOT analyses.

Approximately 24 million people, 8.5% of the population nationally, have Limited English Proficiency (LEP). Adverse events affect LEP patients more frequently and severely than they affect English speaking patients. LEP patients are more likely to experience medical errors due to communication problems than English speaking patients. Six percent of the United States population is at risk for adverse events and or barriers to care associated with language ability. There is also a greater risk of central line infections, surgical infections, falls, and pressure ulcers due to Limited English Proficiency (LEP) patients' longer hospital stays as compared to English-speaking patients with the same clinical condition. Language barriers and belief systems are two of the items identified as needs and opportunities in the Public Health Officers survey in Essex County.

- In 2016, 88.4% of Newark 07112 population was African American, the highest in the NBIMC service area, more than seven times higher than New Jersey (12.1%).
- In 2016, 32.7% of Newark 07112 population was Hispanic/Latino, more than Essex County (23.5%) and higher than New Jersey (20.7%).
- Essex County (17.2%) had a higher percentage of people living in poverty than statewide (10.9%) in 2016.¹³
- In 2016, throughout the NBIMC service area the following had more than 30% of families living in poverty¹⁴:
 - Newark (07114): 35.6%
 - Newark (07108): 34.1%
 - Newark (07102): 31.8%
 - Newark (07103): 34.4%
- In 2016, 38.9% of people were living in poverty in Newark 07108, more than three times the statewide percentage (10.9%).
- In 2016, 50.7% of children in Newark 07114 were living in poverty, higher than the Essex County percentage (24.2%) and more than triple the New Jersey percentage (15.6%).
- In 2016, 15.3% of Essex County residents did not complete high school, 4.2 percentage points higher than New Jersey at 11.1%.¹⁵
- In 2016, 31.5% of Newark 07114 residents did not complete high school.
- In 2016, Essex County had a higher percentage (14.5%) of households with limited English proficiency than the State (12.2%).
- In 2016, 15.7% of households in Irvington had limited English proficiency, highest in the NBIMC service area and higher than Essex County (14.5%) and New Jersey (12.2%).

NBIMC is renowned for its many preventive health programs that promote wellness in the local community. Most recently, NBIMC has enhanced its efforts to impact social determinants of health through its Office of Diversity and Inclusion which oversees the development, promotion, and

¹² <http://archive.ahrq.gov/research/findings/nhqrdr/nhqrdr10/minority.html>

¹³ Ibid.

¹⁴ Ibid.

¹⁵ United States Census Bureau American Community Survey 2014

implementation of initiatives that lead to equitable outcomes, and develop strong community partnerships with the aim of improving population health, and reducing health care disparities.

4. Violence and Safety

The World Health Organization (WHO) defines violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, development, or deprivation.” The WHO further categorizes violence into: child abuse, elder abuse, sexual violence, intimate partner violence, youth violence, collective violence, and self-directed violence. All violence directly affects the health of their victims. Violence is a leading cause of death for African-American and Latino males aged 15-24. Indirect effects of violence have been linked to chronic disease (heart disease, asthma, stroke, cancer, and more), mental health problems (PTSD, stress, anxiety, depression, and more), lower quality of life, and an increased risk of perpetrating violence. Mental trauma from exposure to violence has scientifically demonstrated an increase in a person’s risk of adopting violent behavior themselves, and violent behavior transmits and spreads based on exposure similar to an epidemic disease.

The WHO identified prevailing cultural norms, poverty, social isolation and such factors as alcohol abuse, substance abuse and access to firearms as risk factors for violence. It is not unusual for individuals at risk of violence to experience more than one type. Women who are at risk for physical violence are also at risk for sexual violence. Violence at societal, community, relationship, or individual levels can exacerbate and perpetuate violent behaviors at other levels.

- In 2016, the violent crime rate in Essex County was 536/100,000. This rate was more than double the rate statewide and much higher than the County Health Rankings (CHR) national benchmark (62/100,000).
- In Essex County, there were 2.62/1,000 domestic violence reports for 2013, compared to 2.17/1,000 statewide.¹⁶
- In 2016, the rate of burglaries in Essex County was 3.28/1,000, higher than the rates in New Jersey (2.77/1,000) and Middlesex County (2.07/1,000).
- In 2016, the total arrest rate in Essex County was 34.2/1,000, higher than Middlesex County (24.1/1,000) and Union County (29.1/1,000).

According to a survey of service area residents, improvement is needed to reduce violence in the community including interpersonal violence (domestic/bullying).

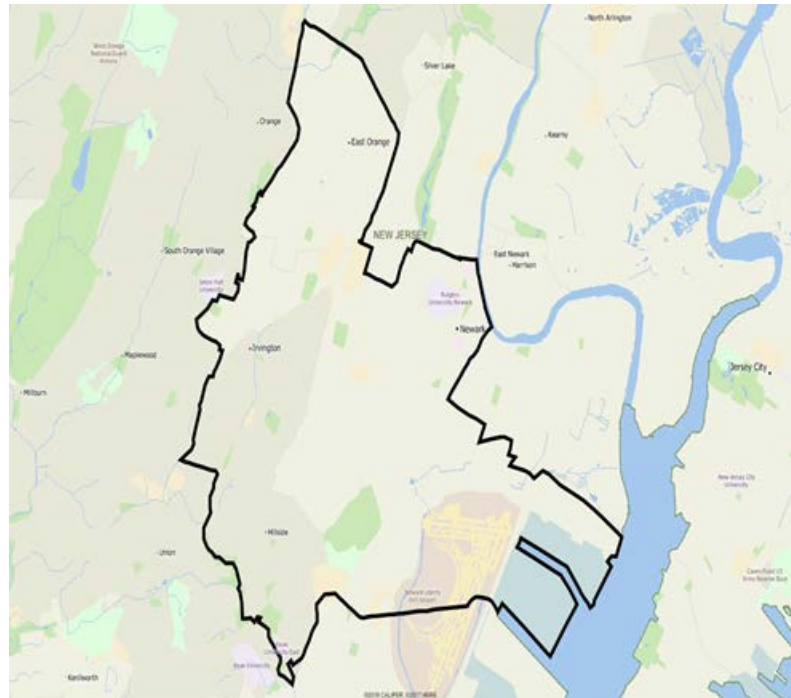
NBIMC provides programs for victims of domestic violence that include medical evaluations, comprehensive health evaluations for children, family life education, and mental health services. It maintains a team of physicians, social workers and psychologists who are experienced in treating and counseling victims of domestic abuse. The Medical Center’s staff work to ensure the family’s safety and security are maintained, and each situation is handled with discretion and respect. Please see the 2019-2022 Implementation Plan for other planned initiatives.

¹⁶ New Jersey State Police Uniform Crime Reporting Unit Domestic Violence in New Jersey 2013 <http://www.njcedv.org/wp-content/uploads/2015/08/THIRTY-FIRST-ANNUAL-DOMESTIC-VIOLENCE-OFFENSE-REPORT-2013.pdf>

1. INTRODUCTION

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

NBIMC Service Area



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

Newark Beth Israel Medical Center, located in Newark, New Jersey, is one of seven acute care hospitals operating in Essex County. NBIMC's primary service area comprises largely urban and suburban communities located in southeastern Essex County. Older urban and suburban Essex County municipalities comprise a large part of NBIMC's secondary service area.

The NBIMC Oversight Committee determined four issues to be within the hospital's purview, competency and resources to impact in a meaningful manner: obesity, maternal/infant mortality, health care disparities, and violence and safety.

The secondary public health data reviewed comes from various sources including Department of Health and Human Services, Centers for Disease Control and Prevention, Census Bureau, *Healthy People 2020*, the County Health Rankings, and hospital discharge data, to name a few.

- *Healthy People 2020* is a 10-year agenda to improve the nation's health that encompasses the entire continuum of prevention and care. For over three decades, Healthy People has established benchmarks and monitored progress over time to measure the impact of prevention activities. *Healthy People 2020* benchmarks are used throughout the report to assess the health status of residents.

- The County Health Rankings, published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, rank the health of nearly all counties in the United States. The rankings look at a variety of measures that affect health such as high school graduation rates, air pollution levels, income, rates of obesity and smoking, etc. These rankings are also used throughout the report to measure the overall health of Essex County residents. County rates are also compared to statewide rates.

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

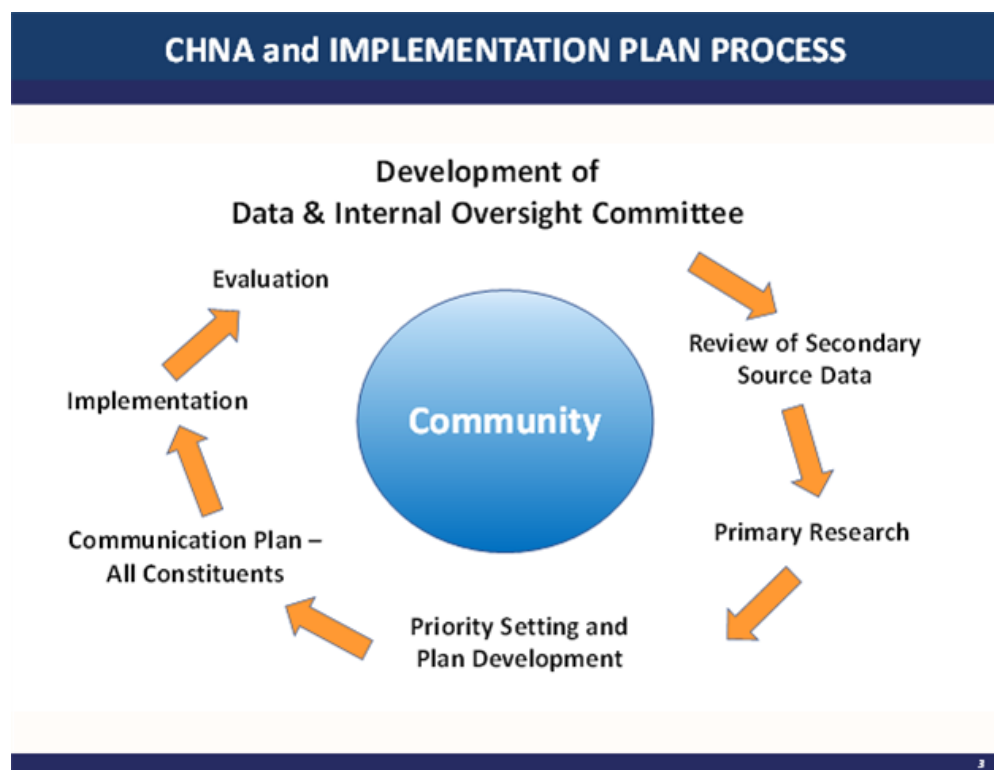
- Mental Health
- Substance Abuse
- Diabetes
- High Blood Pressure/Hypertension
- Cancer
- Finances/Poverty
- Transportation
- Insurance
- Access to Care

2. METHODOLOGY/SERVICE AREA

A. METHODOLOGY

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

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



Prioritization Process

Following the Oversight Committee's review of quantitative and qualitative data on November 18, 2018, a list of 12 issues were identified by consultants as common themes of the research. These issues became the suggested priority issues and included:

- Mental Health
- Diabetes
- Obesity
- High Blood Pressure
- Cancer
- Prenatal Care
- Finances/Poverty

- Substance Use/Abuse
- Transportation
- Insurance
- Access to Care
- Violence and Safety

A ballot was developed, and a survey sent to the Oversight Committee to rank each issue based on the following criteria.

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

After ballots were tallied, the following four priority issues were selected based upon rankings and discussion with Hospital leadership.

- Obesity
- Maternal/Infant Mortality
- Health Care Disparities
- Violence and Safety

Primary Data Sources

Community Health Needs Surveys

In order to obtain a service area-specific analysis for the NBIMC service area, on-line survey Interviews were conducted among 466 residents of the Hospital's PSA. Interviews were conducted online and by telephone. A link to the online survey was displayed on hospital web pages and social media sites. Additionally, postcards were handed out at area businesses and libraries, directing residents to the online survey link. A telephone augment was conducted to capture additional interviews in specific areas and among specific ethnic groups. For the telephone portion, a representative sample of households was generated from a database of residential telephone numbers. Bruno and Ridgway Research Associates, Inc. administered the on-line and telephone surveys from June 1, 2018 - September 27, 2018. Survey results are incorporated into this CHNA. (See Section 3)

Survey of Oversight Committee

A survey was undertaken on November 28, 2018 with members of the Oversight Committee to determine their perceptions of top health needs and barriers to care. The survey was taken prior to the presentation of County and City Health Indicators and results of the Consumer Survey.

The top three health needs determined by the Oversight Committee were mental/behavioral health, obesity and diabetes. The top three barriers were finances, transportation and insurance.

Focus Group Discussions

At the direction of the CHNA Oversight Committee, two focus groups were undertaken to uncover additional information from key community groups and individuals with respect to health needs, challenges and barriers, and suggestions for improving access to health care services. The first focus group included local area primary and specialty care physicians in an effort to garner unique perspective on health needs. The second focus group was conducted with a number of men living or working in the community to capture their unique views. (See Section 4). Both focus group meetings were conducted in February 2019 by New Solutions, Inc.

Secondary Data Sources

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

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

Health Profile

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

Color Indicator Tables

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

Assets and Gaps

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

Resource Inventory

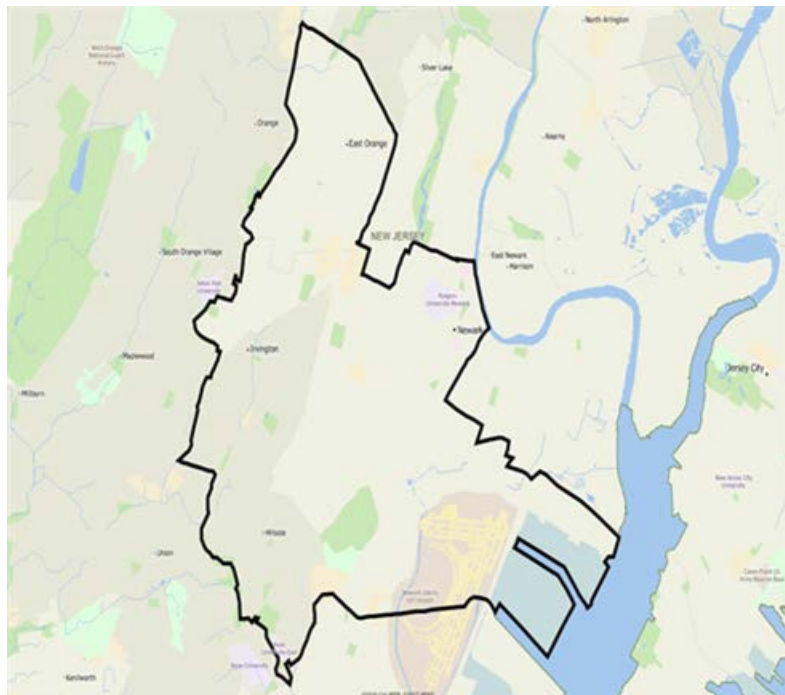
A service area-specific resource inventory is included as **Appendix D**, which details health and social service resources available to residents in Essex County. Providers' names, addresses, and phone numbers and type of services provided are contained in the inventory.

B. SERVICE AREA

Newark Beth Israel Medical Center is located in Newark, New Jersey. It is one of seven hospitals serving residents in Essex County. The Medical Center's primary service area (PSA) consists of the following zip codes:

NBIMC Service Area Map

NBIMC Primary Service Area	
ZIP Code	ZIP Name
07102	Newark
07103	Newark
07106	Newark
07108	Newark
07111	Irvington
07112	Newark
07114	Newark
07017	East Orange
07018	East Orange
07205	Hillside



The service area is determined by taking into consideration three factors: patient origin, market reliance upon the hospital (market share), and geographic continuity/proximity. Typically, the combined

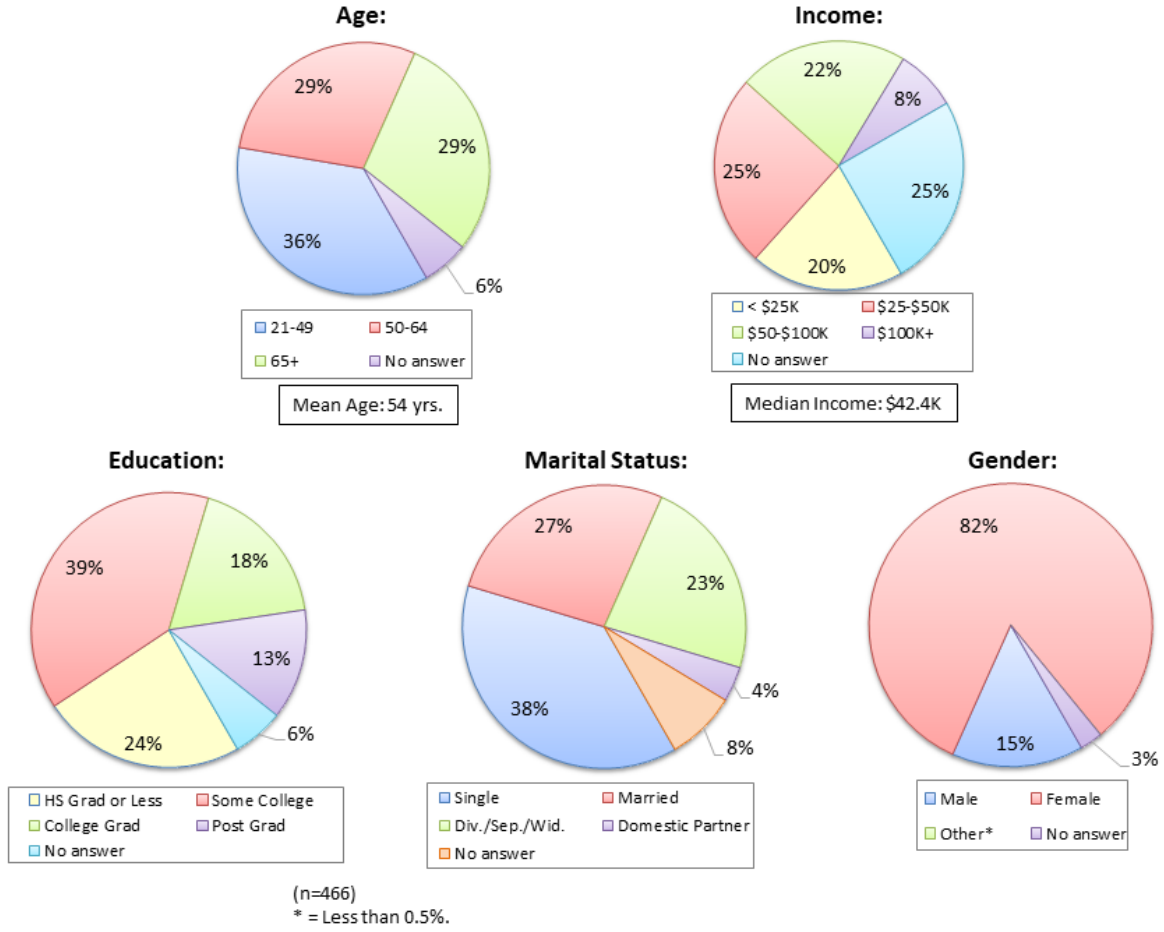
service area represents 75-80% of the Medical Center's patients. Zips codes representing approximately 50% of the NBIMC patient origin form the initial PSA. Added to this list is any zip code in which the Medical Center has a high market share presence, any zip code with lower market share is deleted from the PSA definition and becomes part of the secondary service area (SSA). The next range of zip codes comprise the SSA. Geographic proximity is used to create a contiguous area completes the service area determination. NBIMC's PSA is predominantly located in the southeastern portion of Essex County and borders on Union County municipalities. The SSA is comprised of small sections of Hudson, Bergen and Passaic counties. For purposes of this assessment, Essex County, NBIMC's home county, was selected to best represent communities it serves in reviewing secondary data sources presented at the county level.

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

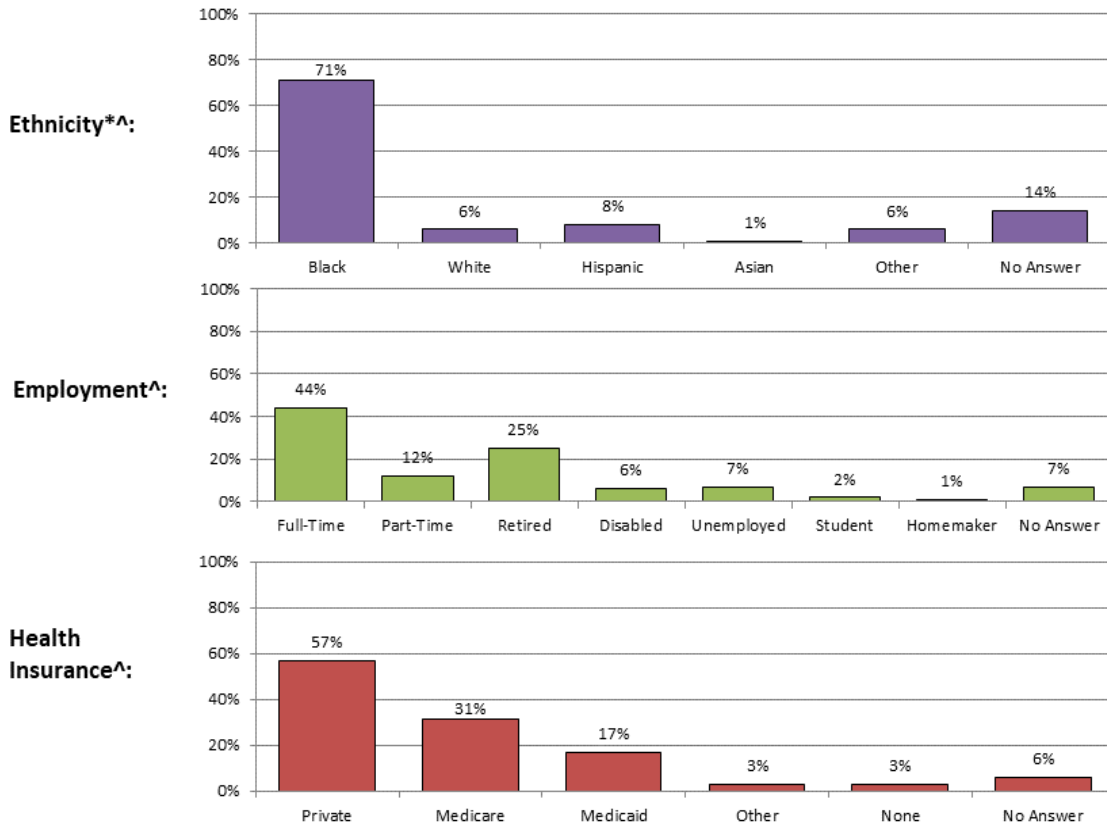
3. **COMMUNITY HEALTH NEEDS SURVEY**

A. **SURVEY RESPONDENTS' PROFILE**

Profile of Respondents in Newark Beth Israel's (NBIMC) PSA



Profile of Respondents in Newark Beth Israel's (NBIMC) PSA – (continued)

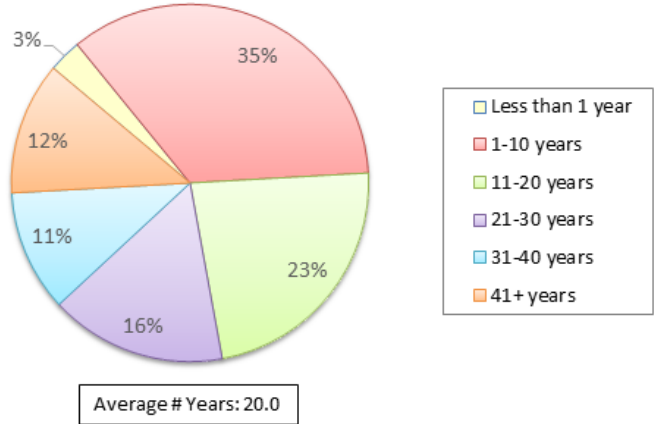


(n=466)

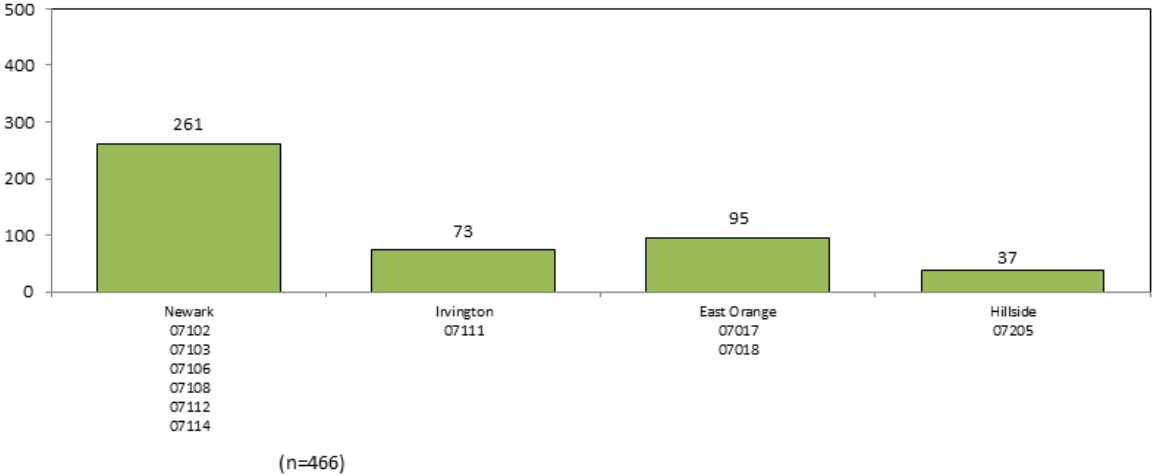
*Quotas were established to align closely with census data.

^ = Multiple mentions.

Length of Time in Area

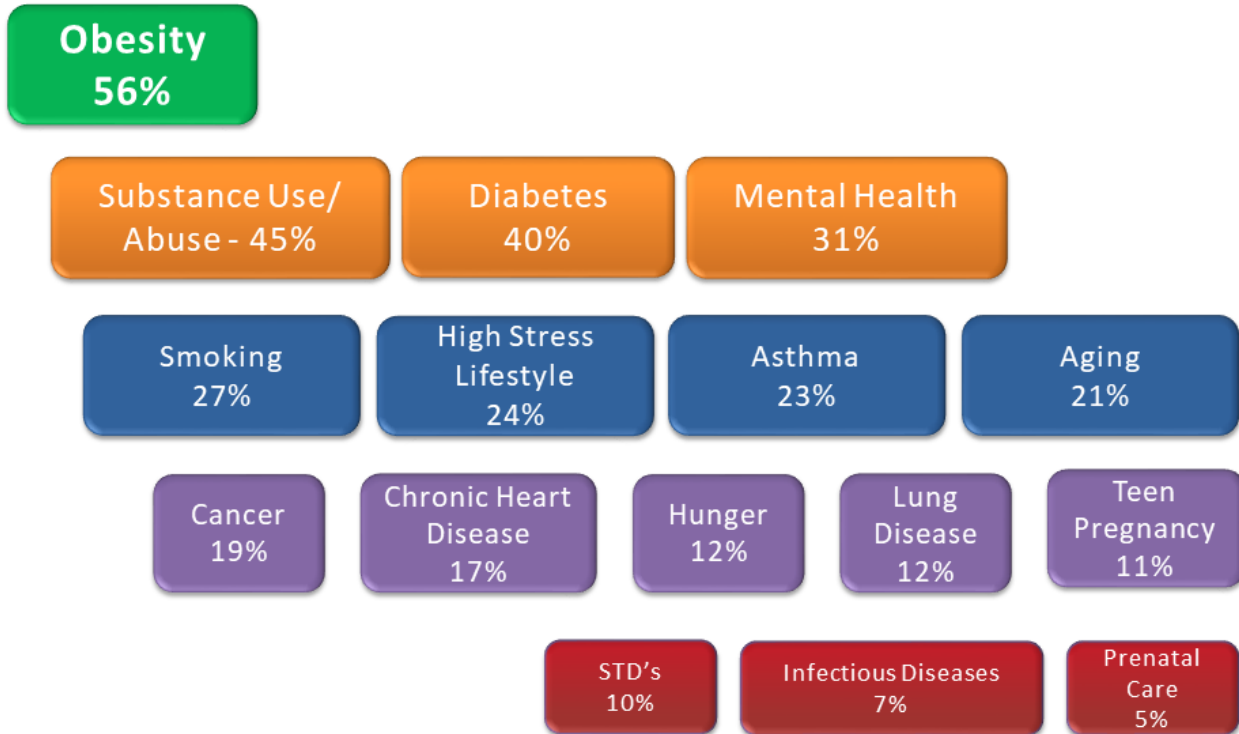


Towns/Zips Where Interviews Came From



Major Health Concerns Among Respondents in NBIMC's PSA Community

- Obesity is the #1 health concern among area respondents, cited by over half of area residents surveyed.
- Substance abuse, many cases of diabetes and mental health issues are also major concerns.



(n=466)

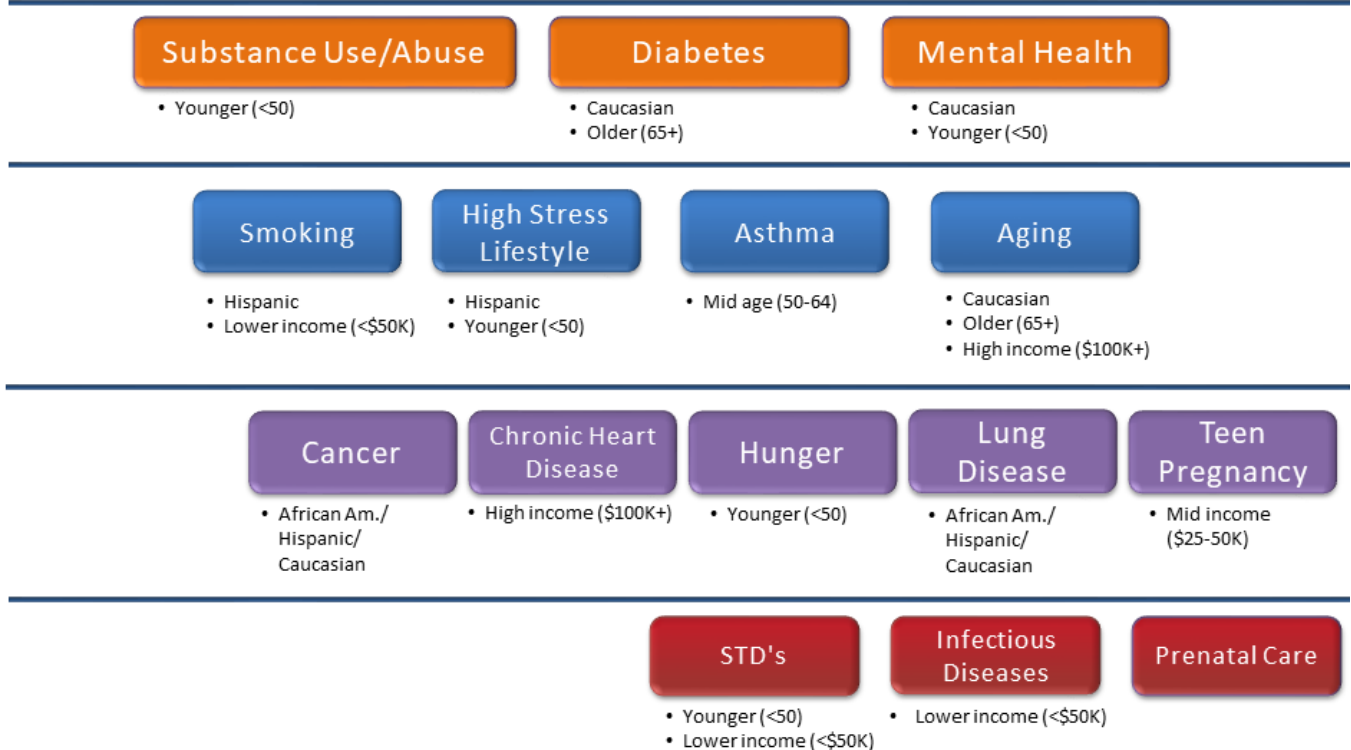
Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?

B. HEALTH-RELATED CONCERNS OF AREA RESIDENTS

Summary of Health Concerns by Subgroups

Obesity

- #1 health concern among all age, gender, income and ethnic groups.

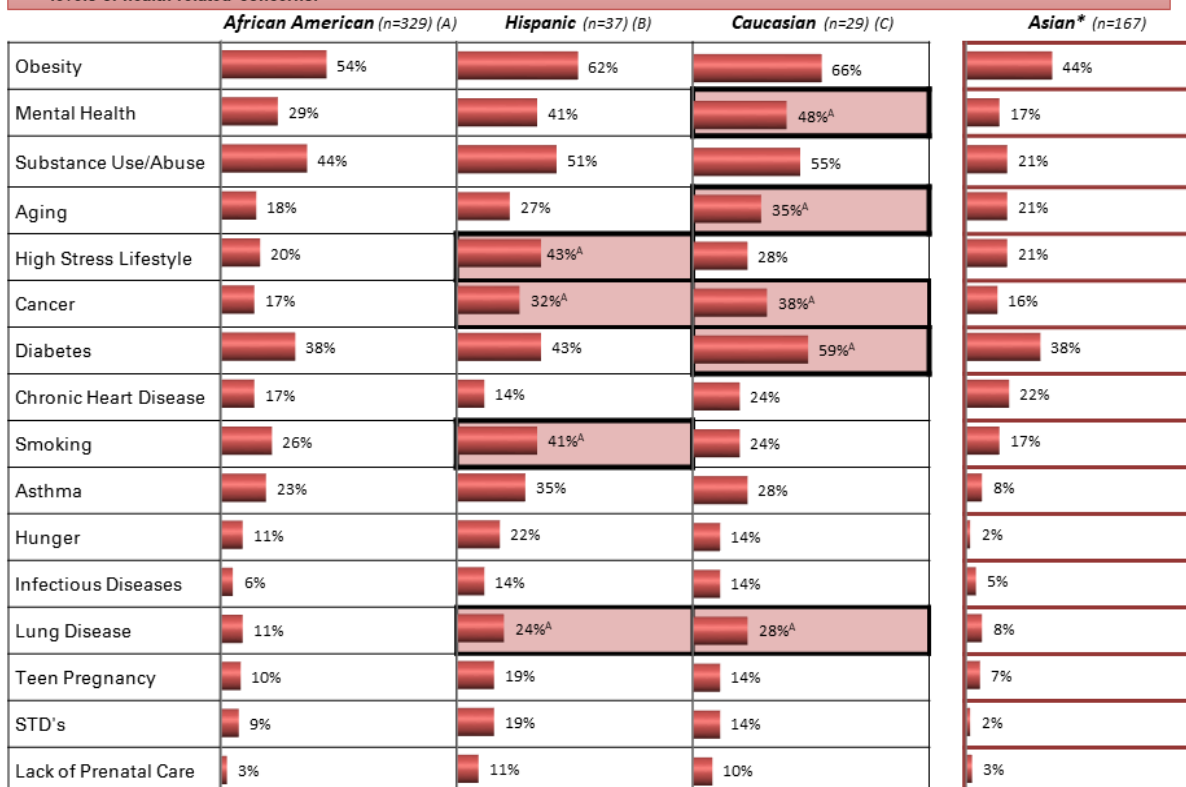


(n=466)

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

Community Health-Related Issues of Concern – by Ethnicity

- African Americans cite a lower level of health-related concerns versus other ethnic groups. The Asian* segment also cites relatively low levels of health-related concerns.



*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

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

Community Health-Related Issues of Concern – by Age

- Mental health, substance abuse, high stress, hunger and STDs tend to skew younger, while concerns about aging and diabetes skew older.

	21-49 (n=167) (A)	50-64 (n=135) (B)	65+ (n=137) (C)
Obesity	58%	55%	57%
Mental Health	39% ^{BC}	26%	26%
Substance Use/Abuse	53% ^C	45%	37%
Aging	12%	22% ^A	31% ^{AB}
High Stress Lifestyle	34% ^{BC}	23% ^C	15%
Cancer	20%	18%	19%
Diabetes	36%	38%	48% ^{AB}
Chronic Heart Disease	14%	19%	19%
Smoking	31%	24%	26%
Asthma	23%	27% ^C	19%
Hunger	16% ^C	13%	8%
Infectious Diseases	8% ^C	9% ^C	4%
Lung Disease	10%	15%	13%
Teen Pregnancy	13%	11%	8%
STD's	20% ^{BC}	7% ^C	2%
Lack of Prenatal Care	4%	7% ^C	2%

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

Community Health-Related
Issues of Concern – by Gender

- No significant differences in health concerns observed between males and females.
- Directionally, males indicate more concern about smoking, chronic heart disease and lung disease.

	Male (n=70) (A)	Female (n=380) (B)
Obesity	57%	55%
Mental Health	26%	31%
Substance Use/Abuse	41%	45%
Aging	21%	21%
High Stress Lifestyle	27%	23%
Cancer	21%	18%
Diabetes	39%	40%
Chronic Heart Disease	23%	16%
Smoking	34%	25%
Asthma	20%	23%
Hunger	14%	12%
Infectious Diseases	9%	7%
Lung Disease	17%	11%
Teen Pregnancy	13%	11%
STD's	10%	10%
Lack of Prenatal Care	9%	4%

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

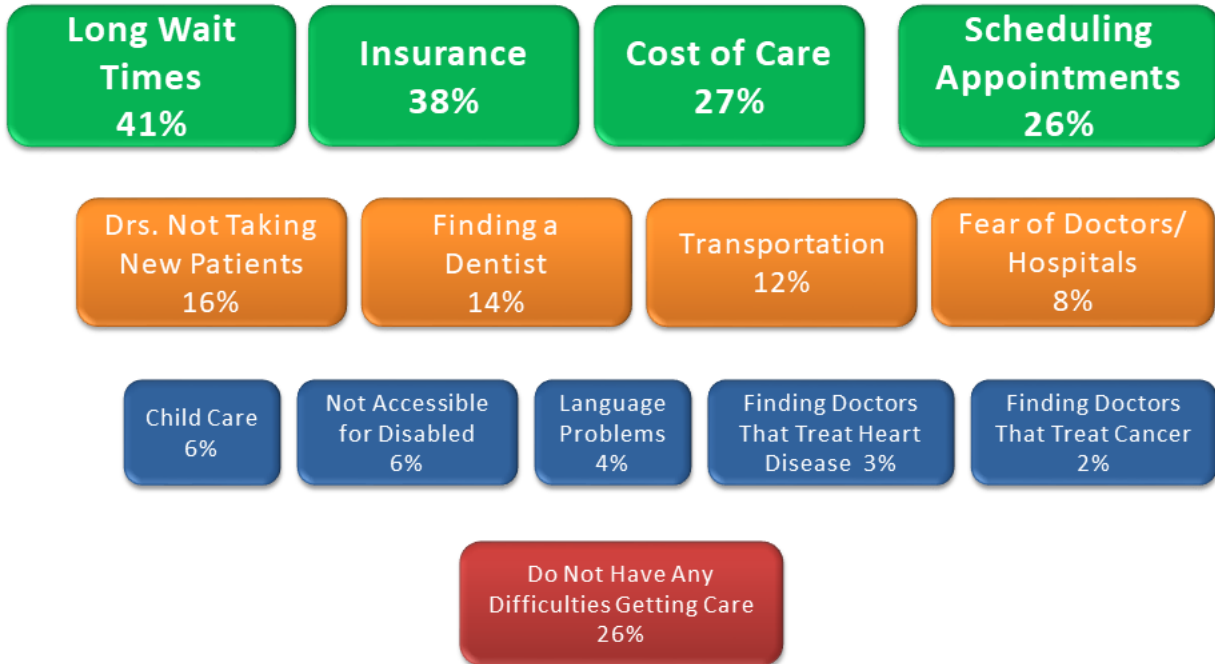
Community Health-Related
Issues of Concern – by Income

- Smoking, infectious diseases, teen pregnancy and STDs of more concern to lower income groups.
- Aging & chronic heart disease of more concern to higher income respondents.

Under \$25K (n=93) (A) **\$25-50K** (n=117) (B) **\$50-100K** (n=103) (C) **\$100K+** (n=36) (D)

Major Barriers to Accessing Health Care in NBIMC's PSA

- Long wait times, insurance, cost of care and scheduling difficulties are the key barriers to obtaining health care services among area respondents.
- Roughly one-fourth of residents surveyed claim they do not experience any difficulty accessing the care they need.



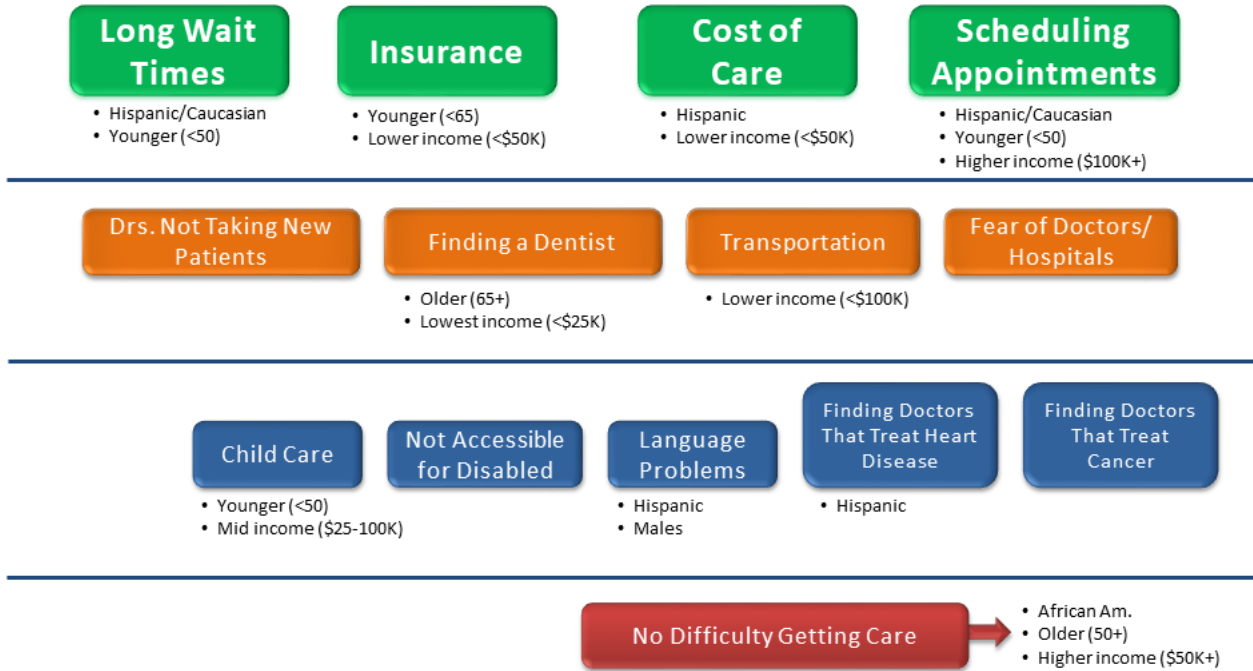
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Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

C. BARRIERS TO ACCESSING HEALTH CARE SERVICES

Summary of Health Care Barriers by Subgroups

• Virtually all age, gender, income and ethnic groups cite long wait times, insurance, cost of care and scheduling as key issues.



(n=466)

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

Barriers to Accessing Health Care Services – by Ethnicity

- In general, African Americans cite the least difficulty getting care.
- In addition to cost, scheduling and long wait times, Hispanics cite language problems and finding doctors that treat heart disease as key barriers.
- The Asian* segment also gives language problems as a key barrier.

	African American (n=329) (A)	Hispanic (n=37) (B)	Caucasian (n=29) (C)	Asian* (n=167)
Insurance Problems	36%	38%	38%	41%
Cost of Care	25%	35% ^C	17%	36%
Scheduling Appointments	24%	41% ^A	41% ^A	28%
Long Wait Times	39%	51%	45%	37%
Drs Not Taking New Patients	14%	16%	24%	20%
Transportation Problems	13%	16%	10%	11%
Fear of Doctors/Hospitals	7%	16%	7%	7%
Finding a Dentist	14%	14%	7%	10%
Language Problems	3% ^C	11% ^C	-	14%
Child Care	5%	8%	3%	4%
Not Accessible for Disabled	5%	8%	3%	4%
Finding Dr. Treats Heart Disease	2% ^C	8% ^C	-	5%
Finding Dr. Treats Cancer	2% ^C	5%	-	2%
DO NOT HAVE ANY DIFFICULTIES GETTING CARE	28% ^{BC}	16%	10%	21%

*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

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

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

Barriers to Accessing Health Care Services – by Age

- In general, older respondents have less difficulty getting care versus younger respondents.

	21-49 (n=167) (A)	50-64 (n=135) (B)	65+ (n=137) (C)
Insurance Problems	42% ^C	42% ^C	30%
Cost of Care	29%	27%	23%
Scheduling Appointments	34% ^{BC}	24%	20%
Long Wait Times	47% ^C	39%	37%
Drs Not Taking New Patients	16%	18%	12%
Transportation Problems	14%	11%	12%
Fear of Doctors/Hospitals	8%	11% ^C	4%
Finding a Dentist	10%	13%	18% ^A
Language Problems	4%	4%	4%
Child Care	11% ^{BC}	3%	2%
Not Accessible for Disabled	5%	7%	5%
Finding Dr. Treats Heart Disease	2%	4%	4%
Finding Dr. Treats Cancer	1%	3%	4% ^A
DO NOT HAVE ANY DIFFICULTIES GETTING CARE	19%	27% ^A	33% ^A

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

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

Barriers to Accessing Health Care Services – by Gender

- Little difference between males and females with regard to accessing healthcare services.

	Male (n=70) (A)	Female (n=380) (B)
Insurance Problems	39%	37%
Cost of Care	30%	26%
Scheduling Appointments	23%	27%
Long Wait Times	47%	40%
Drs Not Taking New Patients	13%	16%
Transportation Problems	14%	12%
Fear of Doctors/Hospitals	11%	7%
Finding a Dentist	11%	14%
Language Problems	10% ^B	3%
Child Care	6%	6%
Not Accessible for Disabled	9%	5%
Finding Dr. Treats Heart Disease	1%	3%
Finding Dr. Treats Cancer	1%	2%
DO NOT HAVE ANY DIFFICULTIES GETTING CARE	23%	26%

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

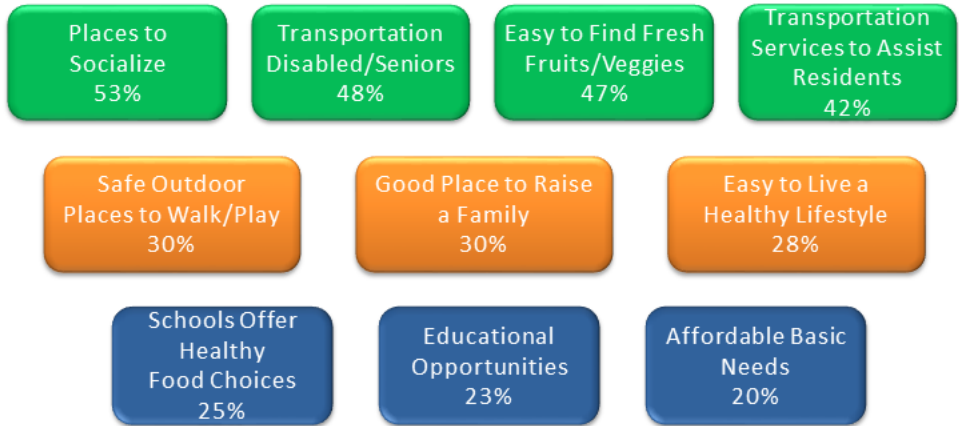
Barriers to Accessing Health Care Services – by Income

- Lower income groups (<\$50K) have more barriers vs. higher income groups and are the most likely to encounter insurance/cost problems when seeking care. Higher income respondents have more difficulty scheduling appointments.

Community Strengths/Opportunities

- Residents of NBIMC's PSA surveyed appear to be only moderately satisfied with community services available. Highest scores are achieved in the areas of having ample places to socialize, ease of finding fresh foods as well as transportation services for disabled/seniors and to assist residents.
- Fewer than one-third of respondents feel the area is a good place to raise a family or that there are safe outdoor places to walk.
- Additionally, the community receives relatively low scores in the areas of having safe, affordable housing, low levels of violence/interpersonal violence and job opportunities.

Community Strengths



Opportunities



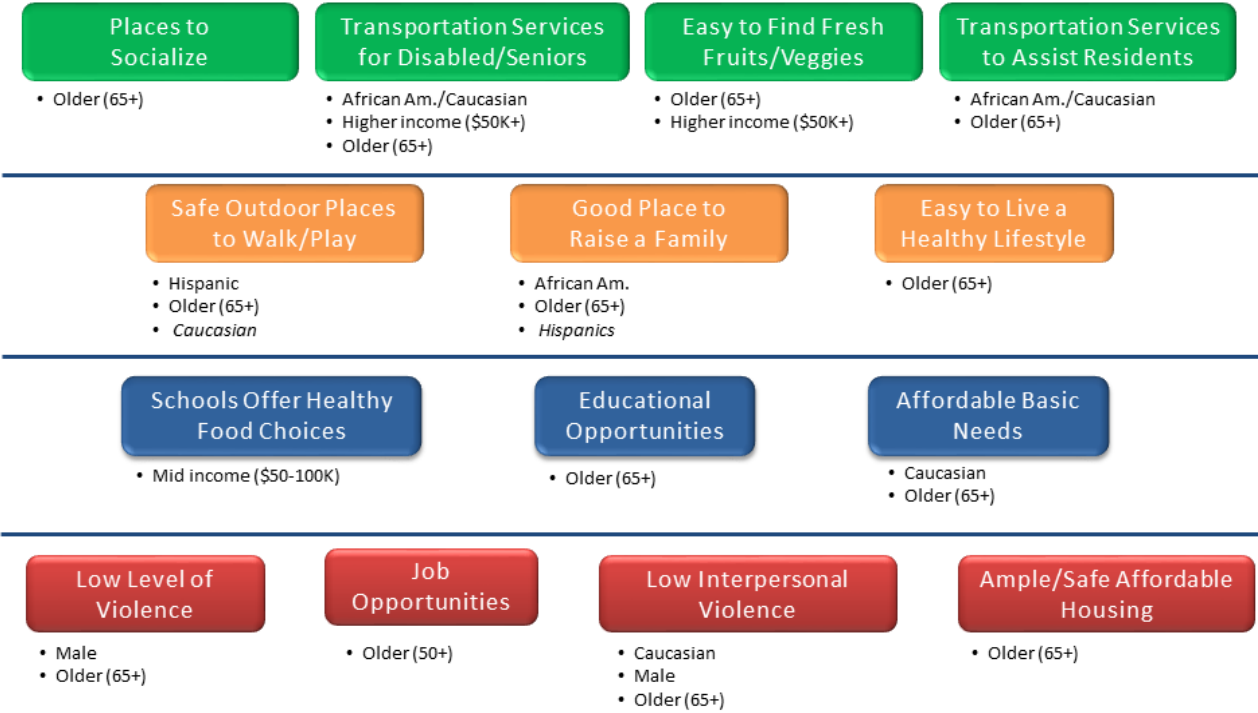
(n=466) **Top 2 Box Agreement**

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

D. COMMUNITY STRENGTHS/OPPORTUNITIES

Summary of Community Strengths/Opportunities by Subgroups

- Ratings among all ethnic groups for community services are only moderate.



(n=466) **Top 2 Box Agreement**

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

Community Strengths/Opportunities – by Ethnicity

- The Asian* segment reports more positive views of community services versus other ethnic groups.
- African Americans and Caucasians give high marks for transportation services.

	African American (n=329) (A)	Hispanic (n=37) (B)	Caucasian (n=29) (C)	Asian* (n=167)
Safe Outdoor Places to Walk/Play	30%	41% ^C	17%	66%
Good Place to Raise a Family	33% ^B	16%	28%	62%
Easy to Find Fresh Fruits/Veggies	48%	43%	55%	70%
Places to Socialize	55%	54%	62%	69%
Easy to Live Healthy Lifestyle	29%	22%	35%	59%
Low Level of Violence	18%	16%	17%	47%
Educational Opportunities	24%	24%	24%	41%
Affordable Basic Needs	17%	14%	31% ^B	52%
Transportation Services for Disabled/Seniors	51% ^B	30%	62% ^B	54%
Job Opportunities	17%	22%	28%	34%
Low Interpersonal Violence	15%	16%	31% ^A	41%
Ample/Safe Affordable Housing	14%	19%	21%	32%
Schools Offer Healthy Food Choices	27%	32%	24%	40%
Transportation to Assist Residents	44% ^B	22%	55% ^B	41%

Top 2 Box Agreement

*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

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

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

Community Strengths/Opportunities– by Age

- Older respondents (65+) are significantly more positive towards almost all community services than younger respondents.

	21-49 (n=167) (A)	50-64 (n=135) (B)	65+ (n=137) (C)
Safe Outdoor Places to Walk/Play	24%	30%	39% ^A
Good Place to Raise a Family	24%	30%	39% ^{AB}
Easy to Find Fresh Fruits/Veggies	39%	44%	61% ^{AB}
Places to Socialize	47%	51%	65% ^{AB}
Easy to Live Healthy Lifestyle	19%	24%	46% ^{AB}
Low Level of Violence	9%	16% ^A	31% ^{AB}
Educational Opportunities	22%	19%	29% ^B
Affordable Basic Needs	13%	16%	31% ^{AB}
Transportation Services for Disabled/Seniors	41%	41%	65% ^{AB}
Job Opportunities	12%	19% ^A	23% ^A
Low Interpersonal Violence	13%	14%	25% ^{AB}
Ample/Safe Affordable Housing	10%	11%	24% ^{AB}
Schools Offer Healthy Food Choices	25%	23%	29%
Transportation to Assist Residents	34%	34%	61% ^{AB}

Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.
 (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Community Strengths/Opportunities – by Gender

- Males report more positive feelings towards the degree of violence and interpersonal violence versus females. They are also directionally more positive towards the availability of job opportunities and affordability of basic needs.

	Male (n=70) (A)	Female (n=380) (B)
Safe Outdoor Places to Walk/Play	33%	30%
Good Place to Raise a Family	34%	31%
Easy to Find Fresh Fruits/Veggies	43%	49%
Places to Socialize	47%	56%
Easy to Live Healthy Lifestyle	30%	28%
Low Level of Violence	30% ^b	16%
Educational Opportunities	24%	23%
Affordable Basic Needs	27%	18%
Transportation Services for Disabled/Seniors	43%	50%
Job Opportunities	26%	17%
Low Interpersonal Violence	30% ^b	14%
Ample/Safe Affordable Housing	17%	15%
Schools Offer Healthy Food Choices	26%	26%
Transportation to Assist Residents	39%	44%

Top 2 Box Agreement

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

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

Community Strengths/Opportunities – by Income

- Those in higher income brackets find it easier to obtain fresh fruits and vegetables and are more satisfied with transportation services for seniors versus those in lower income groups.

	Under \$25K (n=93) (A)	\$25-50K (n=117) (B)	\$50-100K (n=103) (C)	\$100K+ (n=36) (D)
Safe Outdoor Places to Walk/Play	28%	27%	31%	25%
Good Place to Raise a Family	25%	30%	34%	31%
Easy to Find Fresh Fruits/Veggies	39%	44%	51% ^A	58% ^A
Places to Socialize	51%	53%	57%	50%
Easy to Live Healthy Lifestyle	25%	24%	28%	17%
Low Level of Violence	14%	15%	19%	14%
Educational Opportunities	25%	20%	20%	25%
Affordable Basic Needs	12%	16%	19%	25%
Transportation Services for Disabled/Seniors	41%	39%	52% ^B	50%
Job Opportunities	19%	15%	13%	14%
Low Interpersonal Violence	13%	13%	17%	22%
Ample/Safe Affordable Housing	16%	10%	14%	19%
Schools Offer Healthy Food Choices	25%	20%	31% ^{BD}	14%
Transportation to Assist Residents	39%	36%	41%	33%

Top 2 Box Agreement

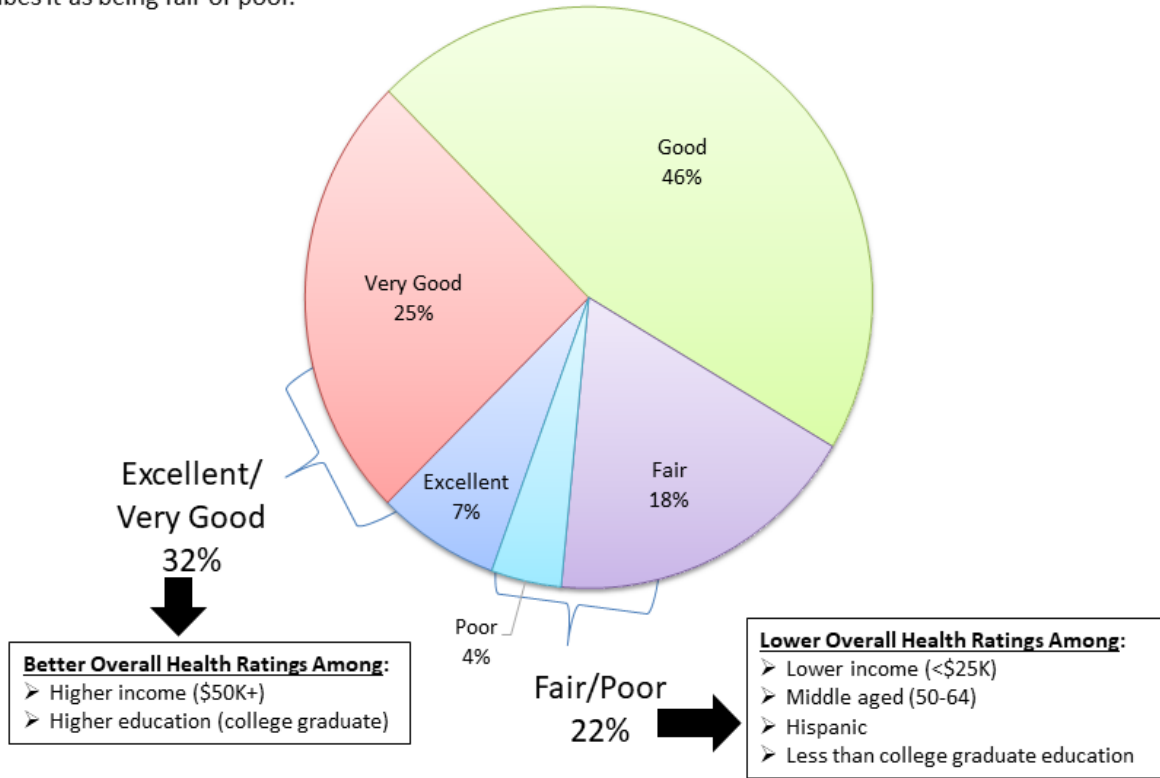
Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

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

E. PERSONAL HEALTH HABITS AND PRACTICES

Self-Description of Overall Health

- Few respondents rate their overall health as "excellent." In all, about one-third of respondents describe their health as being excellent or very good, less than half say their health is good and almost one-fourth describes it as being fair or poor.

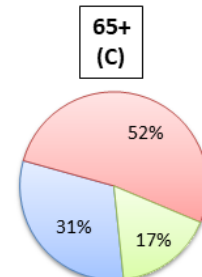
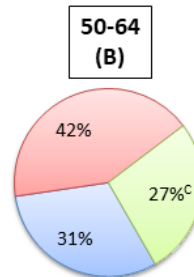
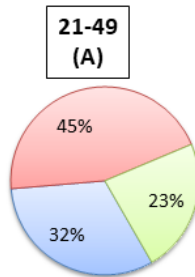
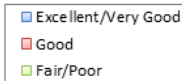


(n=466)
Q.6 - How would you describe your overall health?

Self-Description of Overall Health – by Subgroups

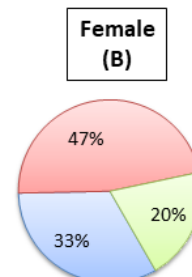
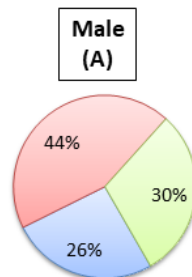
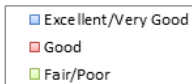
Age:

Older and younger respondents describe their overall health just about equally.



Gender:

Females describe their overall health just slightly better versus males.



Q.6 - How would you describe your overall health?

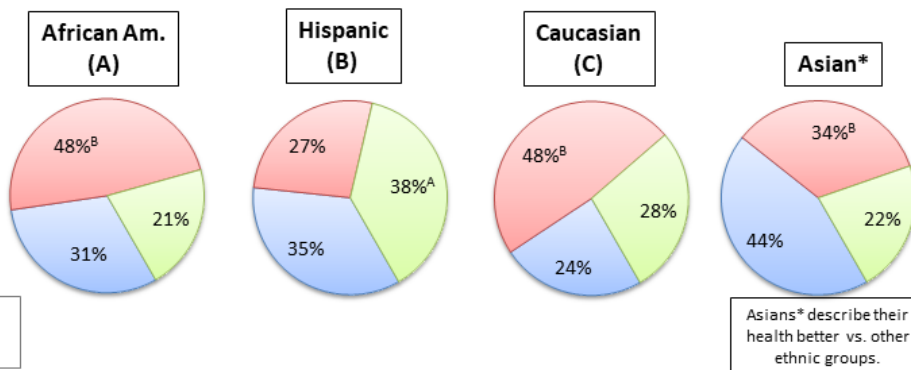
Age: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

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

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

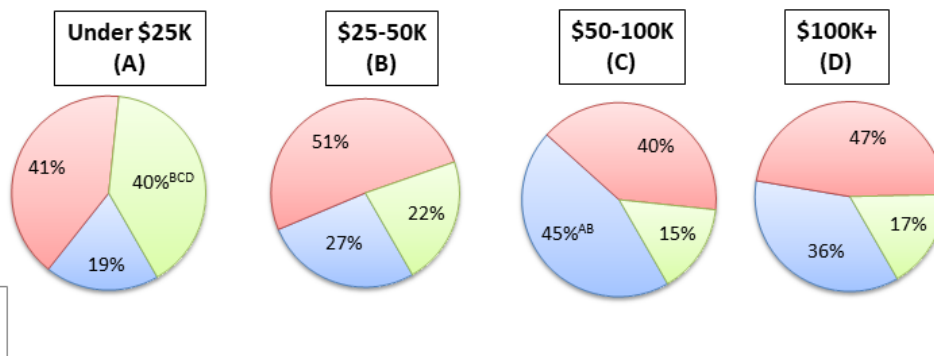
Ethnicity:

Hispanics are more likely vs. other ethnic groups to describe their health as fair or poor.



Income:

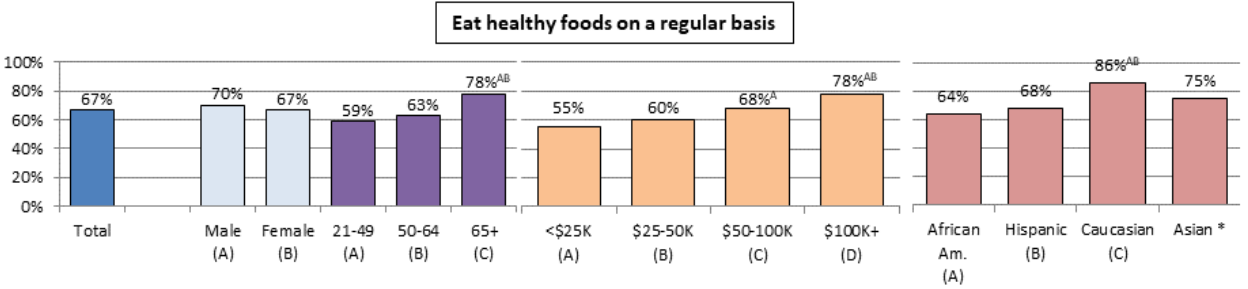
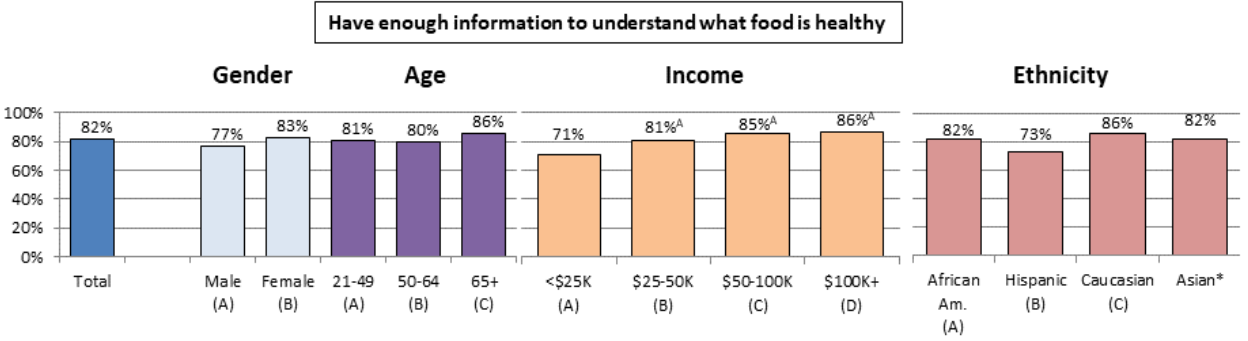
Higher income = better self described health.



*Multi-county Asian group from Essex, Hudson, Morris, Union counties.
 Q.6 - How would you describe your overall health?
 Ethnicity: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.
 Income: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

Self-Description of Understanding and Eating Healthy

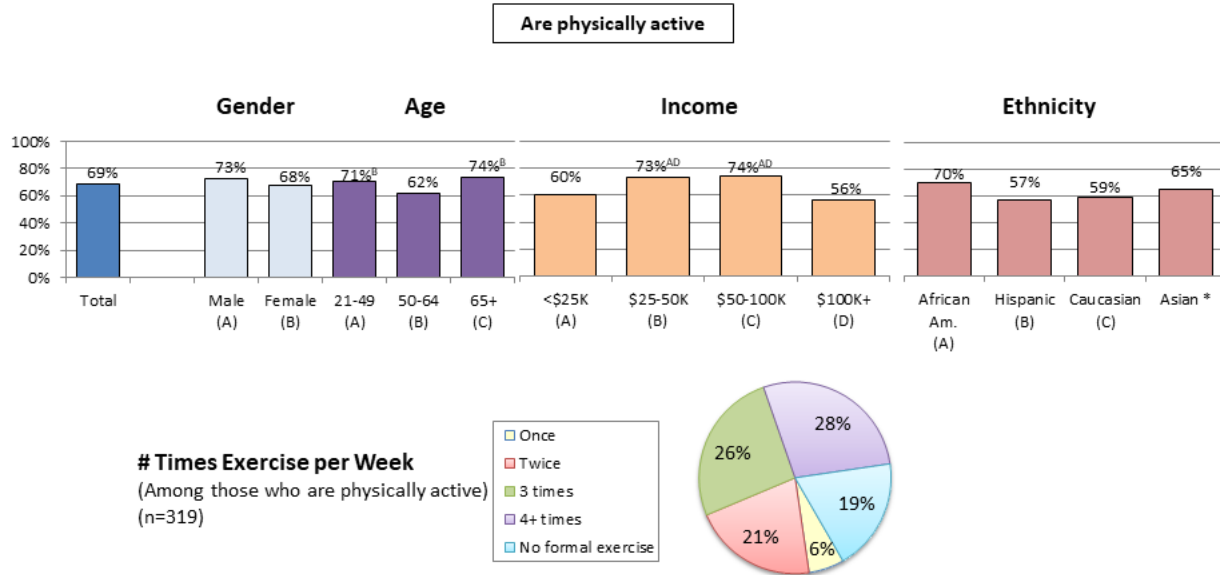
- The majority of respondents feel they understand what food is healthy, but fewer say they eat healthy food on a regular basis.
- Older respondents, those with higher incomes and Caucasians are more likely than lower income, younger or other ethnic groups to eat healthy on a regular basis.
- While African Americans claim to understand what healthy food is, they are less likely to eat healthy regularly.



(n=466)
 *Multi-county Asian group from Essex, Hudson, Morris, Union counties
 Q.11 - Do you feel that you...
 Gender: (A/B) = Significantly greater than indicated cell at the 90% confidence level.
 Age: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.
 Income: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.
 Ethnicity: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

Self-Description of Physical Activity

- In all, 7 of 10 respondents claim to be physically active. Among those who say they are physically active, over one-half say they exercise 3-4 or more times per week.



(n=466)

*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

Q.11 - Do you feel that you...

Q.11 - How often do you exercise each week?

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

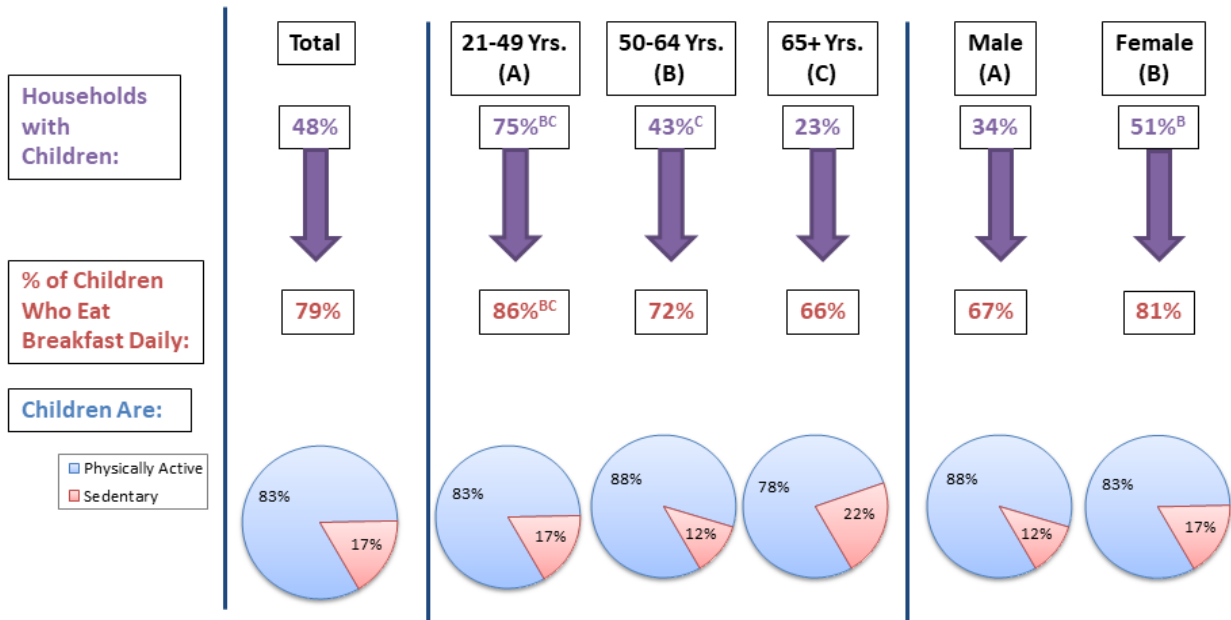
Age: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

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

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

Activity Level of Children in Household

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



(n=466)

Q.11a - Do you have any children that live with you?

Q.11b - Do they eat breakfast before the start of the school day?

Q.11c - Would you describe your child(ren) as physically active or sedentary during after school hours and weekends?

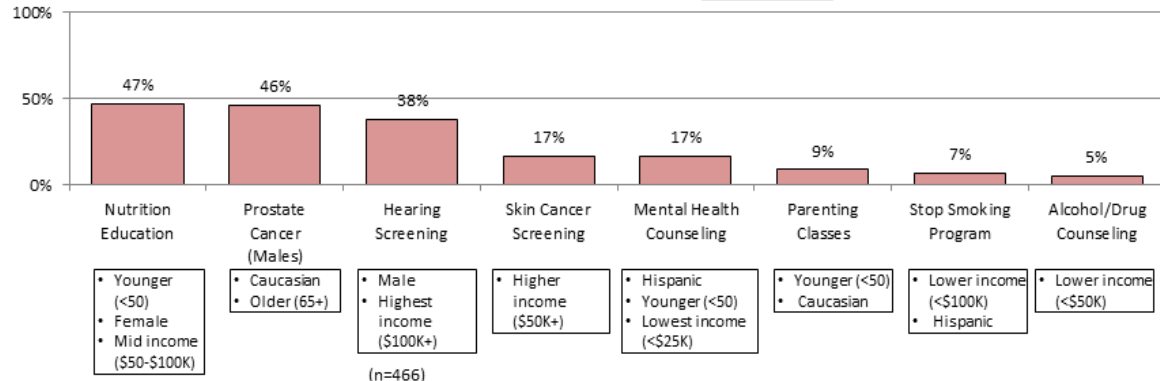
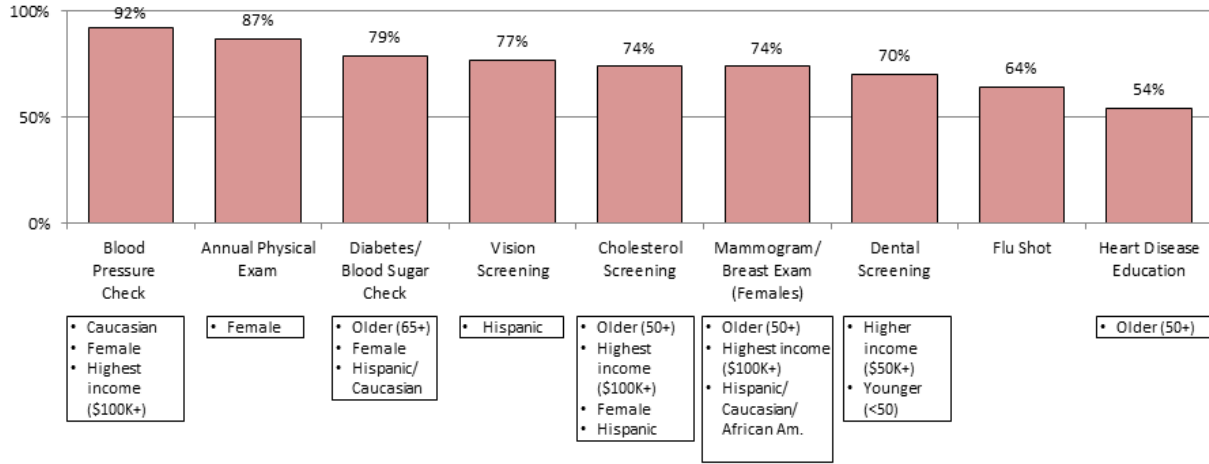
Age: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

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

F. INCIDENCE OF SCREENING TESTS AND CONDITIONS DIAGNOSED

Incidence of Screenings/Exams/Tests Past 2 Years

- In general, older and higher income respondents tend to get more screening tests than younger and lower income respondents.
- African Americans report getting some screening tests or exams, however, they report a low level of prostate screening.



(n=466)

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

Incidence of Screenings/Exams/Tests – by Ethnicity

• Caucasians report a high level, while Hispanics report lower levels of getting screening tests/exams. African Americans, Hispanics and Asians* all report low levels of prostate screens.

• Asians* also report fewer annual physical exams than other ethnic groups.

	<i>African American (n=329) (A)</i>	<i>Hispanic (n=37) (B)</i>	<i>Caucasian (n=29) (C)</i>	<i>Asian* (n=167)</i>
Blood Pressure Check	92%	81%	100% ^{ab}	85%
Cholesterol Screening	75% ^b	57%	72%	69%
Diabetes/Blood Sugar Check	78%	65%	83% ^a	70%
Heart Disease Education	56%	43%	52%	42%
Annual Physical Exam	86%	92%	86%	69%
Dental Screening	68%	73%	72%	65%
Vision Screening	78% ^b	57%	83% ^b	65%
Mammogram/Breast Exam (Females)	77% ^b	31%	83% ^b	64%
Prostate Cancer Screen (Males)	44%	20%	73% ^{AB}	41%
Flu Shot	64%	57%	72%	74%
Skin Cancer Screening	16%	16%	28%	23%
Hearing Screening	37%	41%	45%	33%
Nutrition Education	49%	51%	41%	34%
Parenting Classes	9% ^c	14% ^c	-	14%
Mental Health Counseling	17%	30% ^{AC}	10%	19%
Alcohol/Drug Counseling	5% ^c	3%	-	11%
Stop Smoking Program	8% ^b	-	10% ^b	11%

*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

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

Incidence of Screenings/Exams/Tests – by Age

- Most screening exams skew towards the older (50+) population, however, dental screenings, nutrition education, parenting classes and mental health counseling skew younger.

	21-49 (n=167) (A)	50-64 (n=135) (B)	65+ (n=137) (C)
Blood Pressure Check	90%	93%	93%
Cholesterol Screening	65%	76% ^A	81% ^A
Diabetes/Blood Sugar Check	72%	79%	87% ^{AB}
Heart Disease Education	44%	59% ^A	63% ^A
Annual Physical Exam	86%	89%	86%
Dental Screening	75% ^C	70%	65%
Vision Screening	74%	77%	80%
Mammogram/Breast Exam (Females)	54%	86% ^A	87% ^A
Prostate Cancer Screen (Males)	32%	44%	58% ^A
Flu Shot	62%	67%	64%
Skin Cancer Screening	13%	20%	16%
Hearing Screening	40%	32%	39%
Nutrition Education	52% ^C	46%	42%
Parenting Classes	14% ^{BC}	6%	5%
Mental Health Counseling	27% ^{BC}	14%	12%
Alcohol/Drug Counseling	5%	6%	2%
Stop Smoking Program	6%	8%	7%

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

Incidence of Screenings/Exams/Tests – by Gender

- Females report a higher incidence than males with regard to blood pressure, cholesterol, diabetes screening as well as annual physicals as well as annual physicals and nutrition education. Males report more hearing screens.

	<i>Male (n=70) (A)</i>	<i>Female (n=380) (B)</i>
Blood Pressure Check	86%	94% ^A
Cholesterol Screening	61%	77% ^A
Diabetes/Blood Sugar Check	67%	82% ^A
Heart Disease Education	54%	55%
Annual Physical Exam	79%	90% ^A
Dental Screening	66%	72%
Vision Screening	77%	78%
Mammogram/Breast Exam (Females)	NA	74%
Prostate Cancer Screen (Males)	46%	NA
Flu Shot	66%	65%
Skin Cancer Screening	21%	16%
Hearing Screening	49% ^B	37%
Nutrition Education	39%	50% ^A
Parenting Classes	9%	9%
Mental Health Counseling	21%	17%
Alcohol/Drug Counseling	7%	4%
Stop Smoking Program	11%	6%

Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.
 (A/B) = Significantly greater than indicated cell at the 90% confidence level. NA = Not applicable.

Incidence of Screenings/Exams/Tests – by Income

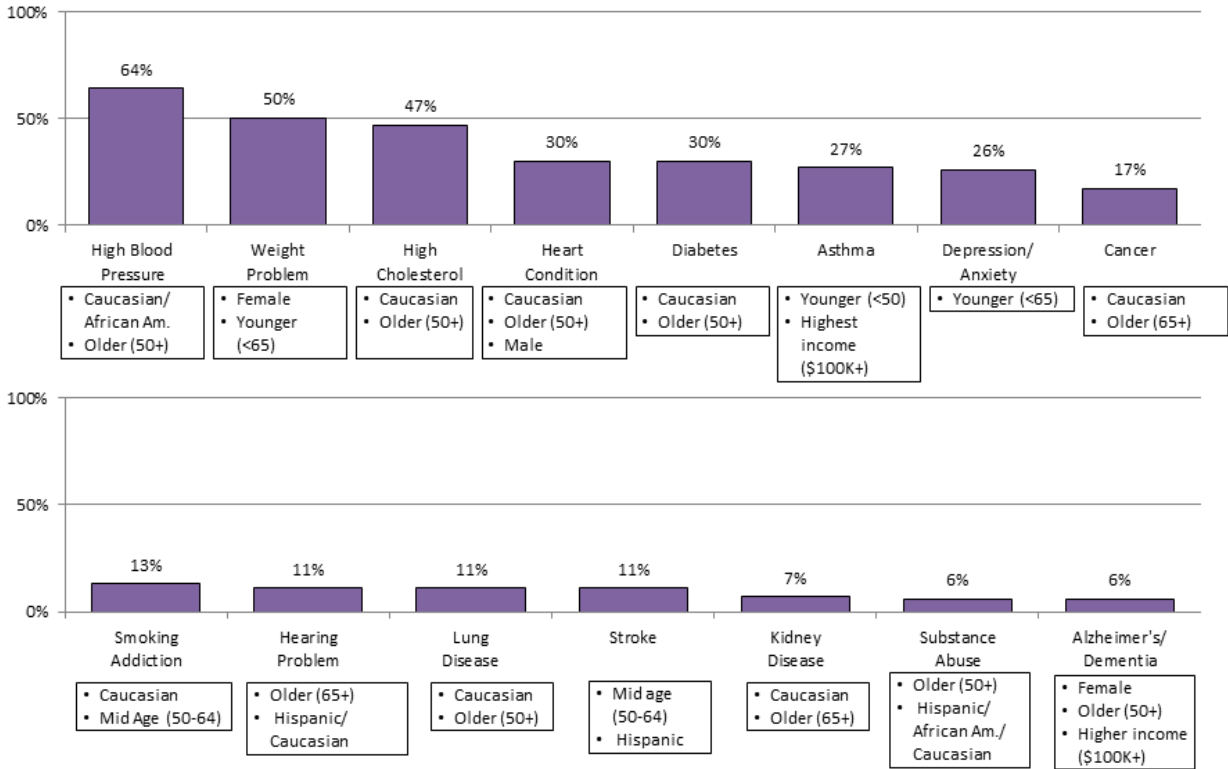
• Higher income increases likelihood to getting screening exams.

	Under \$25K (n=93) (A)	\$25-50K (n=117) (B)	\$50-100K (n=103) (C)	\$100K+ (n=36) (D)
Blood Pressure Check	90%	93%	88%	97% ^A
Cholesterol Screening	67%	73%	77%	81% ^A
Diabetes/Blood Sugar Check	79%	78%	76%	81%
Heart Disease Education	52%	50%	56%	58%
Annual Physical Exam	81%	89%	90% ^A	89%
Dental Screening	60%	66%	80% ^{AB}	81% ^{AB}
Vision Screening	74%	79%	73%	78%
Mammogram/Breast Exam (Females)	68%	68%	76%	85% ^{AB}
Prostate Cancer Screen (Males)	27%	65% ^A	50%	56%
Flu Shot	59%	68%	67%	64%
Skin Cancer Screening	9%	10%	23% ^{AB}	25% ^{AB}
Hearing Screening	28%	38%	38%	47% ^A
Nutrition Education	40%	44%	60% ^{AB}	44%
Parenting Classes	11% ^D	9%	12% ^D	3%
Mental Health Counseling	27% ^{BC}	16%	17%	17%
Alcohol/Drug Counseling	7% ^D	7% ^{CD}	2%	0%
Stop Smoking Program	8% ^D	8% ^D	8% ^D	0%

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

Conditions Diagnosed by Physician (Self or Family Member)

- Older respondents (50+) report being diagnosed with more conditions versus their younger counterparts, although depression/ anxiety and asthma skews towards the younger population.
- Males report a higher incidence of heart conditions, while females report more weight issues.



(n=466)

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

Conditions Diagnosed by Physician – by Ethnicity

- Caucasians report higher incidence of high blood pressure, high cholesterol, diabetes, heart conditions and cancer than other ethnic groups.
- Asians* report fewer weight issues and depression versus other ethnic groups.

	<i>African American (n=329) (A)</i>	<i>Hispanic (n=37) (B)</i>	<i>Caucasian (n=29) (C)</i>	<i>Asian* (n=167)</i>
High Blood Pressure	67% ^B	41%	72% ^B	49%
High Cholesterol	47%	49%	62%	46%
Diabetes	30%	30%	52% ^{AB}	37%
Heart Condition	32%	22%	48% ^{AB}	32%
Cancer	17%	14%	35% ^{AB}	12%
Weight Problem	50%	49%	59%	34%
Depression/Anxiety	23%	32%	38%	16%
Asthma	25%	38%	35%	20%
Lung Disease	11%	8%	21%	9%
Smoking Addiction	14%	8%	21%	7%
Kidney Disease	7%	5%	17%	11%
Hearing Problem	11% ^B	3%	17% ^B	20%
Stroke	13% ^B	5%	10%	11%
Alzheimer's/Dementia	6%	3%	7%	6%
Substance Abuse	6% ^B	-	7%	7%

*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

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

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

Conditions Diagnosed by Physician – by Age

- Not surprisingly, older respondents report being diagnosed with more conditions than younger respondents, with exceptions in the areas of depression/anxiety, asthma and weight problems.

	21-49 (n=167) (A)	50-64 (n=135) (B)	65+ (n=137) (C)
High Blood Pressure	44%	77% ^A	77% ^A
High Cholesterol	34%	53% ^A	59% ^A
Diabetes	25%	34% ^A	34% ^A
Heart Condition	20%	35% ^A	40% ^A
Cancer	12%	16%	25% ^{AB}
Weight Problem	51%	58% ^C	44%
Depression/Anxiety	33% ^C	28% ^C	17%
Asthma	32% ^C	27%	22%
Lung Disease	5%	12% ^A	18% ^A
Smoking Addiction	13%	19% ^C	10%
Kidney Disease	5%	5%	12% ^{AB}
Hearing Problem	7%	11%	18% ^A
Stroke	7%	17% ^A	12%
Alzheimer's/Dementia	3%	10% ^A	8% ^A
Substance Abuse	3%	6%	9% ^A

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

Conditions Diagnosed by Physician – by Gender

- Males report more heart condition diagnoses while females report more weight problems.

	Male (n=70) (A)	Female (n=380) (B)
High Blood Pressure	63%	65%
High Cholesterol	46%	49%
Diabetes	27%	32%
Heart Condition	44% ^B	28%
Cancer	19%	17%
Weight Problem	40%	53% ^A
Depression/Anxiety	29%	26%
Asthma	21%	28%
Lung Disease	14%	11%
Smoking Addiction	9%	15%
Kidney Disease	9%	7%
Hearing Problem	17%	11%
Stroke	11%	11%
Alzheimer's/Dementia	3%	7% ^A
Substance Abuse	4%	6%

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

Conditions Diagnosed by Physician – by Income

- Few differences exist in conditions diagnosed across income levels.

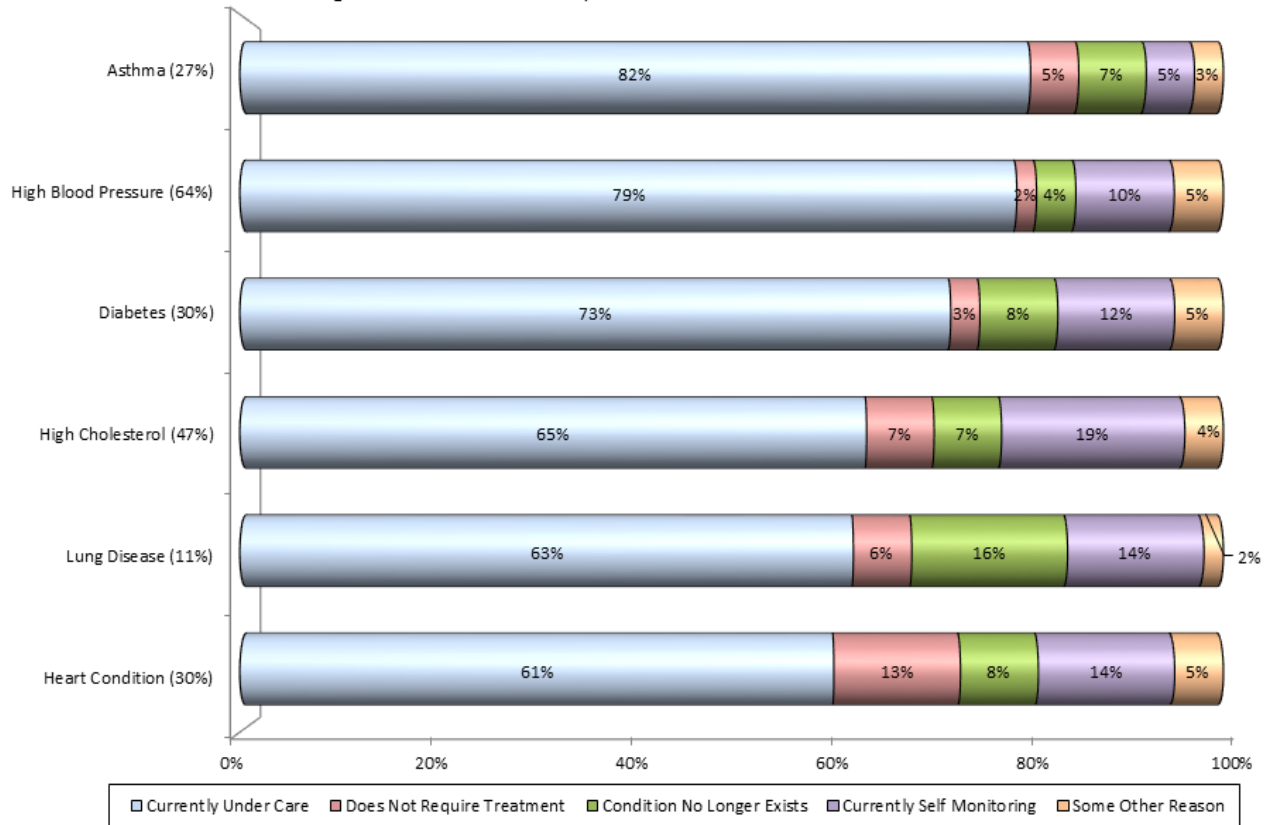
	<i>Under \$25K (n=93) (A)</i>	<i>\$25-50K (n=117) (B)</i>	<i>\$50-100K (n=103) (C)</i>	<i>\$100K+ (n=36) (D)</i>
High Blood Pressure	59%	67%	63%	72%
High Cholesterol	47%	48%	44%	47%
Diabetes	30%	32%	27%	31%
Heart Condition	32%	28%	27%	39%
Cancer	15%	18%	18%	22%
Weight Problem	46%	52%	53%	50%
Depression/Anxiety	28%	32%	22%	25%
Asthma	27%	21%	28%	36% ^B
Lung Disease	11%	9%	11%	14%
Smoking Addiction	13%	15%	12%	19%
Kidney Disease	8%	8%	9%	6%
Hearing Problem	8%	15% ^{AC}	8%	22% ^{AC}
Stroke	10%	12%	10%	14%
Alzheimer's/Dementia	2%	6%	7%	14% ^A
Substance Abuse	3%	9% ^A	4%	8%

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

G. ADDITIONAL DATA

How Conditions Are Being Managed

- The large majority of those suffering from asthma, high blood pressure, diabetes, high cholesterol, lung disease and heart conditions are currently under care for their conditions. Some report they are currently monitoring these conditions on their own, the condition no longer exists, or it does not require treatment.



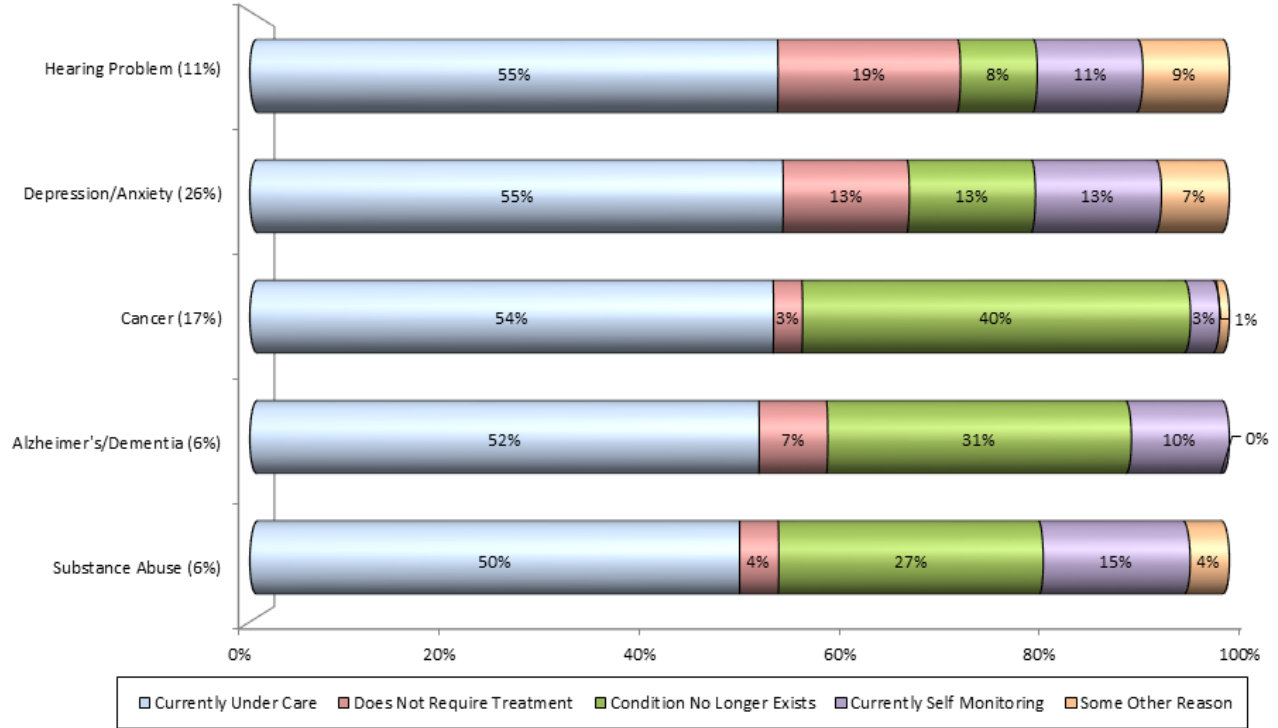
NOTE: Multiple mentions.

Q.9 - Are you/household family member currently under care for this [CONDITION]?

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned? Would you say it is because...

How Conditions Are Being Managed – (continued)

- Just over half of those diagnosed with hearing problems say they are currently under a doctors care, with some saying their condition does not warrant treatments.
- While a slight majority of those diagnosed with depression/anxiety are currently under a physicians care, some say they are monitoring it on their own, it doesn't require treatment or the condition no longer exists.
- For cancer, Alzheimer's and substance abuse, about half of those diagnosed report being under a physicians care while a large minority say the condition no longer exists.



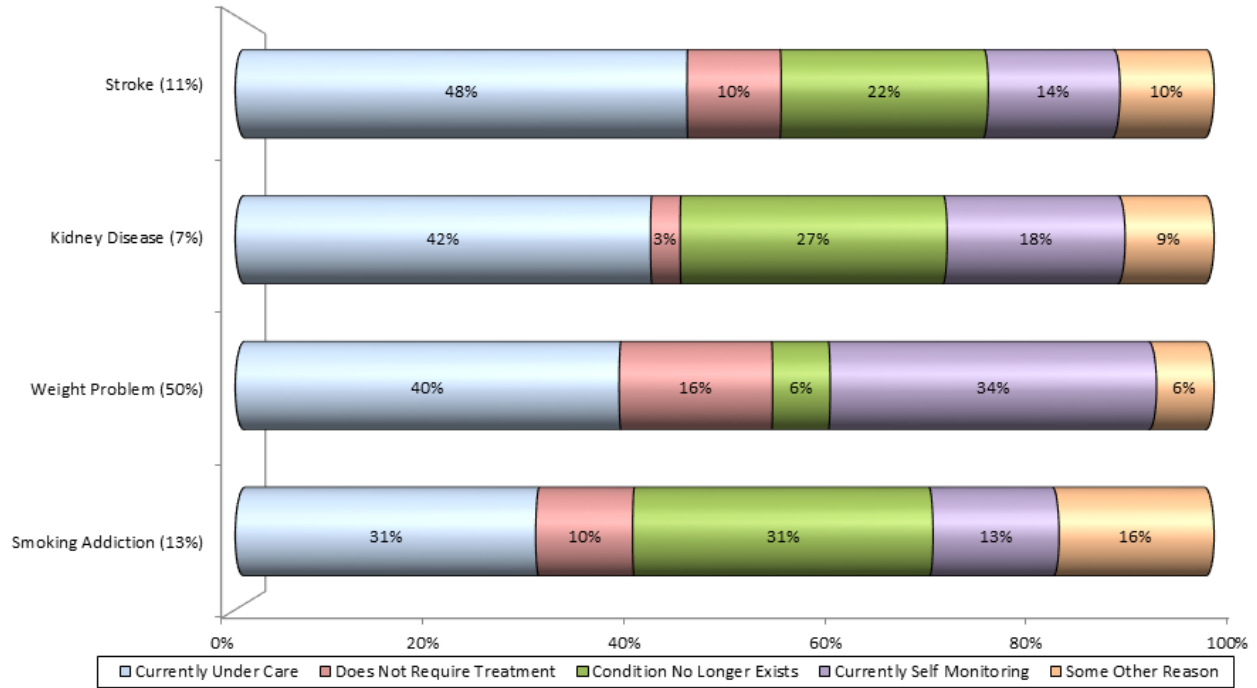
NOTE: Multiple mentions.

Q.9 - Are you/household family member currently under care for this [CONDITION]?

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned? Would you say it is because...

How Conditions Are Being Managed – (continued)

- Fewer than half of those suffering from a stroke or kidney disease say they are currently under care, with many saying the condition no longer exists, and some saying they are self-monitoring their condition.
- For weight problems, 4 of 10 say they are under a physician's care. Over one-third say they are self-monitoring, while some say their condition does not require treatment and no longer exists.
- Of those reporting a smoking addiction, roughly one-third are under care, one-third say the condition no longer exists, with the remaining who say they are self monitoring, does not require treatment or some other reason.



NOTE: Multiple mentions.

Q.9 - Are you/household family member currently under care for this [CONDITION]?

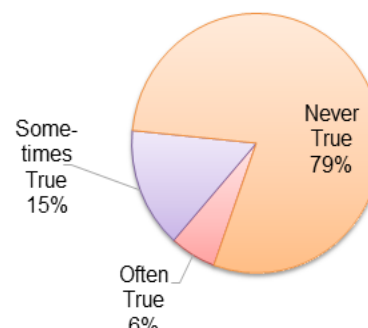
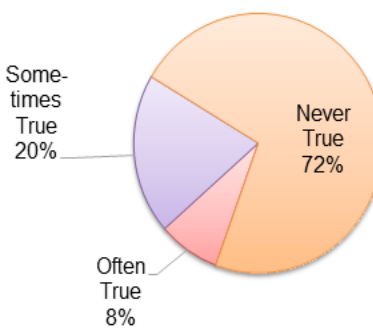
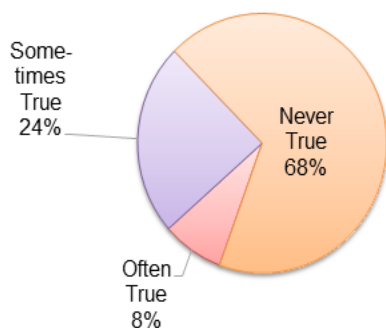
Q.10 - Why are you/household family member not under current care for the [CONDITION]

Statements About Ample Food/Food Assistance Programs

"We worried whether our food would run out before we got money to buy more."

"The food that we bought just didn't last and we didn't have money to get more."

"We rely on a community supper program, food pantry or meal assistance program to supplement our household."



Those who agree with these statements tend to be:
lower income, younger and Hispanic.

(n=466)

Q.12 - Please read the following statements that people have made about their food situation. For each one, indicate how true the statement was for your household over the last 12 months.

Physician Habits

- Older respondents are significantly more likely versus their younger counterparts to visit the same doctor or group every year or two for a check-up, while younger respondents are more likely to visit the doctor only when sick or need medical care.

	Total	Age			Ethnicity			
		21-49 (A)	50-64 (B)	65+ (C)	African Am. (A)	Hispanic (B)	Caucasian (C)	Asian*
		%	%	%	%	%	%	%
Go to Dr/group every year or two for check-up	73	67	68	85 ^{AB}	70	75	62	77
Go to Dr/group only when sick/hurt	26	31	26	23	31	25	43 ^A	23
Go to Urgent Care or ER when need medical care	9	15 ^{Bc}	7	4	3	9	14	11

(n=466)

NOTE: Multiple mentions.

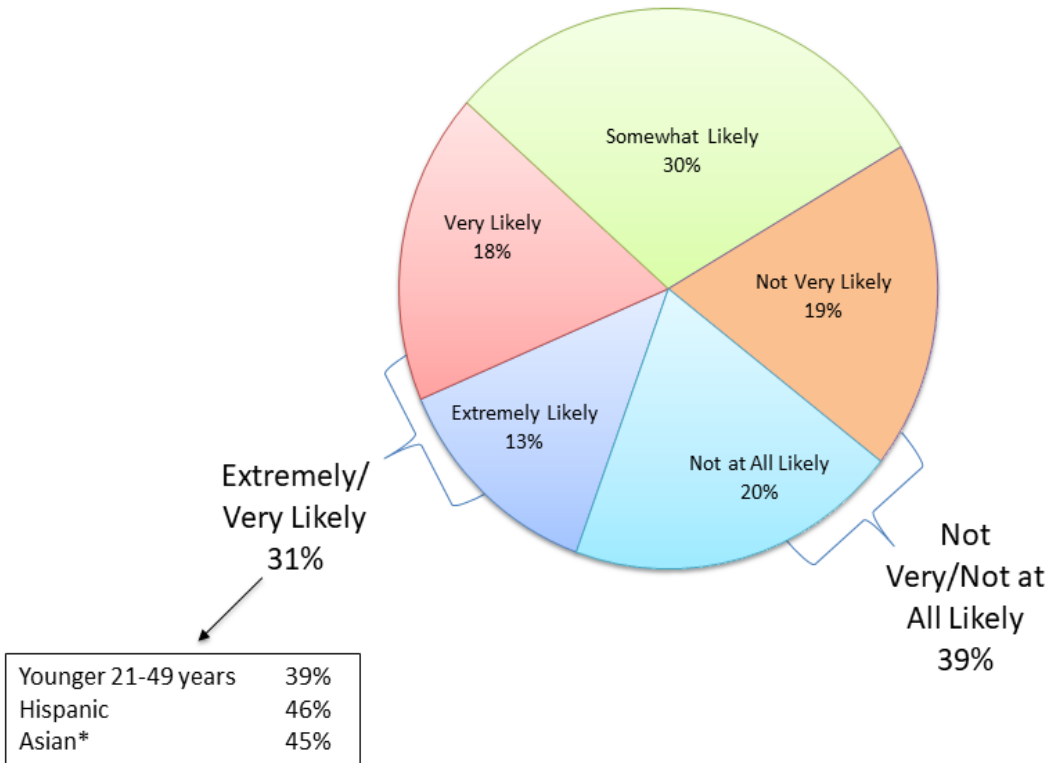
*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

Q.13 - When you need medical care, which of the statements below best describes you?

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

Likelihood of Accessing Medical Care Virtually

- Almost one-third of residents surveyed indicated a strong likelihood of accessing medical care virtually, highest among younger and Hispanic respondents.

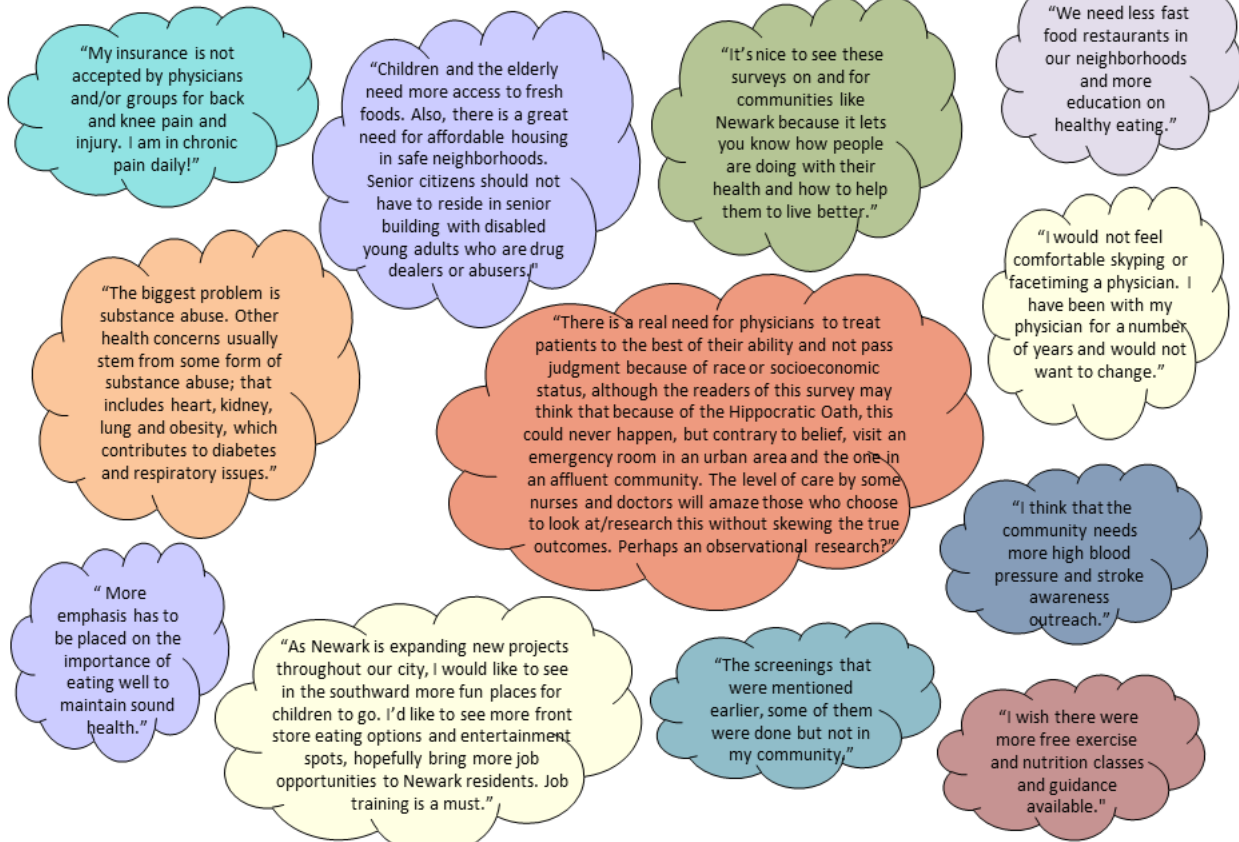


(n=466)

*Multi-county Asian group from Essex, Hudson, Morris, Union counties.

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

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



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

4. FOCUS GROUP DISCUSSIONS

During February 2019, two focus groups were held. One focus group was with community physicians, employed physicians, and medical residents. A second group was held with men living or working in the community. These two groups were chosen based on discussion among Oversight Committee members regarding groups from whom we wanted additional insights. A summary of findings from each group is presented below:

A. PHYSICIAN FOCUS GROUP

Most Pressing Problems

When asked about the most pressing health issues, physician spoke about three main issues; the degree of co-morbidity in the patients they treat, patient follow-up, and mental health issues. To a large extent, the issues of co-morbidity reflect the degree to which patients tend to be seen episodically and not on a regular care basis due to poor access to primary care, health literacy and other social determinants of health.

Co-Morbidity

- *“Our patients have multiple co-morbid conditions which impact their treatment how they tolerate treatment, the selection of treatment and their outcomes.”*
- *“The average degree of disease progress at the time of first visit is much higher in this community than in others.”*

Patient Follow-up

- *“I see a lot of non-compliance with taking medication or even follow-ups, maybe they don’t/can’t afford it . . . there is a whole lot of stuff, maybe they don’t have insurance . . . So, instead they show-up in the ED. Things like that I see over and over.”*
- *“Non-compliance is non-patient-centered word . . . patients have lots of reasons for not taking their medication – lack of insurance, transportation, the medications make them feel bad . . . we need to address issues from the patient’s perspective.”*
- *“Complex patients, with complex diseases, taking complex medication regimens are three things that don’t go well together – plus social determinants of health and poor access to primary care . . . I see that as a big problem here.”*
- *“Patients should have access to primary care in a way that fits their lifestyle and perhaps 9-5 may not be the way.”*

Other issues discussed that impact patient follow-up included the lack of a system to treat urgent care, and the lack of coordination between getting patients from the ED into primary care. Two of the main system issues mentioned included the lack of hand-offs to transition patient from ED to primary care, and the absence of a process to get patients without insurance plugged into the system easily.

- *“It seems like if a patient calls here on an evening or weekend, they are told to go to the ED rather than having a primary care attending physician answer the phone and say, ‘That sounds like an upper respiratory infection, I can see you tomorrow.’”*
- *“The system is against us . . . it’s not geared toward making a hand-off. So there is no process, so there are roadblocks everywhere; so how do you get a patient who doesn’t have insurance plugged*

into our system? We don't have a process for that . . . everyone is overwhelmed with the work at hand."

- *"The system is also not geared to making us successful . . . the system we have is going to give us the results we have."*

Mental Health

- *"We have a lot of patients that come through the ER and we stabilize the patient and see if they are at risk for harming themselves or someone else, then we refer them to someone else, but then we have those who are not in danger – where do you send them?"*
- *It's the same thing on the inpatient side. People clearly have some mental health issues whether it's depression or personality disorder but if they're not meeting crisis mode, they say follow-up as an outpatient . . . and, when they can't get an appointment, or by the time they get it, they don't show up . . . There are a lot of recurrent admissions."*

Sufficiency of Health Care Resources

Asked about the sufficiency of health care resources in the City, everyone agreed that there was a lack of primary care providers. This shortage seems to be particularly true with regard to the number who will treat Medicaid or Medicaid Managed Care patients. Physicians explained that the economics of small medical practices is such that it's not affordable to care for these patients. In addition to the lack of providers, participants addressed other issues as well.

- *"Even if a care provider exists, do they have hours of operation that are useable and is it easy to get there?"*
- *"I'm concerned that the practices that do accept Medicaid may have floods of people because there is no place else to go and then the time and attention a patient gets may not match what they need."*
- *". . . when not enough time is spent with a patient, the communication breaks down."*
- *"I would say as a systems person, we have a crisis of episodic care that the design of the system in the State of New Jersey (in my opinion) seems to be hospital-based, hospital-oriented; the utilization of the ED as primary care seems to be very common; and it's hard for patients to access our system."*

Other concerns mentioned included an underdeveloped ambulatory system of care and a lack of multidisciplinary practices.

- *"Other academic systems that I've worked in – national systems – what I've seen, but not as much here is multidisciplinary practices; so here we have siloed practices that work in these silos and for these complex diseases increasing the number of physicians doesn't help you; you have to increase the nursing, the nutritionist, the social worker, the mental health provider and the case manager. Those are the models that I've seen succeed."*
- *"I'm not just talking about health care but for providing care for families. If I am a woman with a family I don't want 4 practices; I want to go to one place where I can get all of our care."*

Participants believe that more needs to be done with technology to leverage patient contact. Suggestions included using smart phone technology to text message appointment reminders to patients and making greater use of telehealth services.

- *"Instead of buying a van to bring patients to my office, why can't we just invest in telehealth."*

Services Most Difficult to Access

When asked about what services were particularly hard for patients to access, physicians identified the following:

- Mental Health
 - Maternal/Infant Health
 - Rheumatology
 - Dental Services
- *“Dental is a big thing, starting with pediatrics. The adults don’t have coverage which is bad and there are studies that show poor dental health impacts other diseases.”*

Perception of Health Care Providers

Asked whether or not patients trusted their physicians and believed they were getting care that was comparable to that in other areas, physicians indicated they believe that patients were comfortable and satisfied with them, but they were not satisfied with long wait times and short visits due to an overwhelmed system.

- *“Part of the problem is the wait time is horrible . . . they don’t feel well and there is little you can do when you have someone waiting 4 hours to make them feel it was a good experience, even if you save their life.”*
- *“I feel they think you’re a good doctor, but I don’t think they think the experience is very good.”*
- *“And, a big issue in the hospital is the call bell.”*
- *“Look, when you are sick you want to be healed and medicine is not the only healer; so nurturing is healing. Going into a room that is noisy, or that’s not clean, it’s not just the disease process that we are trying to comfort.”*

Additionally, many felt the issue of trust went beyond the level of individual providers but was more of a systemic issue related to history, culture and racial issues.

- *“I don’t know how to rate the degree of suspicion of patients. I haven’t lived here very long, but Newark certainly has a long history of that.”*
- *“I don’t think that patients become distrustful of the system because of not being satisfied with their care or their provider. It’s a bigger conversation, outside the individual providers. There’s culture, there’s history, there’s . . .”*
- *“I’m not sure. So, when they get down to the individual level, I think there is much more trust; than on the system level.”*

Physicians also noted that being allowed visitors 24 hours a day went a long way toward improving patient experience in the hospital and gave family members greater insight as to how patients were cared for.

- *I really think that patients are scared, family members are scared, and when their family stays 24 hours and is allowed to be there . . . they feel respected and their fears and concerns are addressed.”*

Adequacy of Primary Care Delivered

Physicians generally felt that the system was overwhelmed by the needs of complex patients with comorbid medical and behavioral health problems. Additionally, there were few specialists to rely upon and therefore, primary care physicians were oftentimes managing multiple conditions, often within an insufficient amount of time to treat patients.

- *“We definitely don’t do enough to screen patients for cancer – for many reasons – capacity, lack of insurance, patient education. . . . We struggle with colonoscopy, especially if they don’t have insurance.”*
- *“Primary care and specialists need to be able to co-manage patients, not practice in silos.”*
- *“These patients have a million psychosocial medical problems. Fifteen minute visit? Ha! Ha! . . . it doesn’t take 15 minutes. So, how do you work that, you know, you either work later or work over or whatever, or you start to cut somewhere else. I guess it would help if you could get more people, APNs . . . But, it’s not possible . . .”*
- *“I think we do a better job here of chronic disease management and not episodic care on the primary care side, if they are in the system.”*
- *“What’s happened is that the definition of primary care provider is not just prevention, we’re secondary prevention and tertiary care. So, now I’m managing all the preventive aspects of somebody by age and managing their complex diabetes. I may be managing their rheumatoid arthritis because there is no rheumatologist. I’m managing their depression, their heart failure and then Lord forbid they come in with a cold. And that’s what they want to talk about. Now their chronic disease management visit that I planned to work on diabetes is totally thrown off because I have 15 minutes.”*

Awareness of Good Health Habits

Participants generally believe that residents are aware of good health habits but don’t practice them. In large measure, this seems to be due to a lack of healthy choices in the neighborhood and with the need to balance work and maybe pay against going to the doctor and getting follow-up care or balancing the cost of buying fast food against the time, effort and cost of eating healthy foods.

- *“Yea, I mean you could just look at this community, where are they going to buy their food . . . there isn’t a place where you can go to buy fresh fruits and vegetables.”*
- *“Although the food here (in the hospital) is cheap, what they sell from the greenhouse . . . but it’s in the hospital, it’s not out. You have to walk into the hospital and it’s only 11-4, so if you are working, you’re out of luck.”*

Additionally, providers indicated that health literacy was an issue that needs to be addressed for all patients not just those that might be disadvantaged because when people become ill, they don’t hear all they are being told. Suggestions for dealing with this included:

- *“I would love to see processes whereby patients are discharged and someone reviews the plan with you.”*
- *“We need cultural competency to talk to our patients; understand what good health means to them.”*

Other Issues Impacting Health Issues in The Community

There was overall agreement that safety and threats of violence were major health and social issues facing the community.

- *“I think patients are afraid to go out and walk around.”*
- *“Crime is also an issue. The crime and perception of crime is an issue about why you don’t have enough primary care doctors, because they are concerned about their safety and their staff’s safety.”*

B. MEN’S HEALTH

Most Pressing Health Issues

Many of the issues mentioned by participants centered around the subject of diabetes and obesity, and the lack of healthy eating habits. For many, growing up in poverty meant you ate whatever was put in front of you. Those who grew up playing athletics often feel they can still eat anything even though their level of exercise is not the same. According to participants, another dynamic influencing healthy eating is lack of healthy food options, especially in inner cities where fast food and bodegas predominate, and where these choices offered less expensive options.

- *“McDonald’s has a dollar menu – when salad costs \$8 and when you have to provide for your family, you got to cut in certain areas. So being able to buy healthy options is difficult at times.”*
- *“We have Chicken Shacks and Chinese food and McDonald’s or Burger King and that’s all we have; then what are we going to do? I mean especially if you have a family – you can feed a family of four for \$20 at McDonald’s, that’s not always the best option. And you do that three, four times a week, couple that with not exercising, it’s difficult.”*

The subject of many men growing up playing athletics and thinking they were Superman was also discussed.

- *“We thought we can eat anything, do anything. We got stomachs of steel and we would do that as young athletes, you know because we didn’t think any of this stuff would happen to us.”*

The impact of education or the lack of education was also mentioned. Men felt that culturally and because of growing up in poverty, none of them had an opportunity to learn about options until they were adults or had someone in their lives that influenced them through education. Others felt that often who delivered the message about healthy lifestyles was important. For example, young males hearing a message from a coach or trusted mentor would carry more weight than hearing it from a nurse or other health professional.

- *“I didn’t have a father growing up. So, these are things, these are the conversations I had with my doctor . . . So, going forward it should be someone from the district here, particularly from the health office. Someone from the City. I know they have a health department so we can start educating young people on healthy eating options and then someone from the City can say we need to bring in healthier options for our young people.”*
- *“. . . in elementary school we thought the gym teacher was The Man because; hey, whatever he said you did . . . So more of us need to get involved . . . As coaches and mentors, they will listen to more of us.”*

- *“That’s the culture; that’s the problem we had as men . . . something literally had to fall off before you would go to the doctor. And, I’m just as guilty. I am an educated man but I didn’t go to the doctor regularly until I met Dr. _____.”*
- *“So, sometimes it’s let sleeping dogs lie.”*

The men also discussed their fears and concerns about seeking care.

- *“Once the health care system gets ahold of you they don’t want to let go . . . they give you medicine for this . . . a specialist for that. Most men are not going to spend the time. After one or two visits; they say I got hypertension, I can’t spell hypertension . . . Big Mama had hypertension and home remedies.”*
- *“They probably couldn’t afford or didn’t want to hear that there is a problem.”*
- *“As men we don’t like to come to the hospital or doctor . . . when we do come its an emergency. It was not a follow-up appointment. I’m not coming because we diagnose ourselves . . . We go on WebMD and say this is what I’m feeling, and this is what it is. And I’ve diagnosed myself and then I’ll find one of Grandma’s remedies and work with it. And I think, last but not least, affordability – this medicine, if they don’t give you the coupons and the sample, how are you going to afford it. So, not only are men afraid of being diagnosed now once you are diagnosed, how can I handle going back and forth to the doctor?”*
- *“A lot of us are under stress . . . whether you’re a pastor, a community person, all of us have a lot of stresses in our lives that we don’t know how to deal with because as men we are supposed to be the strong one. So, that’s why you see a lot of men die at 44, 39, 56. And they say it was so young. But if you don’t have the fortitude or access to affordable care, then that’s not a priority until it’s an emergency.”*

Men mentioned concerns over their sexual health as a reason for delaying or not getting care.

- *“Some of my brothers in church came down with prostate cancer and the first thing they worried about was their sexual health.”*
- *“A lot of men won’t come to the doctor, especially if they have high blood pressure or heart disease. They could have splitting headaches, but if they got a young girl at home they’re not going to mess that up (over fear that medication will impact their sex drive or they won’t be able to continue taking Viagra).”*

The issues faced by young people were important to these men as many were teachers, pastors and fathers, and believe that the problems that young people faced growing up in this area were so traumatic that it was hard for young people to see health issues as a priority. Therefore, most of the group felt that strategies to promote good health needed to be targeted to specific age groups and delivered in a patient-centric manner. In their view, young people needed education while adults need strategies that dealt with fear and access to care.

One of the men suggested that one way to influence men toward living healthier lives was to appeal to men’s competitive nature through health challenges in which you set a goal and were accountable for achieving that goal. He related his experience with the “Beth Challenge”. He also believes that being part of a communal challenge helped him achieve his goal.

- *“Well, younger guys they don’t think of that (getting sick); it’s not very important to them. And so, when we’re rippin and running the last thing you’re thinking about is trying to go to the doctor.”*
- *“And if you don’t think you’ll live past 21, a doctor is not a priority for you. You think you are going to get shot or stabbed or beaten; you’re not going to the doctor.”*

- *“And there’s the street pharmacy . . . So, if I feel something coming on and want antibiotics, I know where to go without seeing a doctor . . . so we have to teach young people it’s OK to go to the doctor and get proper check-ups. So, it’s education and its fear (depending on the age group).”*

The men also indicated that efforts needed to be geared to systemic changes in education, access to better jobs, access to health care in order for things to change. The kind of change that requires the involvement of government, churches, community-based organizations and counselors to create a safety net.

Access to Care

Most of the discussion around access to care revolved around long wait times in clinics or the ED, transportation barriers and school-based clinics that forced families to divulge financial information or residency information that became a barrier to undocumented parents.

- *“They implemented clinics in the schools . . . they weren’t free. You had to divulge information about your financial situation and oftentimes . . . when an undocumented parent didn’t want to divulge certain information, they were denied services.”*
- *“I tried to go to Beth Prime, the wait was too long. I could not go there and gotta wait three hours to be seen, when I could get into my car and go somewhere else . . . I got transportation. I can’t imagine if somebody didn’t really have transportation.”*
- *“For a lot of our people the emergency room is their primary physician.”*
- *“Well we know that having physicians in the City is a problem because they aren’t opening offices here.”*
- *“The volume of people who need these services is great.”*

Mental Health and Substance Use

Mental health and substance abuse were both acknowledged as being serious health issues in the City of Newark and ones which were manifestations of living in poverty, of living in a constant traumatic state, gang violence, and in situations with a broken family structure and a lack of safe havens.

- *“Our kids are living in a traumatic state. It is not normal to be 16 years old and be shot in the head because you went to a vigil for another 18 year old who died in a car crash. . . . I buried 71 kids (in 23 years of teaching), and that is not normal.”*
- *“Kids come to school and they have issues and doing their homework or that art test isn’t on the agenda right now. What am I eating? Where am I sleeping tonight? I can’t go home because of what’s going on in my house.”*
- *“We have a major gang problem. They took off the colors but the problem still exists. I have kids that come to school by Uber because they’re coming from basketball or New Community. They can’t be seen in certain areas.”*
- *“Cigarettes we know that’s bad for you; everything we eat is bad for you; so everything is a choice, so therefore, we know that drugs and alcohol . . . that’s a macho thing, we know coming up in Newark that’s part of the process, we just have to get through it; whether it’s through sports or whatever. Unless you were just a cornball and nobody wanted to be that. If you wanted to be part of things in school, you might have to sometimes try it, and sometimes it takes just one time, so we know drugs and alcohol impairs your mind; it’s just that now the percentages in Newark are higher, in certain areas like especially the South Ward.”*
- *“Kids that smoke weed, or go to school on the jungle juice, they have a moment where they can forget about what’s going on at home.”*

- *“I keep saying how complicated the issue is . . . Right . . . because what we are experiencing in terms of the fracturing of the family structure . . . Um, as long as there continues to be a fracture in the family structure, right, there is going to be a lot of anxiety, you know? And, there is going to be a lot of mental health issues, you know. I mean, it’s not just anxiety when there’s no Dad in the home . . . There is anxiety when Mom’s got to work two jobs and they got to come home and let themselves in and be alone . . . and they are worried about Mom coming home late and whether or not she is going to get home safe. . . .”*
- *“Single parent households . . . society tries to act as if it’s normal and it should not be an issue . . . but the truth is . . . it is an issue and it breeds a lot of what we are seeing. Especially with the mental health and obesity because kinds are left to fend for themselves.”*
- *“And another thing, there are just too many messages out there; too many mixed messages . . . even when it comes to healthy eating . . . you don’t know if the information you grab off the internet is clinically researched.”*

While it was indicated that students and others often reach out for help, be it in the schools, through counselors, or in the ED or hospital, the services available are not culturally appropriate and oftentimes there are no available rehab beds, or patients experience long waits for outpatient services.

- *“I am not going to open up to you especially if I am a young man. The majority of the people who work in the schools are young white women. You don’t know me; you haven’t been through what I have; you don’t live in my area.”*
- *“It’s more a lack of services. People want to go to Rehab, but beds are really limited and even for people in crisis, whether it’s juveniles or adults, the beds are very limited throughout Essex County.”*

The group also discussed the legalization of recreational marijuana and its impact on the City and its residents.

- *“How in the world are we going to convince folks that they need to do less drugs not more? Right. But then we got the State that’s tried to legalize marijuana and act as if marijuana is not one of the gateway drugs.”*
- *“Colorado has seen an increase in calls to poison control for kids 3-8 or 3-10, but here’s the disconnect . . . that’s the one group that hasn’t seen an increase in ED visits. They know if they take a kid that’s 7 years old to the emergency room whose ingested marijuana, then DYFS is going to be knocking on their door.”*
- *“We are spending all this money on the opioid crisis, but we want to legalize a drug.”*
- *“The other thing they haven’t anticipated is this: there is a difference in the levels of THC between medical marijuana and recreational marijuana. But statements are already being made that even if you taken recreational marijuana it has medicinal principles in it. So, what folks are going to start to do is they are going to start figuring that they don’t need to go to the doctor.”*

Questions were raised as to why hospitals and others were not speaking out about the issue or researching it and providing information about it. Many participants felt that society was sending out mixed messages with respect to the legalization of marijuana and the fight against opioids and smoking. There were also concerns raised about how it would impact their neighborhoods.

- *“ . . . There are already white neighborhoods who have voted there will be no dispensaries in their towns. What I want to know . . . if they voted not to sell it, is it going to be OK to grow it; cause they’ll grow it and send it to Newark.”*
- *“The reality is many people even in our churches want to escape reality and nobody wants to deal with . . . the pink elephant in all our rooms regarding a whole lot of different subjects. If I act like it’s not there, it’s not in my house, then it does not exist.”*

5. ESSEX COUNTY/SERVICE AREA HEALTH PROFILE

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

A. *ESSEX COUNTY OVERVIEW*

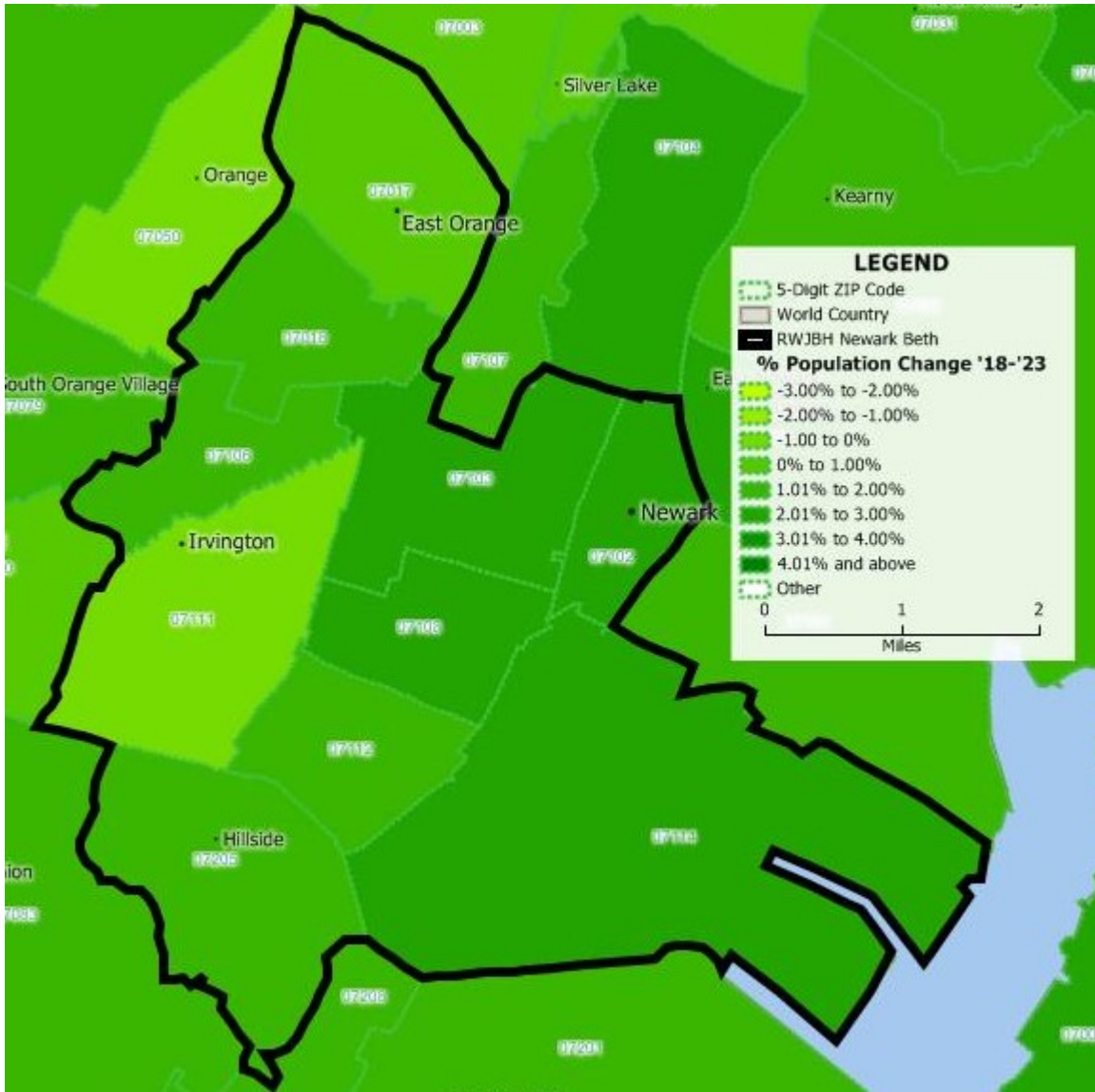
Essex County is located in the center of the northeast section of New Jersey. The county encompasses a land mass of 127 square miles with 22 urban and suburban municipalities. Essex County's municipalities are diverse and include large inner-city communities, such as Newark, Irvington, East Orange and Orange in the southeast, as well as the suburban communities of Livingston, Essex Fells and Roseland in the west. To the north and west lie suburban towns with shopping malls, industrial and professional office parks, luxury condominiums and townhouses, and private homes. Newark, the county's largest city, is also home to a cultural center, a sports and entertainment complex, a number of colleges and universities, and headquarters a number of corporate giants. Newark is a major national transportation hub.

Essex County includes: Belleville, Bloomfield, Caldwell, Cedar Grove, East Orange, Essex Fells, Fairfield, Glen Ridge, Irvington, Livingston, Maplewood, Millburn, Montclair, Newark, North Caldwell, Nutley, Orange, Roseland, South Orange, Verona, West Caldwell, and West Orange. In 1865, Essex County was the first U.S. county to create a county-wide park system, the Essex County Parks Commission acquired 60 acres of land from the City of Newark as the beginning of Branch Brook Park. Today those 60 acres have grown into 5,745 acres of green space that include reservations, developed parks, golf courses, tennis courts, ice and roller skating complexes, and a zoo. Essex County is the second most densely populated county in New Jersey and has the third highest number of residents. Between 2010 and 2018, Essex County's population increased 2.0%. The migration of people in and out of the urban areas of Essex County has changed significantly. After consistent population declines over the last half-century, urban areas in the southern and eastern parts of the county have seen population increases in the past five years. The demographic trends in Essex County are a part of larger changes throughout the State and country. The northeastern part of the state shows the highest growth, with younger couples gravitating toward communities that have walkable downtowns and accessible mass transit to cities. Suburban and rural parts of the state to the west and south are losing residents as they retire and leave the state in search of lower taxes and living costs.

B. NBIMC SERVICE AREA OVERVIEW

Between 2010 and 2018, the population of the NBIMC Service Area grew 2.12% consistent with Essex County (2.0%) and New Jersey (2.0%). In 2023, the Service Area population is expected to grow another 1.7% to 292,283.

**Population Change in NBIMC Service Area
2018-2023**



* Source: Claritas Population Estimates 2018, 2023

**NBIMC Service Area
Population Distribution & Projected Percent Change 2018-2023**

AGE COHORT	GEOGRAPHIC AREA												
	Essex County	Newark Beth Israel	Newark (07112)	Irvington (07111)	Newark (07108)	Newark (07103)	Newark (07106)	East Orange (07017)	East Orange (07018)	Newark (07114)	Hillside (07205)	Newark (07102)	New Jersey
0-17	188,257	70,494	6,763	13,273	7,448	9,310	8,132	8,629	6,969	3,039	4,950	1,981	1,924,893
% of Total	23.2%	24.12%	24.93%	25.00%	27.34%	25.66%	25.03	23.75%	24.19%	18.56%	21.87%	16.63%	21.19%
% Change '18-'23	-0.80%	-0.23%	-1.43%	-0.63%	-0.75%	-0.86%	0.42%	-0.88%	-0.21%	4.76%	-0.22%	4.76%	-1.87%
18-44	284,095	110,539	10,036	18,997	10,460	15,223	11,747	12,725	10,403	8,100	7,914	4,934	3,063,151
% of Total	35.0%	37.8%	36.99%	35.79%	38.39%	41.96%	36.16%	35.02%	36.11%	49.46%	34.97%	41.42%	33.72%
% Change '18-'23	-2.08%	-1.94%	-1.43%	-5.97%	2.15%	1.90%	-2.85%	-2.91%	-1.86%	-1.42%	-1.44%	-3.61%	-0.71%
45-64	213,515	71,669	6,788	13,427	6,315	7,881	8,157	9,091	7,154	3,933	5,990	2,933	2,440,092
% of Total	26.3%	24.52%	25.02%	25.29%	23.18%	21.72	25.11%	25.02%	24.83%	24.02%	26.47%	24.62%	26.86%
% Change '18-'23	0.68%	2.19%	2.18%	0.28%	3.71%	4.54%	2.97%	0.54%	1.62%	6.33%	-0.91%	7.51%	-1.87%
65+	125,886	39,581	3,546	7,387	3,022	3,863	4,450	5,887	4,283	1,304	3,776	2,063	1,656,700
% of Total	15.5%	13.54%	13.07%	13.92%	11.09%	10.65%	13.70%	16.20%	14.87%	7.96%	16.69%	17.32%	18.24%
% Change '18-'23	16.57%	16.89%	16.34%	17.87%	17.13%	18.64%	16.58%	14.24%	15.07%	27.10%	19.42%	12.67%	15.44%
All Ages	811,753	292,283	27,113	53,084	27,245	36,277	32,486	36,332	28,809	16,376	22,630	11,911	9,084,836
% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
% Change '18-'23	1.47%	1.71%	1.49%	-0.25%	3.15%	3.28%	1.75%	0.90%	1.63%	3.36%	1.95%	2.96%	1.30%
Female 15-44	158,516	62,052	5,963	11,011	6,403	8,487	6,927	7,534	6,154	2,540	4,513	2,520	1,677,665
% of Total	19.53%	21.23%	21.98%	20.74%	23.50%	23.39%	21.32%	20.74%	21.36%	15.51%	19.94%	21.16%	18.47%
% Change '18-'23	-2.53%	-2.85%	-3.43%	-5.09%	-1.33%	-0.74%	-2.94%	-3.89%	-2.73%	-0.97%	-2.10%	-2.36%	-1.21%

Source: Claritas Population Estimates 2018, 2023

C. SOCIAL DETERMINANTS OF HEALTH

Social determinants of health include socioeconomic and environmental factors which influence health outcomes, disparities in health, equity in health care, and are important tools to assess health at the local level. *Healthy People 2020* provides a framework for assessing social determinants of health across five topic areas: economic stability; education; social and community context; health and health care; and, neighborhood and built environment. While a relatively affluent county, there are residents of Essex County and NBIMC Service Area that face many socioeconomic challenges that may have consequences for health and health care in the region.¹⁷

¹⁷ <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

1. Socioeconomic Status

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

Income, Poverty, and Unemployment

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

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

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

Essex County

Although Essex County has affluent areas, pockets of poverty in Newark, East Orange and Irvington exist.

- In 2016, the median household income in Essex County was \$54,860, more than \$18,000 below the State median of \$73,702
- In 2016, Essex County had a higher percentage of people living below the federal poverty level than statewide, 17.2% and 10.9% respectively.¹⁸
- Between 2014 and 2016, unemployment throughout New Jersey declined. In 2016, the Essex County unemployment rate was 8.0%, a decrease of 1.1% from 2014, but higher than the New Jersey unemployment rate of 5.2%.¹⁹

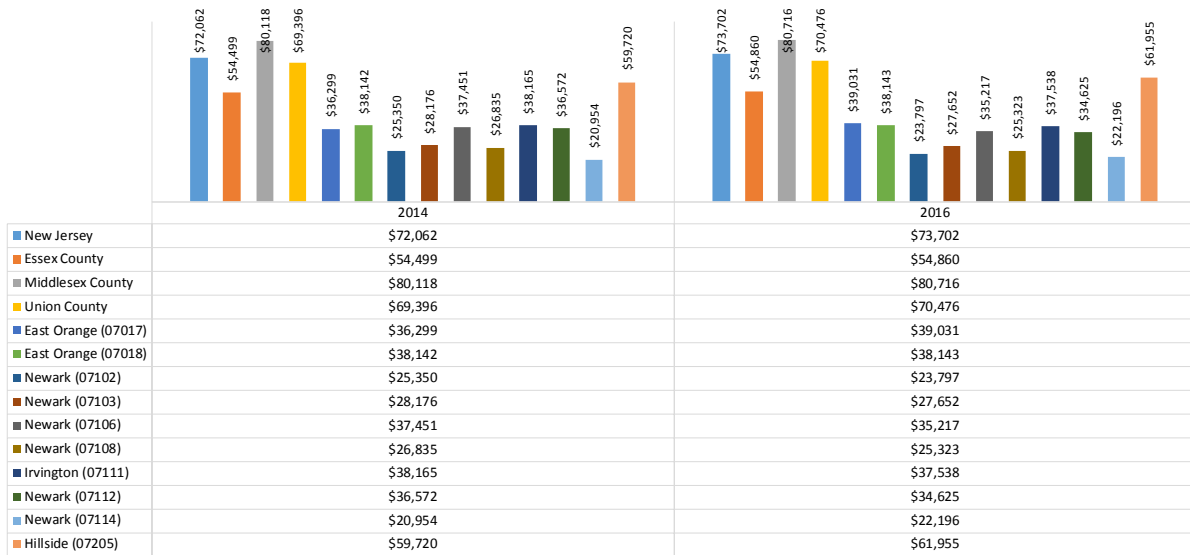
¹⁸ Ibid.

¹⁹ United States Bureau of Labor Statistics Newark, NJ-PA, Division Economic Summary 2016 http://www.bls.gov/regions/new-york-new-jersey/summary/blssummary_newark_div.pdf

NBIMC Service Area

- The 2016 median household income of Newark 07114 (\$22,196) and Newark 07102 (\$23,797) residents was less than the statewide figure (\$73,702), and lower than all the other Service Area zip codes.
 - In the NBIMC Service Area, Hillside had the highest median household income in 2016 at \$61,955. By 2018, the median household income was estimated to have increased throughout the service area, as noted in the next table.

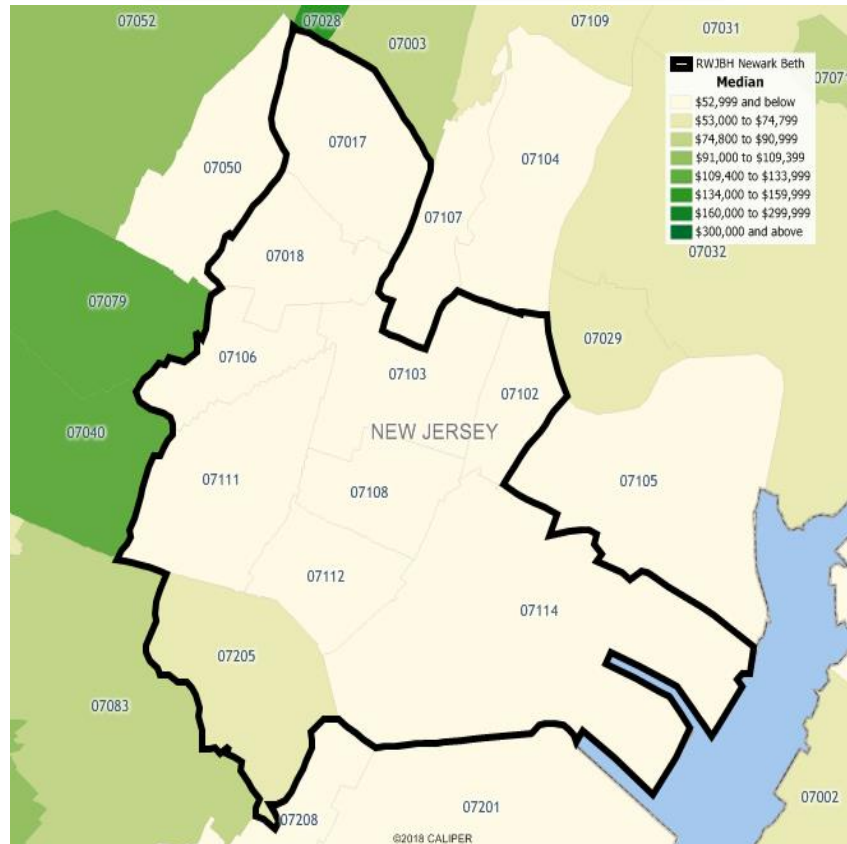
**Median Household Income
State and County Comparisons – 2014-2016**



Source: United States Census 2016 5 Year ACS Estimates

Median Household Income, 2018 Essex County

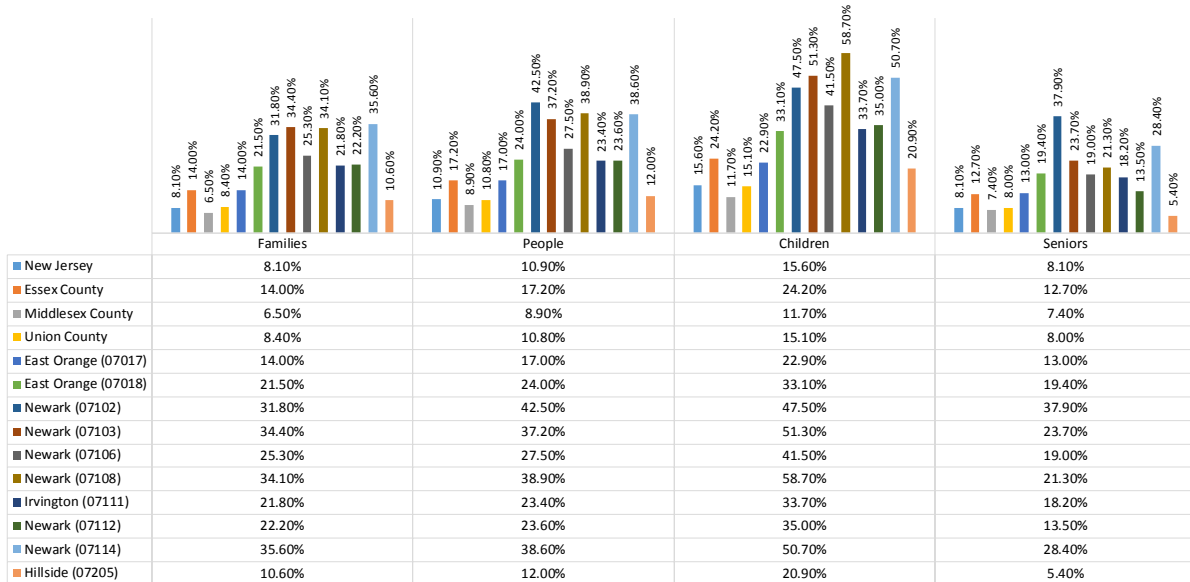
HOUSEHOLD INCOME (2018*)	
GEOGRAPHIC AREA	MEDIAN
New Jersey	\$78,317
Essex County	\$58,264
Newark (07112)	\$35,960
Irvington (07111)	\$39,445
Newark (07108)	\$26,308
Newark (07103)	\$28,020
Newark (07106)	\$36,573
East Orange (07017)	\$39,704
East Orange (07018)	\$37,516
Newark (07114)	\$30,380
Hillside (07205)	\$66,186
Newark (07102)	\$30,482



Source: Nielson-Claritas 2018 Estimates

- In 2016, the percent of families living in poverty in Essex County (14%) was higher than the State (8.1%).²⁰
 - In 2016, 37.2% of people and 34.4% of families were living in poverty in Newark 07103. The Newark 07103 percentage of children in poverty was over 50%.
- In 2016, there was a wide range of percentages of families living in poverty across select NBIMC service area zip codes:²¹
 - East Orange 07017: 14.0%
 - Newark 07114: 35.6%
 - Hillside 07205: 10.6%
 - Newark 07108: 34.1%
- Newark's 07114 percent of families living in poverty is more than five times the New Jersey percentage (8.1%).

Income Below Federal Poverty Level State and County Comparisons, 2016



Source: United States Census 2016 5 Year ACS Estimates

Unemployment

- In 2016, the unemployment rate for Essex County (8.0%) was well above the rate statewide (5.2%) and for all of the surrounding counties.
- The Essex County unemployment rate declined 1.2 percentage points between 2014-2016.
- In 2016, Irvington 07111's unemployment rate was 12.8%, a decrease from 14.1% in 2014, but higher than the Essex County rate of 8.0%, and the State rate of 5.2%.²²
- In 2016, the Newark 07112 unemployment rate was 15.6%, a decrease from 17.2% in 2014 but higher than the County rate of 8.0%.

²⁰ United States Census Bureau American Community Survey 2014

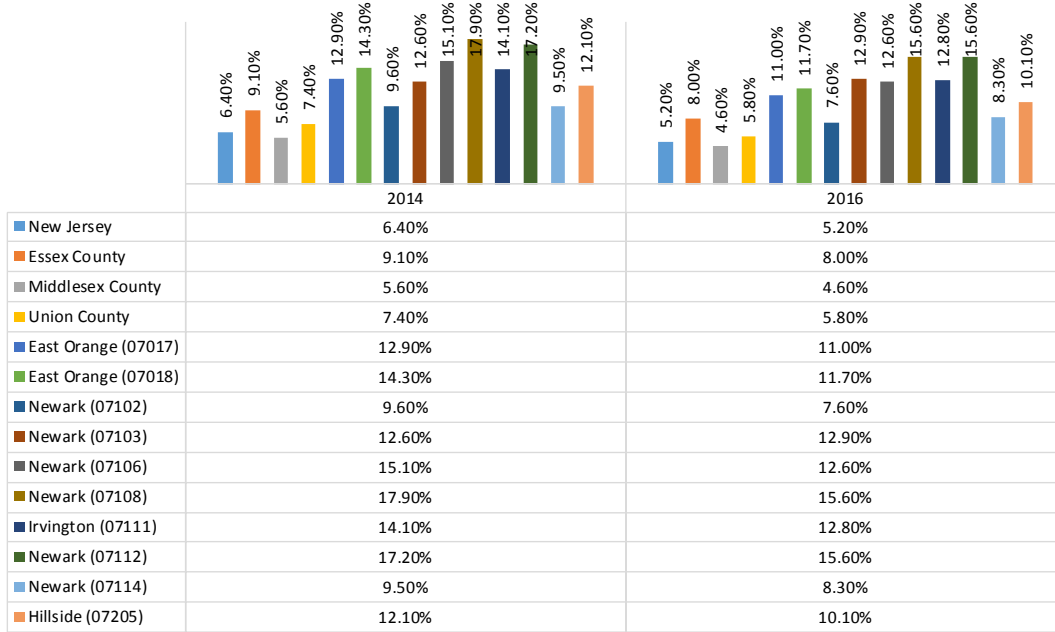
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP03&prodType=table

²¹ United States Census Bureau American Community Survey 2014

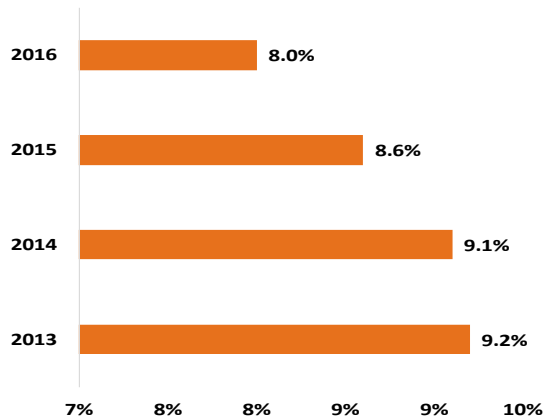
²² Ibid.

- In 2016, Newark 07102 had the lowest unemployment rate (7.6%).

Unemployment State and County Comparisons, 2014-2016



Essex County



Source: United States Census 2014-2016 5 Year ACS Estimates

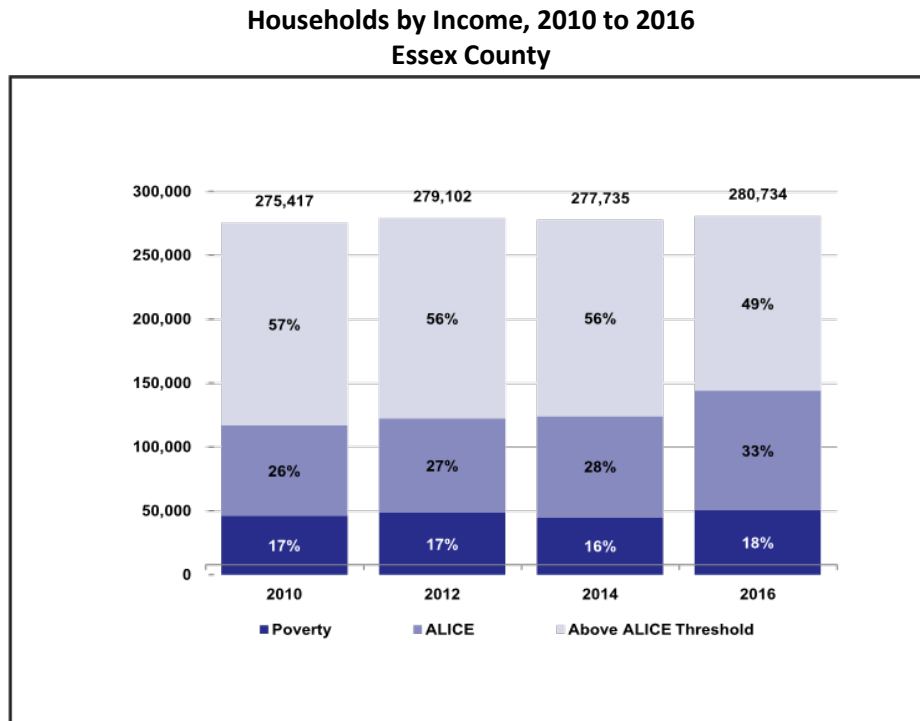
**County Health
Rankings & Roadmaps**
Building a Culture of Health, County by County
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National Benchmark: 3.2%
Essex County 2016: 8.0%

Asset Limited Income Constrained Employed Project

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

To ascertain the number of households that may be struggling due to the high cost of living in New Jersey, we turned to the United Way’s ALICE (Asset Limited Income Constrained Employed project).²³ The ALICE project looks at the number of households that earn more than the Federal Poverty Level but less than the basic cost of living in Essex County. As shown in the chart below, the Alice Threshold (AT) combined the number of households in poverty and ALICE households equals the population struggling to afford basic needs. In Essex County, this percentage amounts to 33% (2016).



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

The United Way’s analysis shows ALICE households in Essex County may earn above the Federal poverty level for a single adult, \$11,670, or \$23,850 for a family of four, but less than the household survival budget for Essex County.

²³ <http://www.unitedwaynj.org/ourwork/aliceatnj.php>

Household Survival Budget, Essex County		
	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	\$1,044	\$1,324
Child Care	\$-	\$1,292
Food	\$182	\$603
Transportation	\$116	\$186
Health Care	\$196	\$727
Technology	\$55	\$75
Miscellaneous	\$194	\$479
Taxes	\$348	\$585
Monthly Total	\$2,135	\$5,271
ANNUAL TOTAL	\$25,620	\$63,252
<i>Hourly Wage</i>	<i>\$12.81</i>	<i>\$31.63</i>

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

There appears to be wide differences among municipalities in Essex County in terms of the percentage of households living in poverty or at the ALICE threshold. Nearly 60% of residents in the PSA towns of Irvington and East Orange had incomes at the Federal poverty level or at the ALICE threshold, and 64% of Newark residents and 67% of Orange residents, had incomes at the Federal poverty level or the ALICE threshold.

Essex County, 2016		
Town	Total HH	% ALICE & Poverty
Belleville	12,872	43%
Bloomfield	17,609	37%
Caldwell	3,355	39%
Cedar Grove	4,395	25%
City of Orange	11,471	72%
East Orange	24,858	66%
Essex Fells	753	9%
Fairfield	2,481	22%
Glen Ridge	2,467	14%
Irvington	20,220	69%
Livingston	9,755	16%
Maplewood	8,165	24%
Millburn	6,539	15%
Montclair	14,513	29%
Newark	94,158	72%
North Caldwell	2,103	12%
Nutley	10,903	30%
Roseland	2,380	27%
South Orange	5,240	24%
Verona	5,058	26%
West Caldwell	3,810	27%
West Orange	16,375	31%

Temporary Assistance Needy Families (TANF)

In order to qualify for TANF in New Jersey, applicants must comply with all requirements of Work First New Jersey. This includes signing over rights of child support payments, helping to establish paternity of children, cooperating with work requirements and applying for all assistance programs for which a household may be eligible. Additionally, eligible applicants must meet income and resource guidelines.²⁴

- As of December 2017, 2.5% of Essex County children were receiving Work First NJ/TANF benefits, nearly double the statewide rate (1.39%); Essex County ranks in the worst performing quartile in New Jersey.
- As of December 2017, 0.36% of Essex County adults were receiving Work First NJ/TANF benefits, more than statewide (0.17%).
- Between 2015 and 2017, the percentage of adults and children receiving WFNJ/TANF benefits declined by 51% and 43%, respectively.

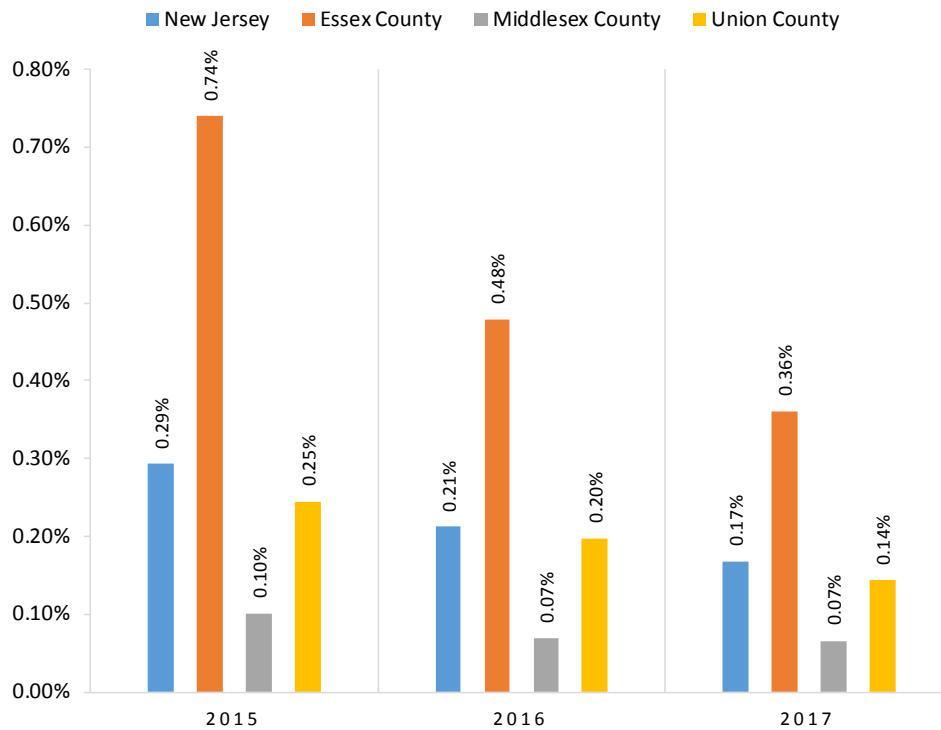
**Temporary Assistance to Needy Families
State & County Comparisons Children 2015-2017**



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

²⁴ <http://www.tanfprogram.com/new-jersey-tanf-eligibility>

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



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

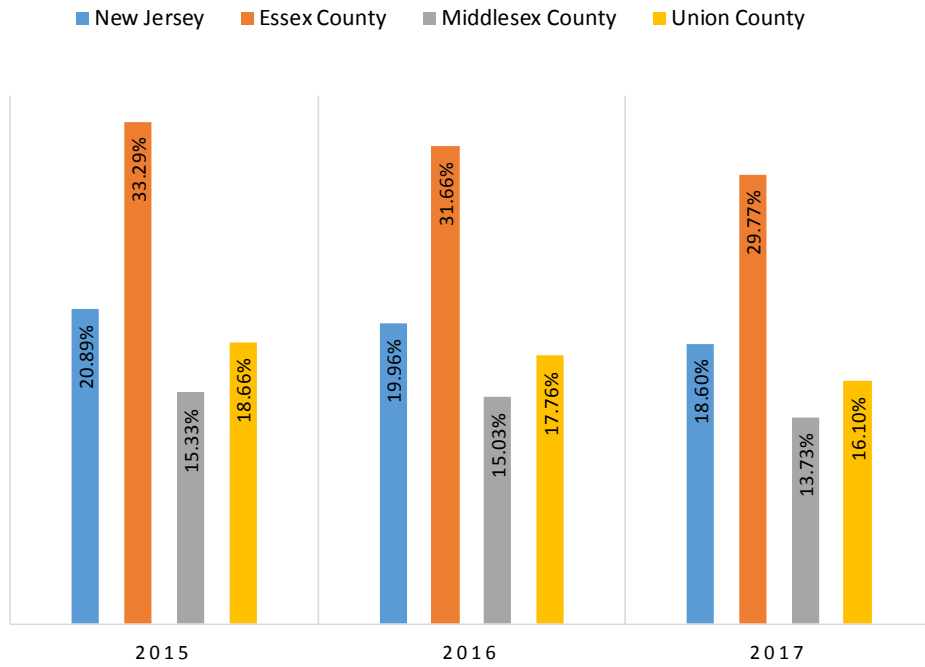
Supplemental Nutrition Assistance Program (SNAP)

SNAP offers nutrition assistance to millions of eligible, low-income individuals and families. The Food and Nutrition Service works with State agencies, nutrition educators and neighborhood and faith-based organizations to ensure that those eligible for nutrition assistance make informed decisions and access benefits.²⁵

- In 2017, 37.6% more Essex County children (29.8%) use SNAP benefits than children Statewide (18.6%).
- In 2017, 40.8% more Essex County adults (9.8%) use SNAP benefits than throughout the State (5.8%).
- Between 2015 and 2017, Essex County experienced a 42.6% decline in the percentage of adults and a 10.6% decline in the percentage of children receiving SNAP benefits.
- The percentage of Essex County children and adults receiving SNAP benefits ranks in the worst performing quartile among all counties.

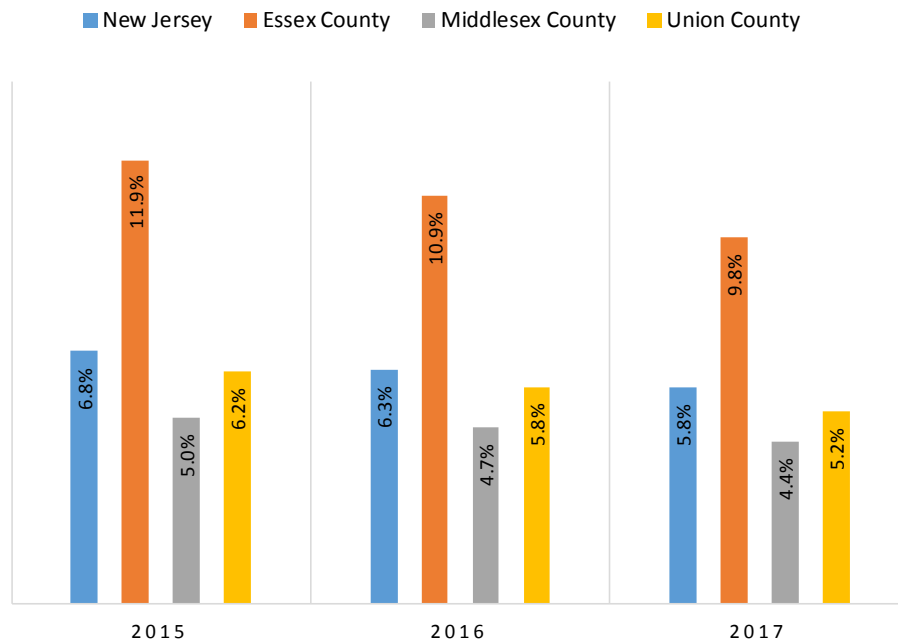
²⁵ <http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap>

Supplemental Nutrition Assistance Program (SNAP) State & County Comparisons Children 2015-2017



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

Supplemental Nutrition Assistance Program (SNAP) State & County Comparisons Adults 2015-2017



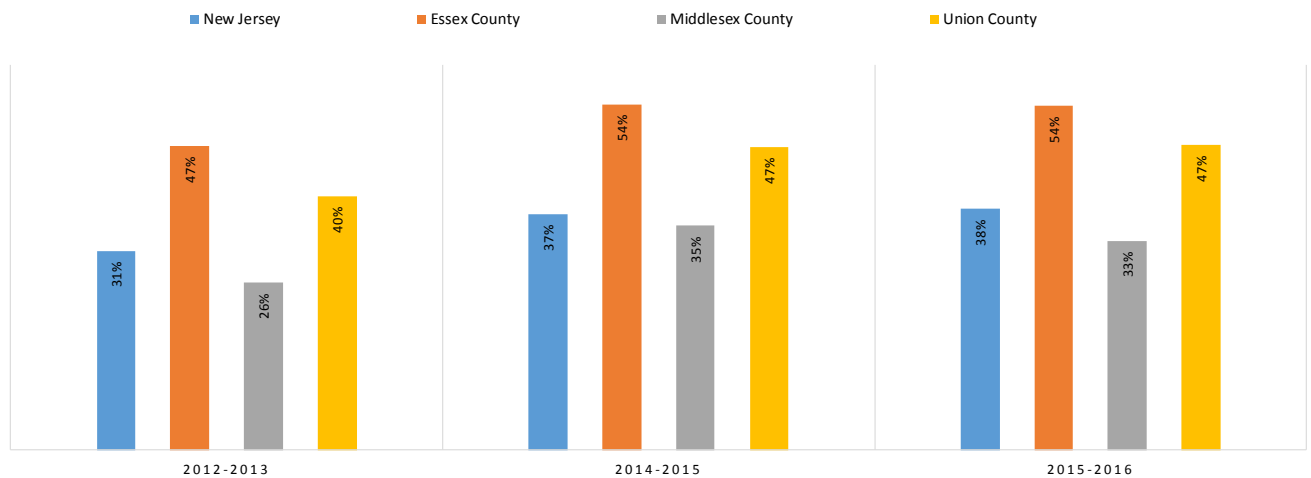
Source: http://www.nj.gov/humanservices/dfd/news/cps_dec17.pdf

Children Eligible for Free Lunch

Public schools nationwide and across New Jersey have free lunch programs for children living at or near poverty. New Jersey requires public schools serve school lunches meeting at least one-third of recommended dietary allowances. According to the National School Lunch Program, the objective is “to provide a nutritious, well-balanced lunch for children in order to promote sound eating habits, to foster good health and academic achievement and to reinforce the nutrition education taught in the classroom.”²⁶

- The percentage of children eligible for free lunch increased throughout New Jersey, Essex, Middlesex and Union counties between 2012-2013 and 2015-2016.
- Essex County reported a 7 percentage point increase in students eligible for free lunch from 47% during the 2012-2013 school years to 54% in 2015-2016 school years.
- Essex County is within the worst performing quartile compared to of all New Jersey counties for free school lunch eligibility.

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



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

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National Benchmark: 33.0%
Essex County 2016: 54.0%

²⁶ http://www.nj.gov/agriculture/divisions/fn/childadult/school_lunch.html

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

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

2. Education

People with higher levels of educational attainment tend to have lower morbidity rates from acute and chronic diseases, independent of demographic and labor market factors. Life expectancy is increasing in the United States, yet differences have become more pronounced between those with and without a college education. The mechanisms by which education influences health are complex and likely include interrelationships between demographic and family background indicators, effects of poor health in childhood, greater resources associated with higher levels of education, a learned appreciation for the importance of good health behaviors, and one’s social networks.²⁷ The ability to communicate in English is also a key part of educational competence.

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

Essex County

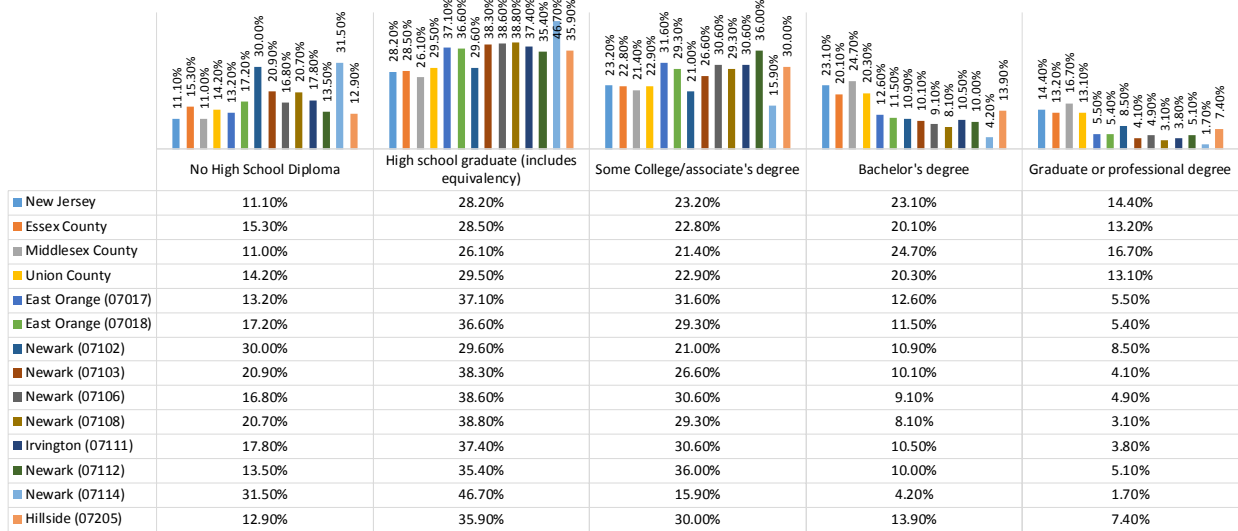
- In 2016, 15.3% of Essex County residents did not graduate from high school, 4.2 percentage points higher than New Jersey at 11.1%.²⁸ This represents an improvement from 16.2% of County residents and 11.6% statewide that did not graduate from high school as reported in the previous CHNA.
- In 2016, 33.3% of Essex County residents earned a bachelor’s degree or higher.²⁹ This represents a decrease from 36.3% of County residents that earned a bachelor’s degree or higher as reported in the previous CHNA.
- The percentage of Limited English Proficiency (LEP) persons age 5+ in Essex County (14.5%) was higher than New Jersey (12.2%).

²⁷ National Poverty Center Policy Brief #9 Education and Health 2007 http://www.npc.umich.edu/publications/policy_briefs/brief9/
²⁸ United States Census Bureau American Community Survey 2014
²⁹ Ibid.

NBIMC Service Area

- In 2016, 30.0% of Newark 07102 residents did not complete high school, higher than the statewide percentage (11.1%).
- In 2016, 31.5% of Newark 07114 residents did not complete high school, more than the statewide percentage (11.1%).

**Educational Attainment
State & County Comparisons, 2016**



Source: United States Census 2016 5 Year ACS Estimates



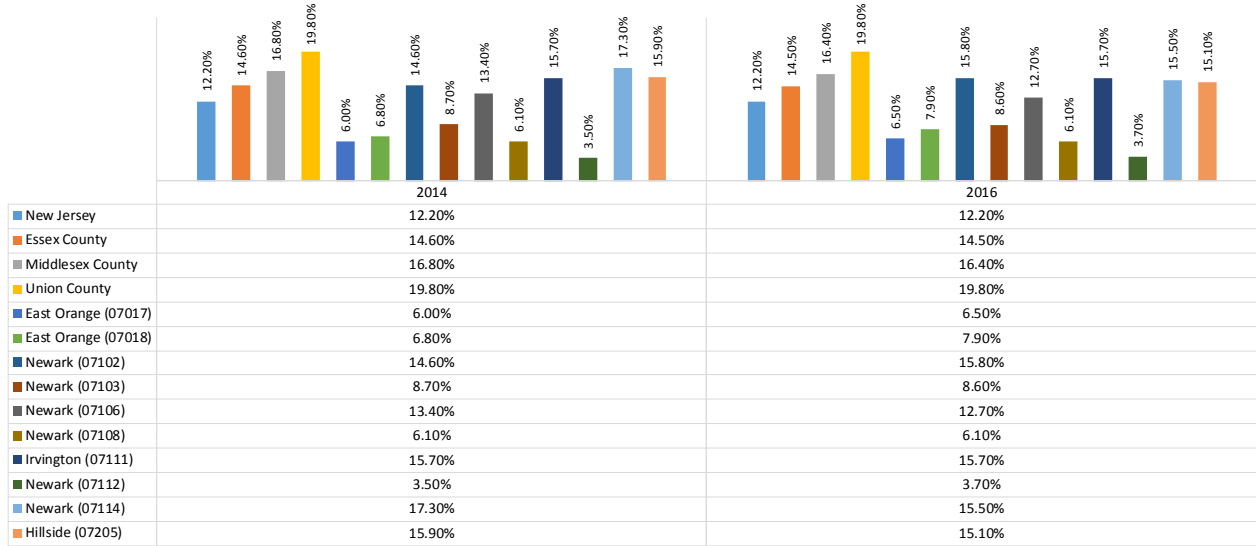
Baseline: 89.0 %
Target: 97.9%
Essex County 2016: 84.7%

Limited English Proficiency

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

- In 2016, the percentage of Limited English Proficiency (LEP) individuals in Newark 07102 (15.8%) was higher than New Jersey (12.2%) and Essex County (14.5%).

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



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

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

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

3. Demographics

Age

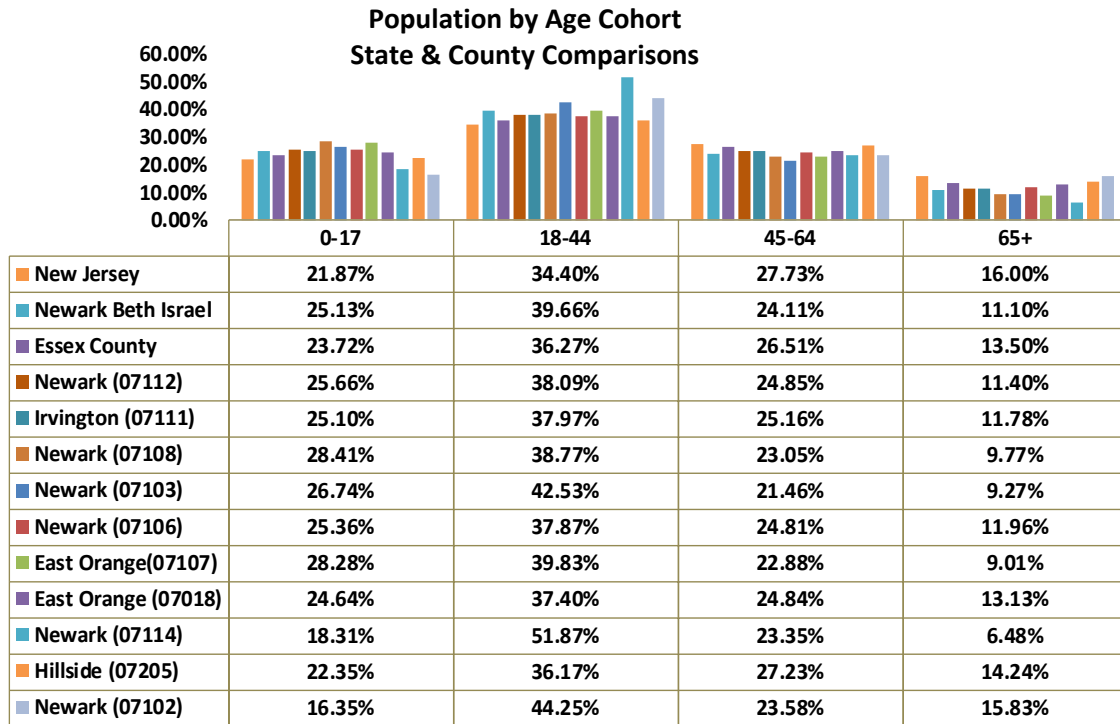
Age affects how people behave in relation to their health; as people age, the body becomes more prone to disease and health behaviors become more important to good health.

Essex County

- Essex County’s population distribution is younger than the State.
- In 2016, 13.5% of Essex County residents were seniors over 65 compared to 16.0% statewide.

NBIMC Service Area

- The population distribution of most zip codes in the NBIMC Service Area was younger than the State.
- In 2016, 28.4% of Newark 07108 residents were 0-17, higher than the 23.7% in Essex County and 21.9% in New Jersey.
- In 2016, 51.9% of Newark 07114 residents were 18-44, higher than 36.3% in Essex County and 34.4% in New Jersey.
- In 2016, 9.0% of East Orange 07017 residents were 65+, lower than 13.5% in Essex County and 16.0% in New Jersey.



Source: Claritas 2016 Population Estimate

Ethnic and Racial Makeup

Racial and ethnic minorities receive lower quality healthcare than non-minorities, even when access-related factors such as insurance status and income are controlled. Sources of disparities are complex and rooted in historic and contemporary inequities, and involve many participants at several levels, including health systems administrative and bureaucratic processes, utilization managers, healthcare professionals, and patients.³⁰

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

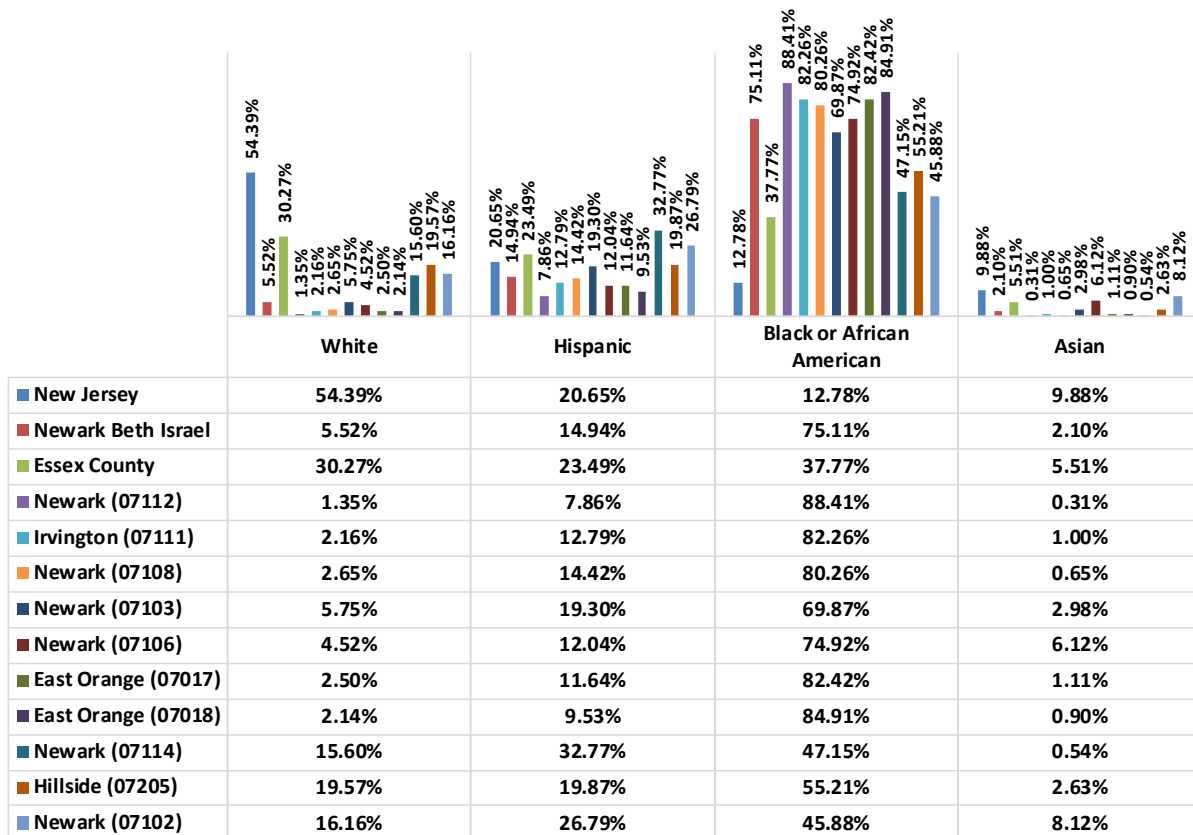
Essex County

- In 2018, Essex County had larger percentages of African-American and Hispanic populations than New Jersey.
 - 37.8% of the county population was African-American, compared to 12.8% statewide.
 - 23.5% of the population was Hispanic/Latino compared to 20.7% statewide.
 - Whites were 30.3% of the county’s population compared to 54.4% in New Jersey.

NBIMC Select Service Area

- In 2018, 88.4% of Newark’s 07112 population was African-American, higher than 12.8% in New Jersey.
- In 2018, 19.6% of Hillside’s population was White, lower than 30.3% in Essex County.
- In 2018, 32.8% of the Newark 07114 population was Hispanic/Latino, compared to 23.5% in Essex County and 20.7% in New Jersey.
- In 2018, 6.1% of the Newark 07106 population was Asian, slightly higher than 5.5% in Essex County.
- Between 2010 and 2018, the Asian population in Essex County grew 24.9%.

**Population by Race/Ethnicity
State & County Comparisons**



Source: Claritas 2018 Population Estimate

**Population by Race/Ethnicity
Essex County – Trend**

Essex County			
RACE / ETHNICITY	2010	2018	% Change
White (alone)	260,177	242,156	-6.92%
Black / African American (alone)	308,358	302,184	-2.00%
Asian (alone)	35,292	44,084	24.91%
Native American / Pacific Islander / Other Race (alone)	7,807	7,510	-3.80%
Two or More Races (alone)	13,218	16,094	21.75%
Hispanic / Latino (of Any Race)	159,117	187,956	18.12%

Source: Claritas 2018 Population Estimate

4. Social and Community Context

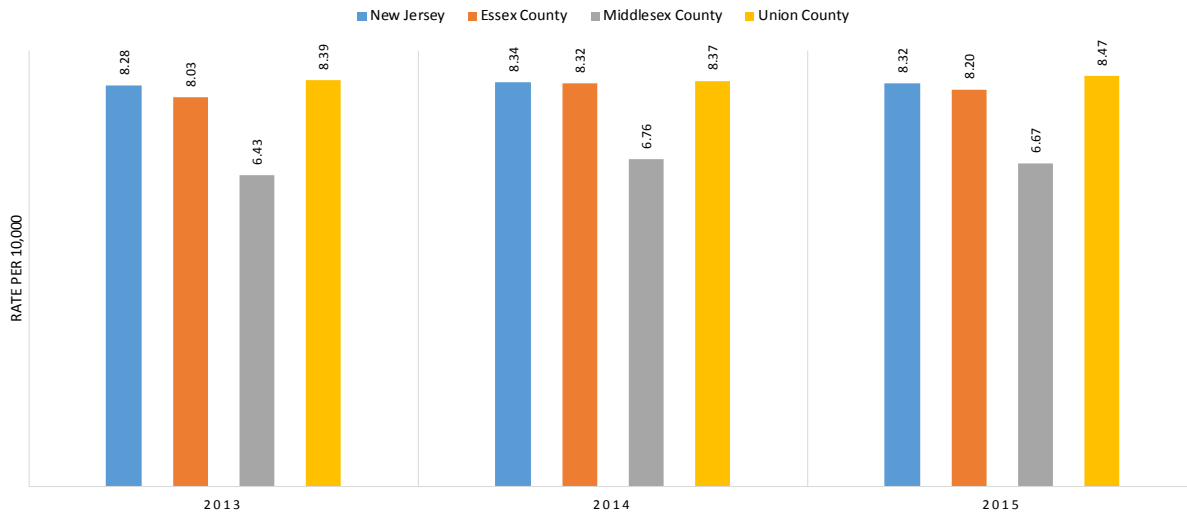
Social Associations

Social isolation can negatively impact health outcomes. Having a strong social network is associated with healthy lifestyle choices, positive health status, and reduced morbidity and mortality. Participation in community organizations can enhance social trust and a sense of belonging.³¹ Social associations include structured membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, business and professional associations.

- Between 2013 and 2015, Essex County had slightly lower membership association rates than New Jersey and Union County, but higher than the Middlesex County rate.
- The membership association rate for Essex County falls within the worst performing quartile compared to all 21 counties statewide.

³¹ <http://www.countyhealthrankings.org/app/new-jersey/2015/measure/factors/140/description>

Number of Membership Organizations State & County Comparisons, 2013-2015



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



National Benchmark:
22.1
Essex County 2015: 8.2

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

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

5. Health and Health Care

Access to affordable quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not ensure access. It is also necessary for providers to offer affordable care, be available to treat patients and be near patients.³²

³² <http://www.countyhealthrankings.org/our-approach/health-factors/access-care>

Health Insurance

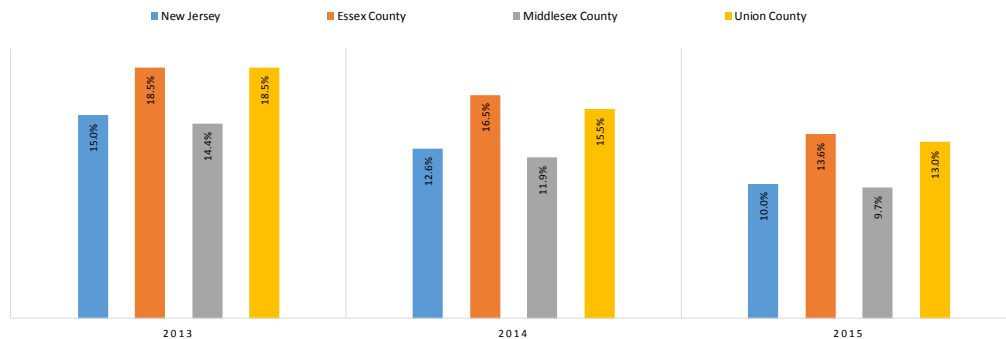
The expansion of Medicaid coverage and the Affordable Care Act's (ACA) coverage provisions, which began taking effect in 2010, helped decrease the nation's uninsured rate by 7.2 percentage points, from 16 percent in 2010. That translates into 20.4 million fewer people who lacked health insurance in 2016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

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

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

- Since 2013, the non-elderly population without health insurance in Essex County has trended downward, decreasing from 18.5% in 2013 to 13.6% in 2015.
- From 2013 through 2015, Essex County had consistently higher rates of non-elderly population without health insurance than statewide.
- In 2015, Essex County (13.6%) was higher than the ambitious *Healthy People 2020* target of no person without health coverage. Essex County also had a higher percentage of individuals without insurance than the CHR Benchmark of 6%.

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



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



Access to Care



Target: 6.0%
13.6%

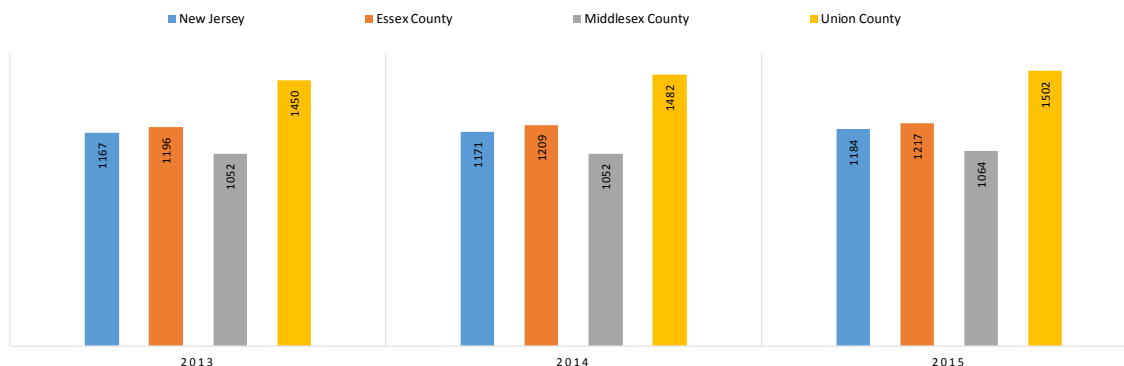
Access to affordable quality health care is important to ensuring physical, social, and mental health. Health insurance assists individuals and families to obtain primary care, specialists, and emergency care, but does not ensure access. Access to care goes beyond just insurance, it is also necessary for providers to offer affordable care, be available to treat patients and be near patients.³³

Primary Care Physicians

Nationally, many areas lack sufficient providers to meet patient needs; as of June 2014, there are about 7,200 primary care, 5,000 mental health and 5,900 dental federally designated Health Professional Shortage Areas in the US. Having a usual primary care provider is associated with a higher likelihood of appropriate care and better outcomes. In 2017, 88% of Americans had a usual source of care, but those with low incomes are less likely to than those with higher incomes, and the uninsured are twice as likely as the insured to lack a usual care source.^{34,35}

- Between 2013 and 2015, the ratio of population to physician in Essex County decreased from 1,196:1 to 1,217:1.
- In 2015, the Essex County ratio for primary care providers was better than the CHR national benchmark (1,320:1).
- Essex County performs in the middle quartile of all New Jersey counties for the ratio of primary care physicians to population.

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



Source: County Health Rankings – HRSA Area Resource File



National Benchmark: 1030:1
Essex County 2015: 1217:1

³³ <http://www.countyhealthrankings.org/our-approach/health-factors/access-care>

³⁴ <http://www.countyhealthrankings.org/our-approach/health-factors/access-care>

³⁵ <http://www.cdc.gov/fastfactsaccesstohealthcare.htm>

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

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

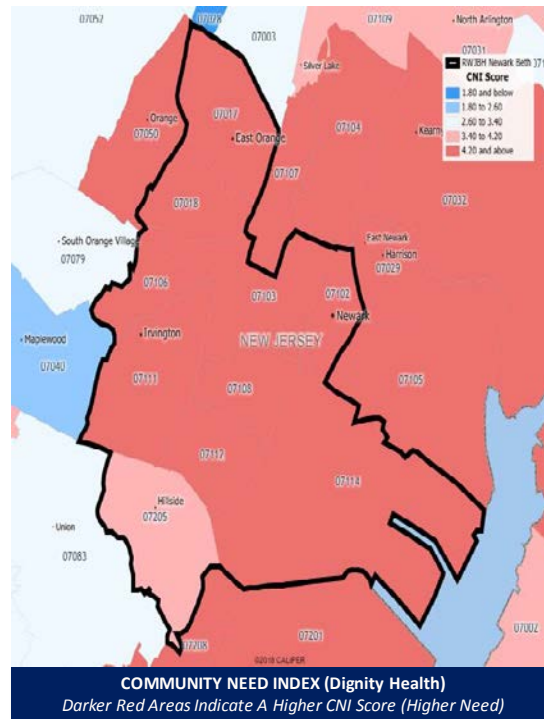
Community Need Index ³⁶

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

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

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

1. Income Barrier
 - Percentage of households below poverty line, with head of household age 65 or older
 - Percentage of families with children under 18 below poverty line
 - Percentage of single female-headed families with children under 18 below poverty line
2. Cultural Barrier
 - Percentage of population that is minority (including Hispanic ethnicity)
 - Percentage of population over age 5 that speaks English poorly or not at all
3. Education Barrier
 - Percentage of population over 25 without a high school diploma



³⁶ Truven Health Analytics, 2017; Insurance Coverage Estimates, 2017; Claritas, 2017; and Community Need Index, 2017. <http://cni.chw-interactive.org/>

4. Insurance Barrier
 - Percentage of population in the labor force, aged 16 or more, without employment
 - Percentage of population without health insurance
5. Housing Barrier
 - Percentage of households renting their home

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

Community Needs Index

	Service Area	ZIP Code	ZIP Code Description	CNI Score
CNI Score (Highest Need)	Newark Beth Israel	07102	Newark	5.0
		07114	Newark	5.0
		07108	Newark	5.0
		07103	Newark	4.8
		07106	Newark	4.6
		07017	East Orange	4.4
		07111	Irvington	4.4
		07018	East Orange	4.4
		07112	Newark	4.4
CNI Score (Lowest Need)	Newark Beth Israel	07205	Hillside	3.8

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

Newark 07102, 07114, and 07108 had the highest CNI scores (5.0) indicating highest need in the service area, followed by Newark 07103 (4.8) and Newark 07106 (4.6). Conversely, Hillside’s score (3.8) represented the lowest CNI score in the service area.

Timeliness of Service

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

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

- No regular source of primary care
- Lack of health insurance
- Cost

- Transportation
- Office hours
- Citizenship status

ED Utilization of Ambulatory Care Conditions

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

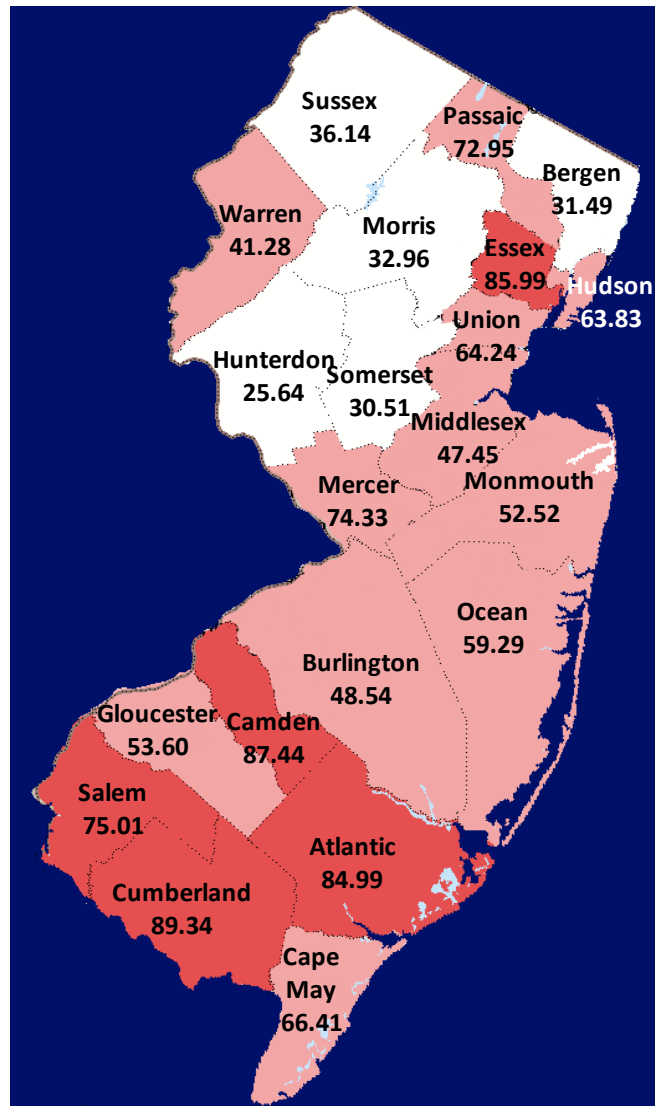
ED Utilization for Ambulatory Care Sensitive Conditions

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

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

Also, see Appendix E for tables outlining ACSC by race/ethnicity among those 18-64. These tables show a clear disparity in the rates among Black residents of the region.

- In 2016, Essex County’s ACSC ED visit rate (at 85.99/1,000) was higher than the statewide rate (58.22/1,000).
- Essex County had the third highest ACSC ED visit rate of the 21 counties in 2016, 85.99/1,000, this was a 4.6 percentage point increase from the 2013 rate.



Total ACSC ED Visits/Rate/1,000 Population

2013-2016

ACSC - ED Rate/1000				ACSC - ED Rate/1000			
COUNTY	NJ 2013	NJ 2016	Change '13-'16	COUNTY	NJ 2013	NJ 2016	Change '13-'16
CUMBERLAND	82.08	89.34	7.26	GLOUCESTER	53.34	53.60	0.26
CAMDEN	92.53	87.44	-5.09	MONMOUTH	52.97	52.52	-0.45
ESSEX	81.43	85.99	4.56	BURLINGTON	53.85	48.54	-5.31
ATLANTIC	85.64	84.99	-0.65	MIDDLESEX	48.46	47.45	-1.01
SALEM	77.56	75.01	-2.55	WARREN	36.90	41.28	4.38
MERCER	73.13	74.33	1.20	SUSSEX	25.76	36.14	10.38
PASSAIC	70.77	72.95	2.18	MORRIS	30.40	32.96	2.56
CAPE MAY	71.68	66.41	-5.27	BERGEN	31.74	31.49	-0.25
UNION	61.98	64.24	2.26	SOMERSET	30.77	30.51	-0.26
HUDSON	58.01	63.83	5.82	HUNTERDON	23.72	26.62	2.90
OCEAN	62.11	59.29	-2.82	STATEWIDE	57.56	58.22	0.66

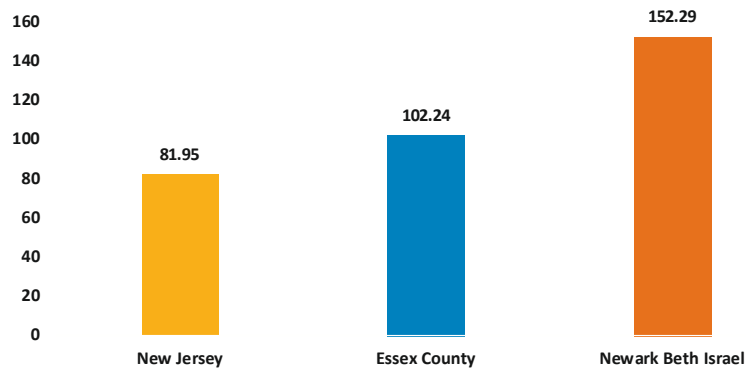
Yellow shading represents increase in admissions percentage and green shading represents decrease in admissions percentage from the year 2013 to 2016.

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

Children

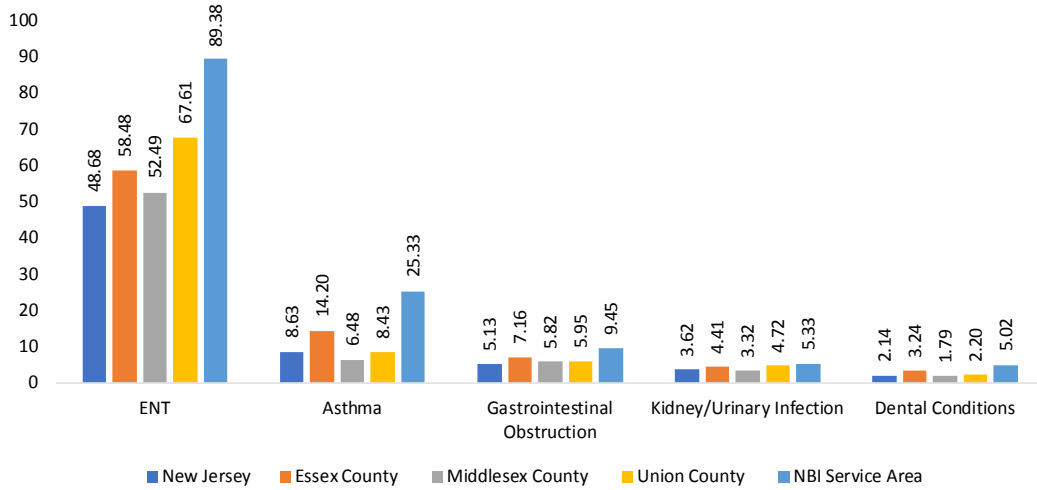
- In 2016, Essex County’s ACSC ED visits for children age 0-17 (at 102.24/1,000) was 27.2% higher than the statewide rate (80.36/1,000).
- The 2016 Essex County ACSC visit rate among children was lower than the rate in the NBIMC Service Area (152.29/1,000).
- The towns with the highest ACSC ED visit rate were Newark 07112 (193.98/100,000), Newark 07102 (187.87/100,000), and Newark 07108 (187.83/1,000), each of which have rates considerably higher than the NBIMC Service Area.

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



Source: UB-04 2016 Discharges

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



ED ACSC (2016) Pediatrics (Age 0-17)			
Geographic Area	Rate	Geographic Area	Rate
New Jersey	81.95	07112 Newark	193.98
Newark Beth Israel	152.29	07102 Newark	187.87
Essex County	102.24	07108 Newark	187.83
		07111 Irvington	159.50
		07103 Newark	156.05

Source: UB-04 2016 Discharges

- There was a total of 10,810 ACSC ED visits for children from NBIMC’s Service Area in 2016.
- ENT is the most common ACSC that resulted in an ED visit for children, followed by asthma and gastrointestinal obstruction urinary tract infection and dental conditions.

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

GEOGRAPHIC AREA	RATE	HIGHEST SERVICE AREA RATES
Essex County	102.24	07112 Newark 193.98
New Jersey	81.95	07102 Newark 187.87
Newark Beth Israel	152.29	07108 Newark 187.83
		07111 Irvington 159.50
		07103 Newark 156.05

Source: UB-04 2016 Discharges

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

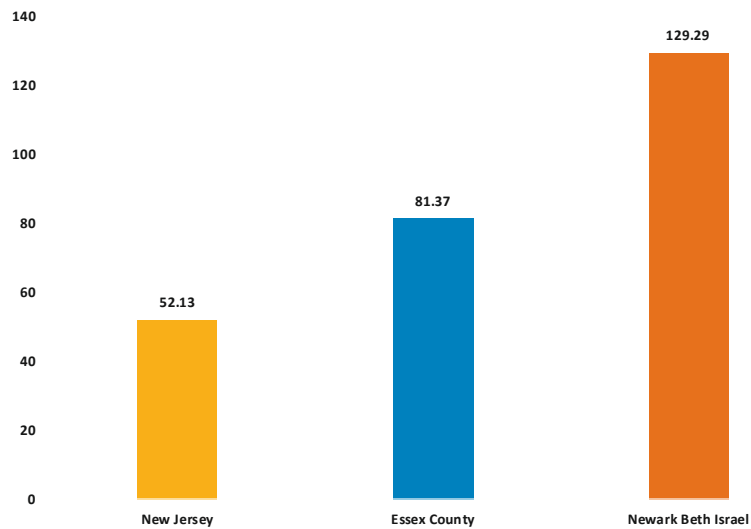
EMERGENCY DEPARTMENT (2016) – AGE (0-17)		
Service Area	ACSC Description (Top 5 Combined Service Area)	TOTAL IN AREA
Newark Beth Israel	ENT	6,345
	Asthma	1,798
	Gastrointestinal Obstruction	671
	Kidney/Urinary Infection	378
	Dental Conditions	356
	All Others	1,262
TOTAL SERVICE AREA		10,810

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

Adults

- The 2016 Essex County’s adult ED ACSC rate (81.37/1,000) is 53.7% higher than the statewide rate (52.13).
- Essex County adult ED ACSC rate is lower than NBIMC’s Service Area rate (129.29/1,000).

Total ACSC ED Visits for Adults (age 18+): Rate 1,000 Population



Source: UB-04 2016 Discharges

- The 2016 adult ED ACSC rate for Newark 07108 (174.51/1,000) was more than double the Essex County rate (81.37/1,000).
- In 2016, East Orange 07018 had the lowest adult ED ACSC rate (151.23/1,000) of the top 5 zip codes, and was still nearly three times the State rate (52.13/1,000).

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

GEOGRAPHIC AREA	RATE	Top 5 By Zip Code	RATE
Essex County	81.37	07108 Newark	174.51
New Jersey	52.13	07112 Newark	158.05
Newark Beth Israel	129.29	07103 Newark	157.82
		07102 Newark	156.90
		07018 East Orange	151.23

Source: UB-04 2016 Discharges

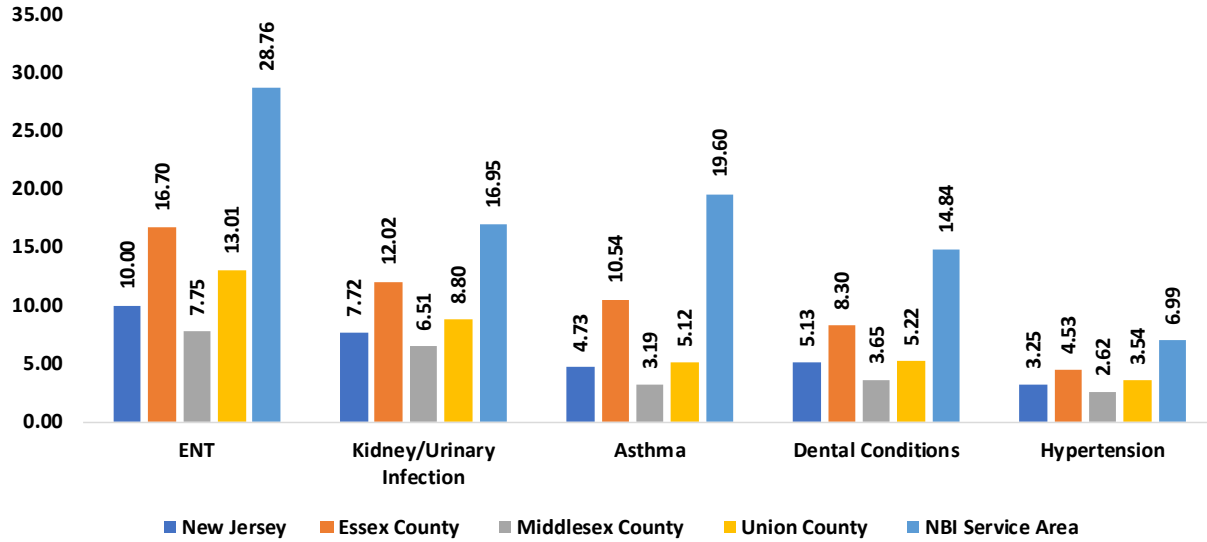
- There was a total of 27,547 adult ED ACSC visits in 2016 in the NBIMC Service Area.

EMERGENCY DEPARTMENT (2016) – AGE 18+		
Service Area	ACSC Description (Top 5 Combined Service Area)	TOTAL IN AREA
Newark Beth Israel	ENT	6,175
	Kidney/Urinary Inf.	4,210
	Asthma	3,640
	Dental Conditions	3,187
	Hypertension	1,501
	All Others	8,834
TOTAL SERVICE AREA		27,547

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

- In 2016, ENT was the leading cause of adult ED ACSC followed by kidney/urinary infection, asthma, dental conditions and hypertension in the service area.
- In 2016, Essex County adults (10.54/1,000) had a ED visit rate for asthma that was more than twice the State rate (4.73/1,000).

**Total ACSC ED Visits for Adults (Age 18+): Rate/1,000 Population
Top 5 Conditions (2016)**



ED ACSC (2016) Adults 18+				
Geographic Area	Rate	Geographic Area		Rate
Essex County	81.37	07108	Newark	174.51
New Jersey	52.13	07112	Newark	158.05
Newark Beth Israel	128.29	07103	Newark	157.82
		07102	Newark	156.90
		07018	East Orange	151.23

Source: UB-04 2016 Discharges

Inpatient Utilization for Ambulatory Care Sensitive Conditions

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

- Essex County ranks 6/21 counties with 19.76/1,000 ACSC Inpatient admissions in 2016, a 1.85 percentage point decrease from 2013.
- In 2016, Essex County (19.76/1,000) had a higher rate of ACSC Inpatient admissions than the State (16.99/1,000).

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

ACSC - IP Rate/1000				ACSC - IP Rate/1000			
COUNTY	NJ 2013	NJ 2016	Change '13-'16	COUNTY	NJ 2013	NJ 2016	Change '13-'16
SALEM	26.07	27.47	1.40	MONMOUTH	19.07	17.22	-1.85
CUMBERLAND	24.18	26.12	1.94	GLOUCESTER	19.84	15.85	-3.99
CAMDEN	22.87	22.61	-0.26	WARREN	15.94	15.69	-0.25
CAPE MAY	20.71	22.36	1.65	MIDDLESEX	17.07	15.33	-1.74
OCEAN	24.79	20.19	-4.60	UNION	16.18	15.21	-0.97
ESSEX	21.61	19.76	-1.85	SUSSEX	15.34	14.12	-1.22
ATLANTIC	23.63	19.66	-3.97	HUNTERDON	13.81	13.90	0.09
BURLINGTON	18.91	18.90	-0.01	MORRIS	15.04	13.13	-1.91
HUDSON	20.58	17.35	-3.23	BERGEN	15.20	12.18	-3.02
PASSAIC	20.78	17.32	-3.46	SOMERSET	14.04	11.48	-2.56
MERCER	20.17	17.23	-2.94	STATEWIDE	19.13	16.99	-2.14

Yellow shading represents increase in admissions percentage and green shading represents decrease in admissions percentage from the year 2013 to 2016.

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

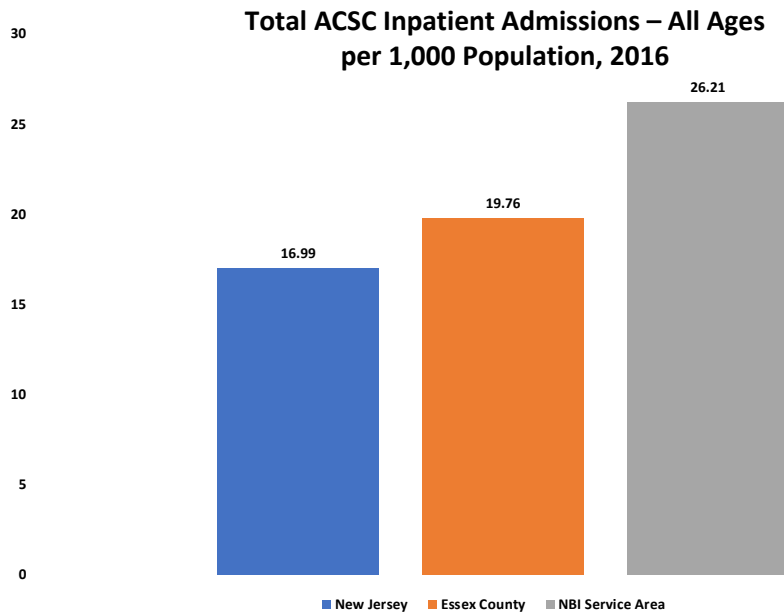
- In 2016, Newark 07102 had the highest inpatient admissions due to ACSC (33.35/1,000) followed by Newark 07108 (33.01/1,000).

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

GEOGRAPHIC AREA	RATE	HIGHEST SERVICE AREA RATES	
New Jersey	16.99	07102 Newark	33.35
Essex County	19.76	07108 Newark	33.01
Newark Beth Israel	26.21	07018 East Orange	32.61
		07017 East Orange	30.85
		07103 Newark	27.78

*Source: UB-04 2016 Discharges

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



Source: UB-04 2016 Discharges

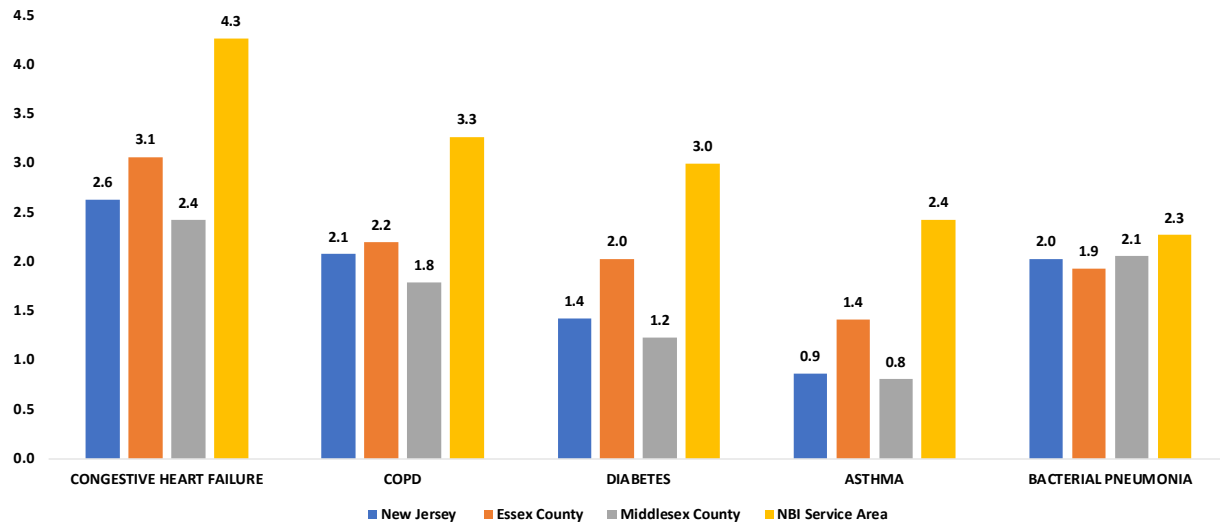
- In 2016, there were a total of 7,488 ACSC admissions from the NBIMC Service Area.

INPATIENT (2016) – ALL AGES		
SERVICE AREA	ACSC Description (Top 5 conditions combined)	TOTAL IN AREA
Newark Beth Israel	Congestive Heart Failure	1,220
	COPD	934
	Diabetes	855
	Asthma	693
	Bacterial Pneumonia	648
	All Others	3,138
TOTAL Service Area		7,488

Source: UB-04 2016 Discharges

- In 2016, congestive heart failure was the leading cause of inpatient ACSC admissions in Essex County followed by COPD, Diabetes, Bacterial Pneumonia and Asthma
- The 2016 Essex County inpatient ACSC rates for congestive heart failure, COPD, Asthma and diabetes were higher than State rates.

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



IP ACSC (2016) All Ages			
Geographic Area	Rate	Geographic Area	Rate
Essex County	19.76	07102 Newark	33.35
New Jersey	16.99	07108 Newark	33.01
Newark Beth Israel	26.21	07018 East Orange	32.61
		07017 East Orange	30.85
		07103 Newark	27.78

Source: UB-04 2016 Discharges

Additional information regarding Ambulatory Care Sensitive Conditions may be found in **Appendix E: Discharges by Race for the Population 18-64 for Ambulatory Care Sensitive Conditions.**

6. Neighborhood and Built Environment

The neighborhood and built environment contribute to health in a variety of ways. Pollution, crime, and access to healthy food and water are environmental and neighborhood factors that may be hazardous to a community's health.³⁷

Air Quality

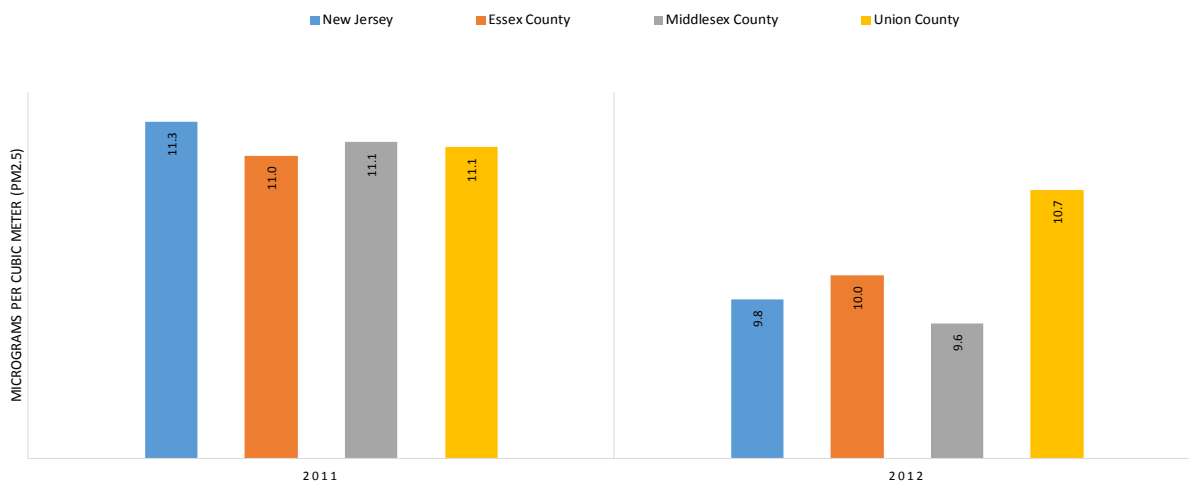
Outdoor air quality has improved since the 1990, but many challenges remain in protecting Americans from air quality problems. Air pollution may make it harder for people with asthma and other respiratory

³⁷ Source: Commission to Build a Healthier America, Robert Wood Johnson Foundation <http://www.commissiononhealth.org/PDF/888f4a18-eb90-45be-a2f8-159e84a55a4c/Issue%20Brief%203%20Sept%2008%20-%20Neighborhoods%20and%20Health.pdf>

diseases to breathe.³⁸ County level data masks ZIP Code level analysis that may reveal higher concentrations of air pollution, particularly in industrialized areas of a county.

- In 2012, the daily measure of fine particle matter in Essex County (10 PM2.5) is slightly higher than the State rate (9.8 PM2.5). Compared to all 21 counties, Essex County ranks in the middle quartile.
- Essex County experienced a 9.1% reduction in fine particulate matter in between 2011 (11.0 per cubic meter) and 2012 (10.0 per cubic meter).
- In 2012, Essex County (10.0 PM2.5) average daily measure of fine particles is 49.3% higher than the CHR national benchmark (6.7 PM2.5), placing it in the in the worst performing quartile.

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



Source: County Health Rankings - Environmental Public Health Tracking Network



National Benchmark: 6.7
Essex County 2012: 10.0

Housing Built before 1950

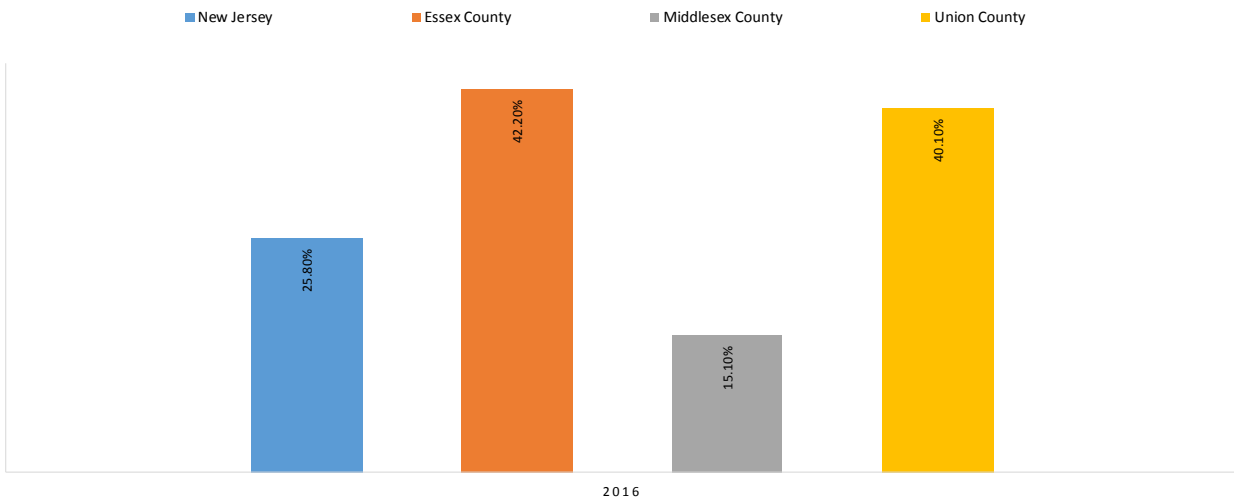
The potential for exposure to lead based paint in housing units built before 1950 is high. A main source of lead exposure is found in household dust with lead-based paint. Children are highly vulnerable to exposure to lead because of its adverse effects on the developing brain and nervous system.³⁹

- In 2016, 42.2% of Essex County housing units were built before 1950, 63.5% higher than New Jersey overall at 25.8%.
- Essex County (42.10%) ranked among the worst performing quartiles of all counties in New Jersey, in terms of housing units built before 1950.

³⁸ <http://www.cdc.gov/air/default.htm>

³⁹ Report On the National Survey of Lead-Based Paint in Housing, <https://www.epa.gov/sites/production/files/documents/r95-003.pdf>

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



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

Lead Hazards

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

During the summer of 2019, high levels of lead in Newark drinking water were reported, prompting widespread distribution of bottled water to Newark residents. Though lead has long been an issue in Newark, the situation escalated after a number of tests indicated water filters were failing to adequately remove the lead. In October, Governor Murphy laid out a plan to make the State's water system lead-free within 10 years. The plan could cost \$2 billion over the next 10 years. Soon after, a U.S. House subcommittee announced hearings to examine the issue of lead in New Jersey's drinking water.

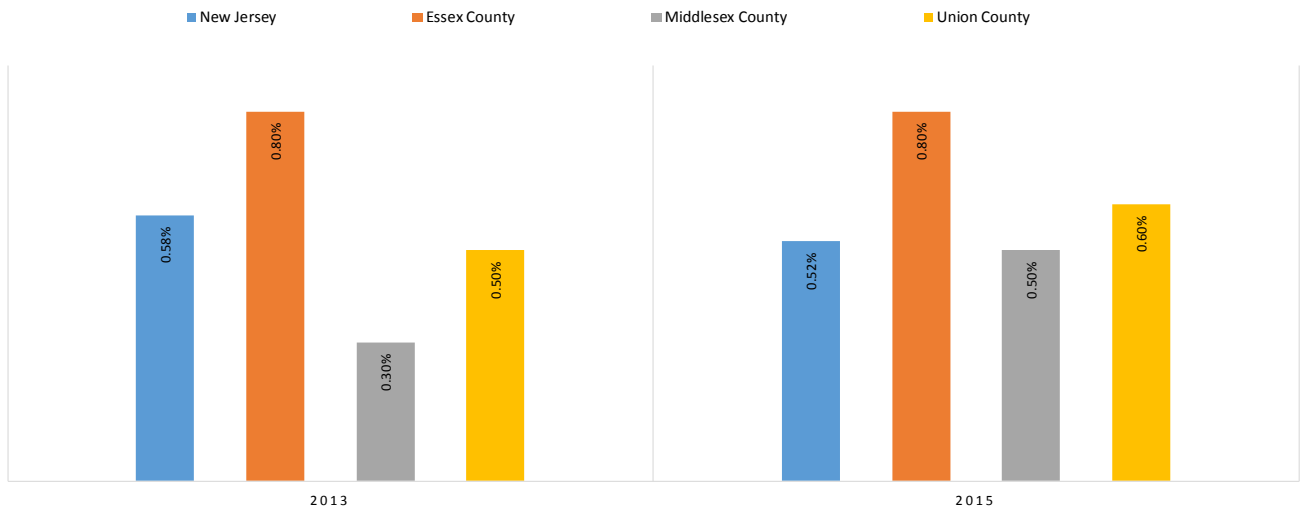
Very high levels of lead can cause seizures, brain damage, developmental or intellectual disabilities, coma and even death. Exposure to lead, even at low levels, has been associated with decrease hearing, lower intelligence, hyperactivity, attention deficit, and developmental problems.⁴⁰ County level analysis cannot reveal individual town disparities in blood lead levels particularly in towns with housing stock built before 1950.

- In 2015, 0.8% of Essex County children had elevated blood lead levels compared to 0.52% statewide.

⁴⁰ <http://www.nj.gov/health/fhs/newborn/lead.shtml>

- There was no change among the percent of children with elevated blood lead levels from 2013 (0.8%) to 2015 (0.8%). In 2015, Essex County ranked among the worst performing quartile among counties statewide.

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



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

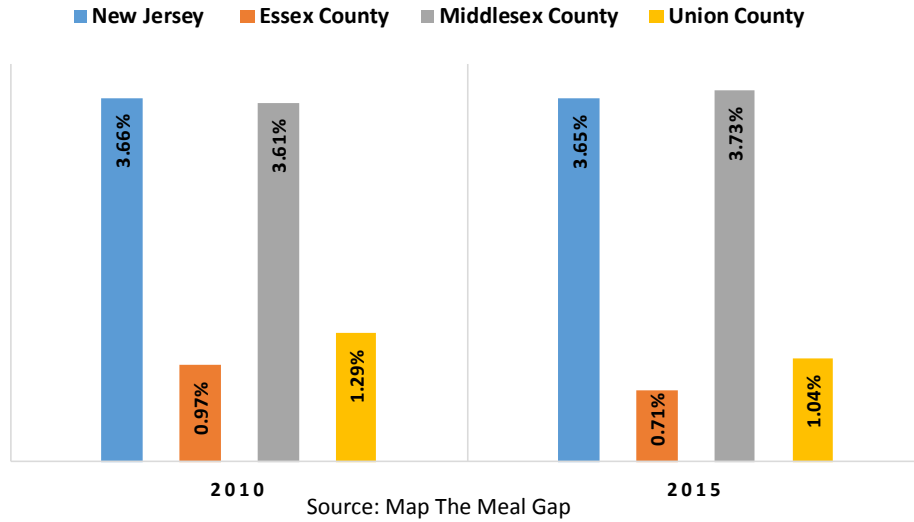
Access to Healthy Foods

Choices about food and diet are influenced by accessibility and affordability of retailers. Specifically, travel time to shopping, availability of healthy foods and food prices are key to decision making. Low-income families face greater barriers in accessing healthy and affordable food retailers, which in turn negatively affect diet and food security.⁴¹

- In 2010, 3.66% of New Jersey and 0.97% of Essex County residents suffered from limited access to healthy foods.
- Between 2010 and 2015, the percent of Essex County residents with limited access to healthy foods declined from 0.97% to 0.71%.

⁴¹ <https://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas/>

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

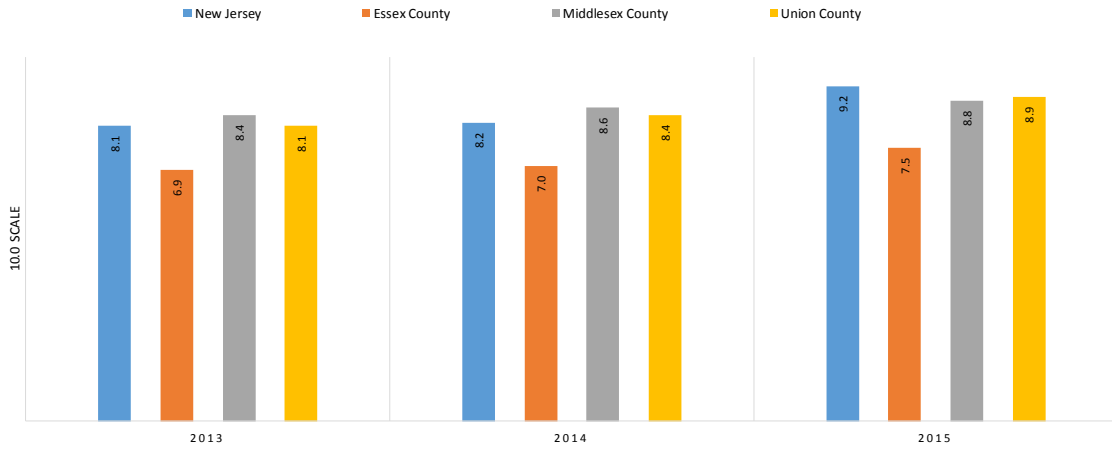


County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 2.0%
Essex County 2015: 0.71%

- In 2015, Essex County had a rate of 7.5 out of 10 on the food environment index which is an indicator of access to healthy foods.

Food Environment Index 2010-2015



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

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

National Benchmark: 8.6
Essex County 2015: 7.5

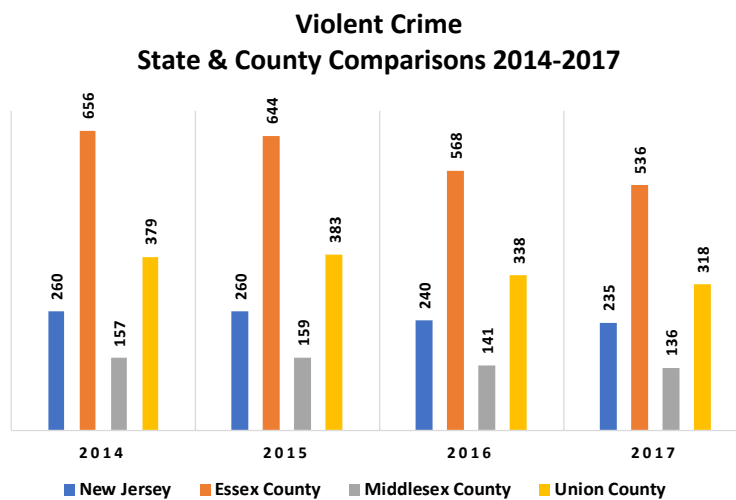
Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Limited Access to Healthy Foods			
Food Environment Index <i>Index of factors that contribute to a healthy food environment</i>	N.A.		
Housing Built Before 1950 with Possible Lead-Based Paint Hazard	N.A.	N.A.	
Percent of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

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

Injury and Crime Prevention

Injuries and violence are widespread. Most events resulting in injury, disability or death are predictable and preventable. Individual behaviors, physical environment, access to health services and the social environment affect the risk of unintentional injury and violence.

- Between 2014 and 2016, the violent crime rate in Essex County (568/100,000) was more than double than the violent crime rate (240/100,000) in New Jersey.
- The violent crime rate for Essex County places it in the worst performing quartile.
- In 2017, Newark ranked 12th out of 422 municipalities reporting violent crimes to the FBI. This was an improvement over 2016, when Newark ranked 8th overall in violent crimes.



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

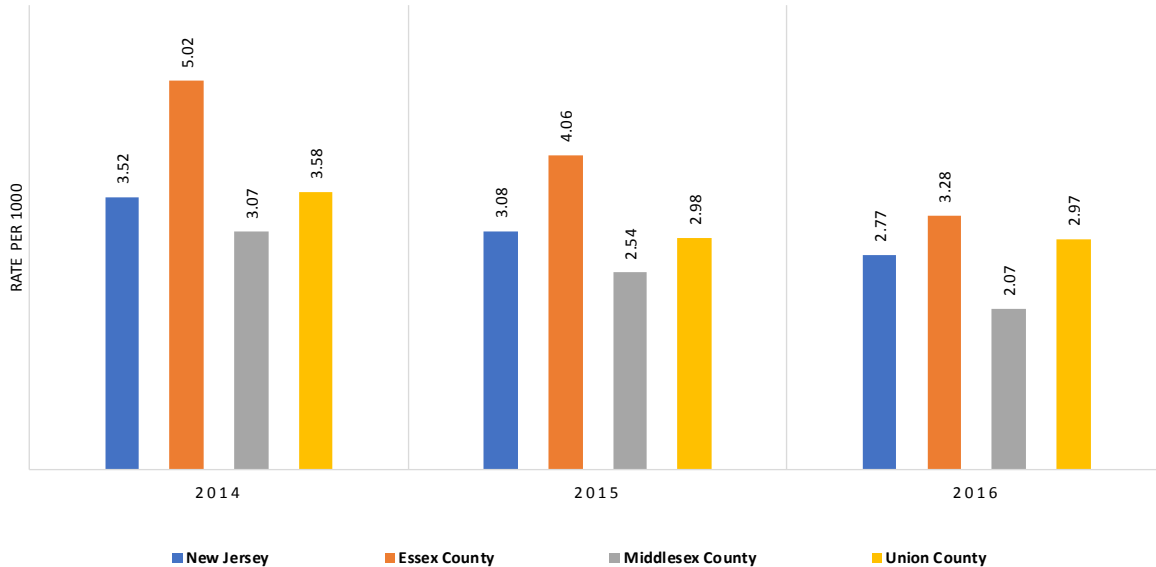


National Benchmark: 62
Essex County: 536

Burglaries

- Essex County (3.28/1,000) had 18.2% more burglaries than New Jersey (2.77/1,000) in 2016.
- The Essex County burglary rate decreased 53.0% from 5.02/1,000 in 2014 to 3.28/1,000 in 2016.
- Newark ranked number 1 in terms of burglaries across the 422 reporting municipalities.
- Essex County's burglary rate ranks in the worst performing quartile of New Jersey counties.

Burglary Rate
State & County Comparisons, 2014-2016



Source: http://www.njsp.org/ucr/2016/pdf/2016a_sect_7.pdf

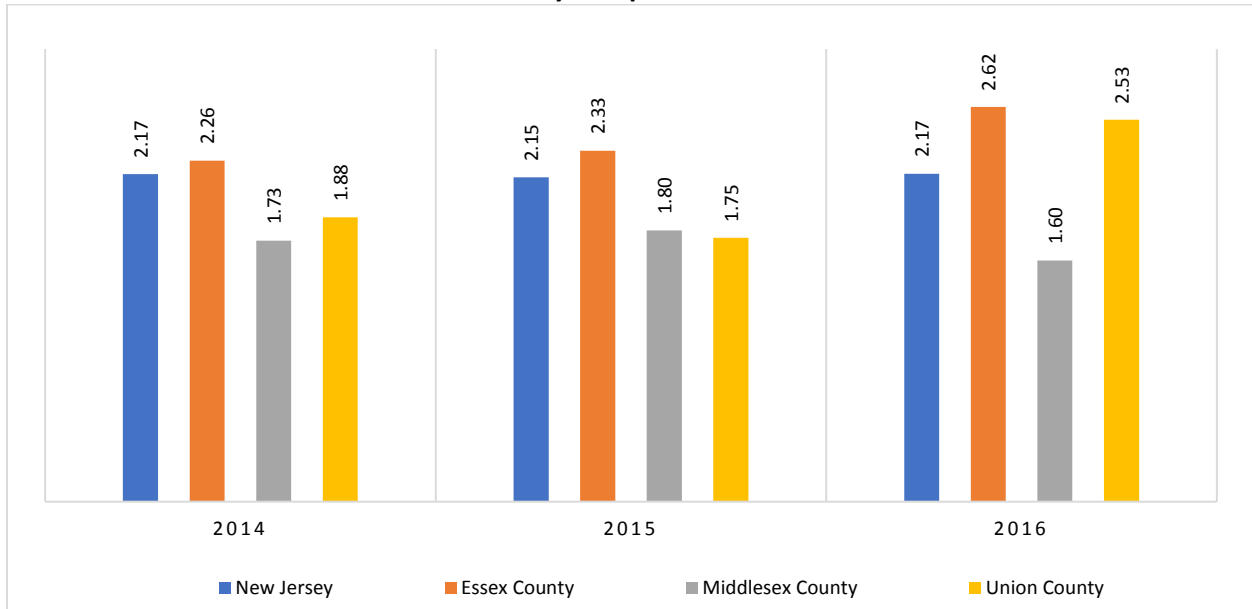
Domestic Violence Arrests

Domestic violence can negatively impact a victim's health beyond the domestic violence incident. Victims of domestic violence exhibit physical and emotional problems including, but not limited to, chronic pain, depression, anxiety, eating disorders, and post-traumatic stress disorder.⁴²

- Statewide domestic violence arrest rates have remained fairly constant.
- In 2016, the Essex County domestic violence arrest rates were higher than the State and all comparison counties.
- Between 2014 and 2016, the rate of domestic violence arrests in Essex County decreased 15.9%.
- Essex County is within the middle quartile compared to all New Jersey counties for arrests due to domestic violence.

⁴² http://www.stopvaw.org/health_effects_of_domestic_violence

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

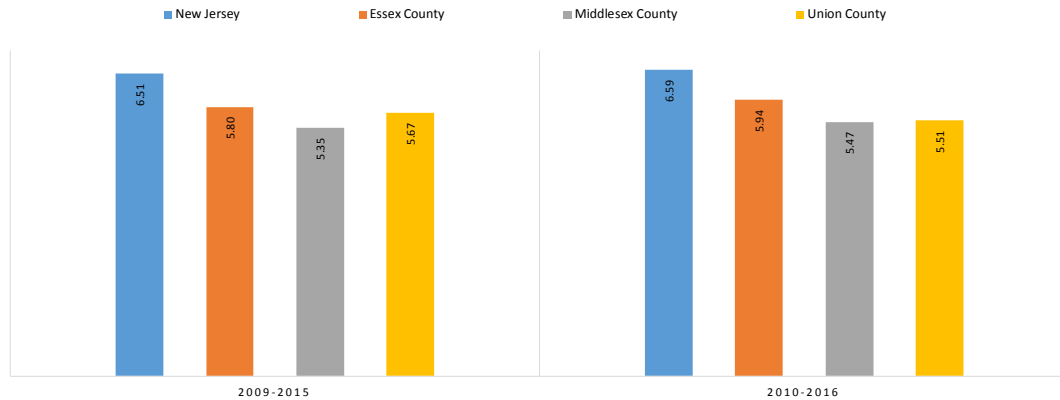


Source: County Health Rankings - The Uniform Crime Reporting (UCR) Program

Motor Vehicle Crash Deaths

- In 2010-2016, Essex County (5.94/100,000) had 10.9% fewer motor vehicle crash deaths than New Jersey (6.59/100,000).
- Deaths due to motor vehicle accidents increased slightly in Essex County between 2009-2015 (5.80/100,000) and 2010-2016 (5.94/100,000).
- 2010-2016 Essex County (5.94/100,000) car accident related deaths occurred 108.8% less often than the *Healthy People 2020* target (12.4/100,000).

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



Source: County Health Rankings, CDC Wonder Mortality Data, 2010 - 2016



Baseline: 13.8
Target: 12.4
Essex County 2016: 5.7

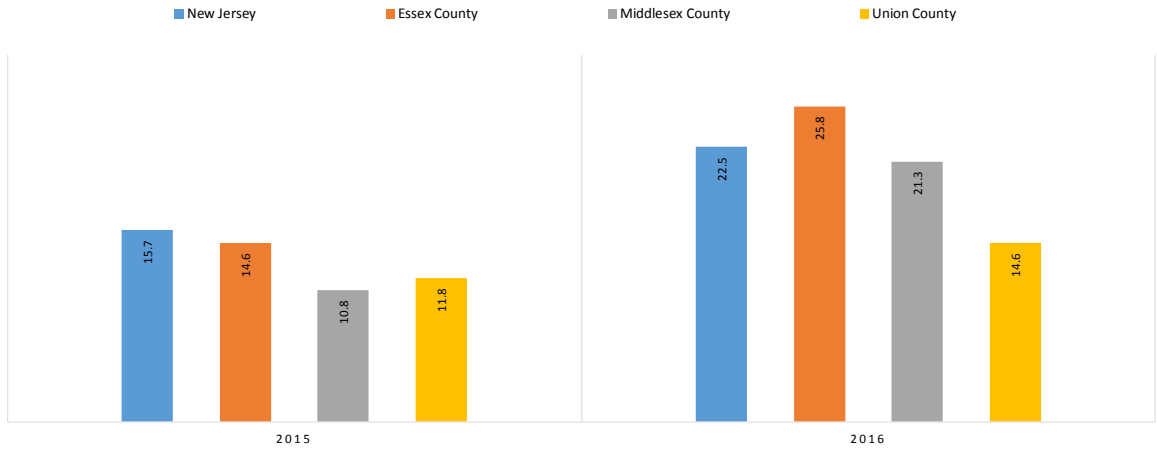


National Benchmark: 9
Essex County 2016: 5.7

Accidental Poisoning and Exposure to Noxious Substances

- In 2016, Essex County (25.8/100,000) had a higher death rate due to accidental poisoning and exposure to noxious substances than statewide (22.5/100,000).
- Essex County had a higher death rate due to accidental poisoning and exposure to noxious substances in 2016 than in 2015.
- Essex County ranks in the middle quartile in New Jersey, and in the worst performing quartile with respect to the *Healthy People 2020* target.

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



Source: NJ SHAD



Baseline: 13.2
Target: 13.2
Essex County 2016: 25.8

D. HEALTH FACTORS

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

1. Clinical Care Measures

Inpatient and ED Utilization

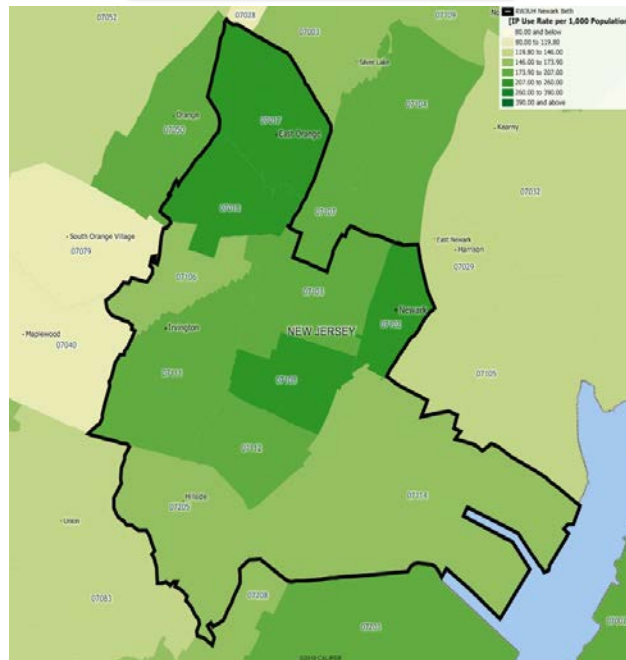
Factors impacting hospital utilization may include policy change, advances in technology, practice patterns and demographics. Many federal and state health care payment reforms, including the Affordable Care Act (ACA), were designed to improve care transitions, coordination of care, enhance ambulatory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

Inpatient

- Essex County’s 2016 inpatient utilization rate (163.15/1,000) was slightly higher than the State (160.22/1,000).
- NBIMC’s Service Area inpatient rate (192.11/1,000) was higher than the Essex County and State rates.
- Newark 07102 had the highest inpatient use rate in the NBIMC Service Area (237.62/1,000).

Inpatient Use Rates per 1,000 Population 2016

GEOGRAPHIC AREA	RATE
New Jersey	160.22
Essex County	163.15
Newark Beth Israel	192.11
TOP 5 BY ZIP CODE	
07102 Newark	237.62
07108 Newark	217.11
07018 East Orange	216.39
07112 Newark	205.54
07103 Newark	200.85



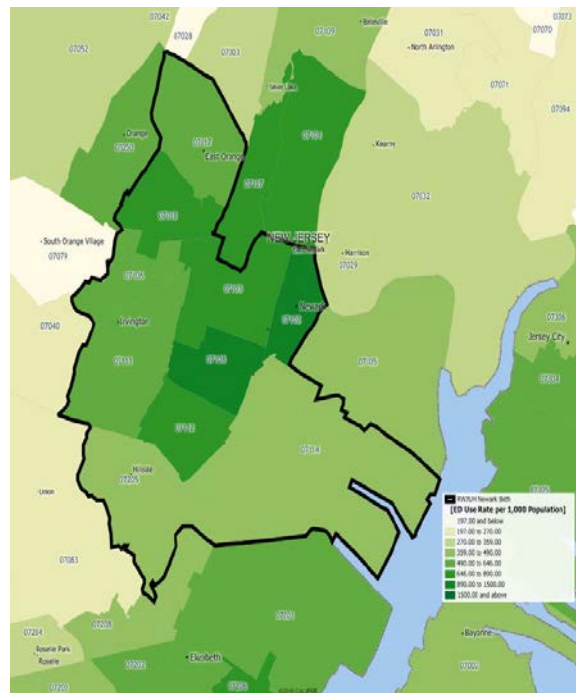
Source: UB-04 2016 Discharges Includes Inpatient & Same Day Stay, Excludes Normal Newborn; Population – Claritas 2016 Estimate

Emergency Department

- Essex County’s 2016 ED visit rate (464.65/1,000) was 31.9% more than the State rate (352.20/1,000).
- NBIMC’s 2016 Service Area (681.12/1,000) ED use rate exceeded the State rate (352.2/1,000) and the County rate (464.65/1,000).
- In 2016, Newark’s 07102 ED visit rate (923.35/1,000) was nearly twice as large as the County rate (464.65/1,000).
- In 2016, the ED visit rates of Newark 07102, 07108, 07112, and 07103 and 07018 in East Orange were greater than Essex County.

ED Use Rate per 1,000 Population 2016

GEOGRAPHIC AREA	RATE
New Jersey	352.20
Essex County	464.65
Newark Beth Israel	681.12
TOP 5 BY ZIP CODE	
07102 Newark	923.35
07108 Newark	897.00
07112 Newark	829.34
07103 Newark	797.03
07018 Newark	718.82



*Source: UB-04 2016 ED Discharges; Claritas 2016 Estimate

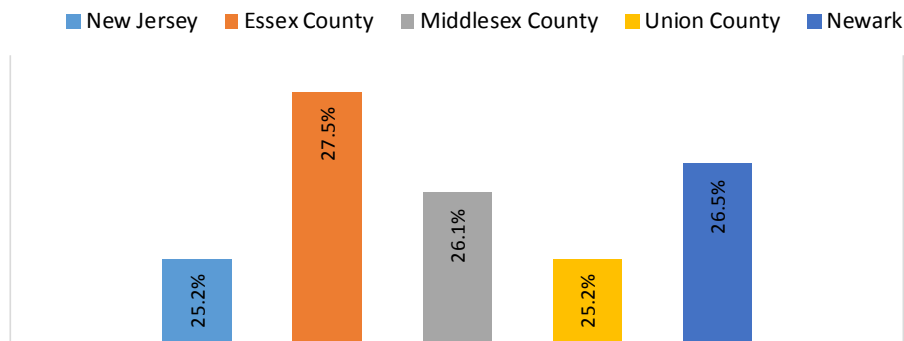
** Emergency Room Use Among Adults Aged 18–64: Early Release of Estimates From the National Health Interview Survey, January–June 2011; http://www.cdc.gov/nchs/data/nhis/earlyrelease/emergency_room_use_january-june_2011.pdf

Cesarean Section

A Cesarean Section (C-section) is a major surgical procedure performed because of health problems in the mother, position of the baby, and/or distress in the infant.⁴³ The U.S. cesarean delivery rate reached a high of 32.9% of all births in 2009, rising 60% from 1996 (20.7%). Recently, the American College of Obstetricians and Gynecologists developed clinical guidelines for reducing the occurrence of non-medically indicated cesarean delivery and labor induction prior to 39 weeks. Efforts to reduce such births include initiatives to improve perinatal care quality, and changes in hospital policy to disallow elective delivery prior to 39 weeks and education of the public.⁴⁴

- Essex County's 2016 primary C-section rate (27.5%) was higher than the State rate (25.2%).
- The 2016 Essex County primary C-section rate (27.5%) was higher than the Middlesex (26.1%) and Union (25.2%) County rates.
- In 2016, the Essex County primary C-section rate was in the middle quartile of New Jersey counties, and the *Healthy People 2020* target.
- County-wide, women with a primary C-section trended upward from 2013 through 2016, increasing from 26.2% in 2013, to 27.5% in 2016.
- The primary C-section rate for Newark moms was 1 percentage point lower than for Essex county moms.

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



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database <http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html>

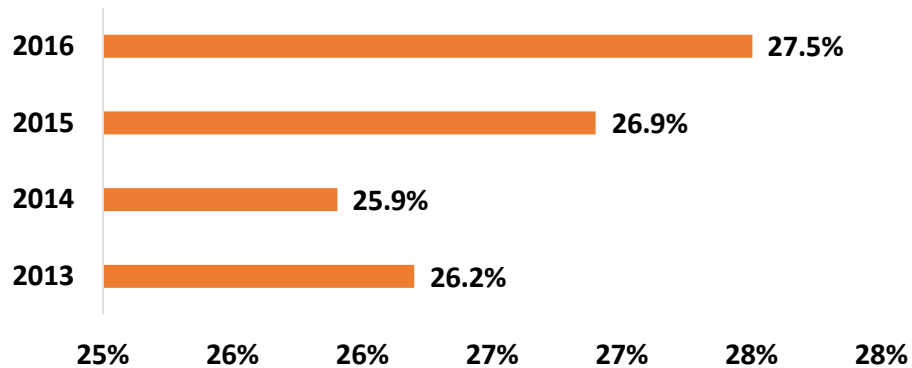
*Primary C-Section: Single \geq 37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females

**Repeat C-Section: Single \geq 37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean

⁴³ <http://www.nlm.nih.gov/medlineplus/cesareansection.html>

⁴⁴ http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_01.pdf

**Primary C-Section Rates (2016)
Essex County – Trend**



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database <http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html>

*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females

**Repeat C-Section: Single >=37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean



Baseline: 26.5%

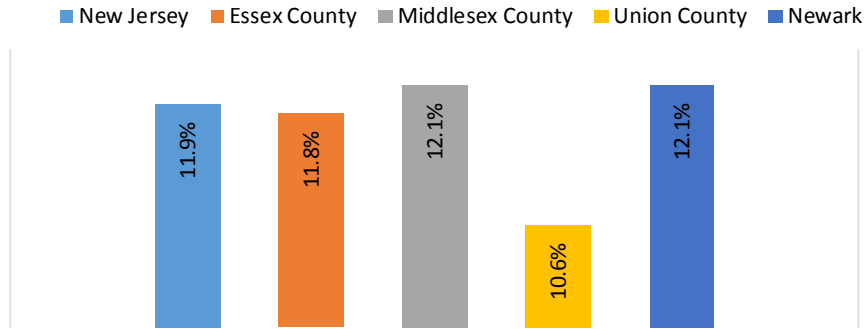
Target: 23.9%

Essex County 2016: 27.5%

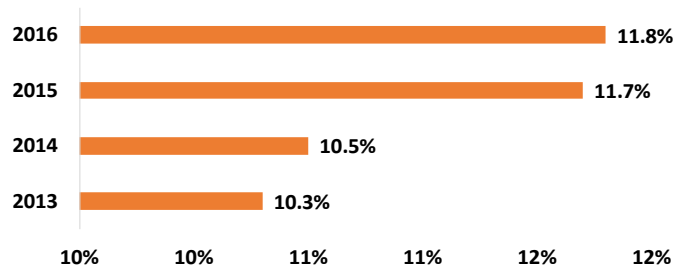
Vaginal Birth After C-Section (VBAC)

- Essex County’s 2016 VBAC rate (11.8%) is similar to the State rate (11.9%). Essex County ranks in the middle performing quartile of all 21 New Jersey counties.
- County-wide women with a VBAC trended upward from 2013 through 2016, increasing from 10.3% in 2013 to 11.8% in 2016.
- Newark’s VBAC rate (12.1%) is similar to the statewide rate.

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



Essex County – Trend



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database <http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html>

*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females

**Repeat C-Section: Single >=37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean

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

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

2. Health Behaviors

Maternal / Fetal Health

Prenatal Care

The medical care a woman receives during pregnancy monitors her health and the developing fetus. Low-risk pregnancies should visit a prenatal provider every four or six weeks through 28 weeks, then every two or three weeks from weeks 28-36, and finally every week in the ninth month until delivery. A high-risk pregnancy requires additional visits.⁴⁵ Pregnant women who do not receive adequate prenatal care risk undetected complications and an increased possibility of adverse outcomes.

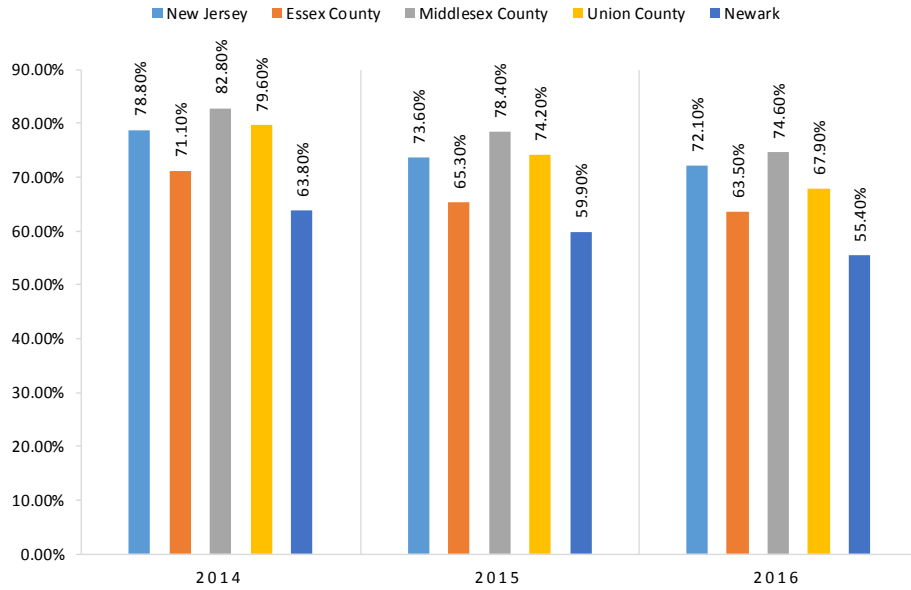
Early and regular prenatal care is a strategy to improve health outcomes for mothers and infants. Two significant benefits are improved birth weight and decreased preterm delivery. Infants born to mothers who receive no prenatal care have an infant mortality rate five times higher than mothers who receive appropriate prenatal care in the first trimester of pregnancy. Enrollment in care during the first trimester of pregnancy reflects timely initiation of prenatal care.⁴⁶

- In 2016, only 63.5% of Essex County women entered prenatal care in the first trimester compared to 72.1% in New Jersey. As compared to other New Jersey counties, Essex County ranks in the lowest quartile.
- Essex County women enrolled in first trimester prenatal care declined from 80.9% in 2010, to 63.5% in 2016.
- In 2016, only 55.4% of Newark women enrolled in prenatal care in the first trimester.
- The percent of Newark women enrolled in first trimester care decreased from 63.8% in 2014, to 55.4% in 2016.

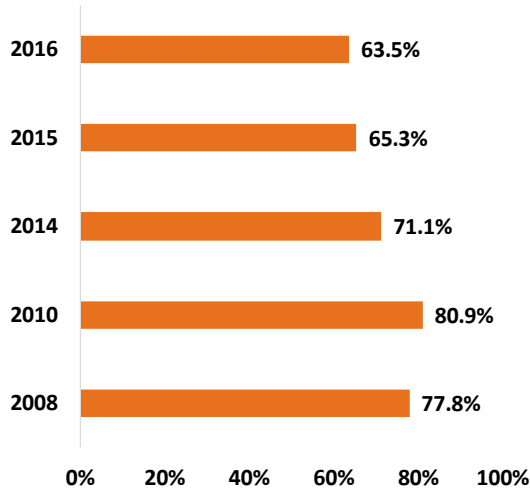
⁴⁵ <http://www.plannedparenthood.org/health-info/pregnancy/prenatal-care>

⁴⁶ <http://www.hrsa.gov/quality/toolbox/measures/prenatalfirsttrimester/index.html>

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



Essex County



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database

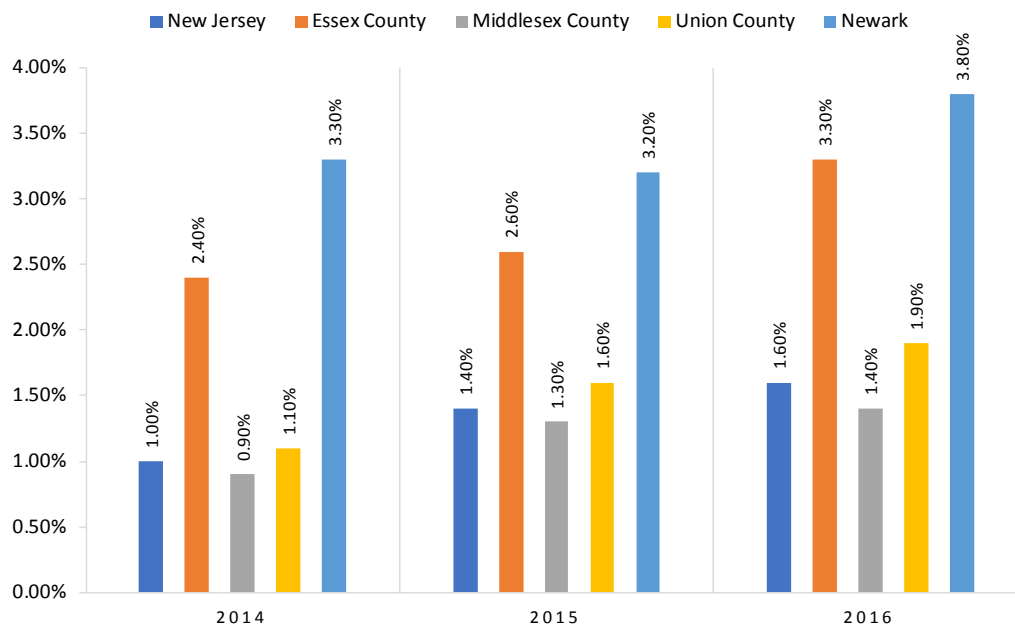
Note: Percentages are based on Total Number of Live Births for County and State



Baseline: 70.8%
Target: 77.9%
Essex County 2016: 63.5%

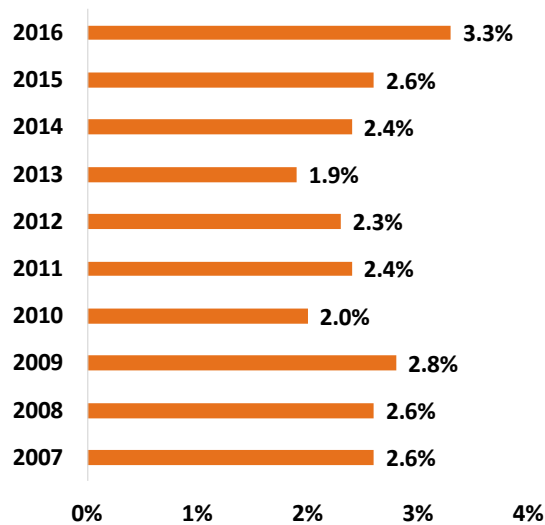
- The percent of Essex County women without prenatal care ranged from a low of 1.9% in 2013, to a high of 3.3% in 2016.
- The percent of Newark women without prenatal care exceeded the County rate by 0.5 percentage points, increasing from 3.3% in 2014, to 3.8% in 2016.
- The 2016 Essex County rate for no prenatal care was more than double the State rate of 1.6% and performed in the lowest quartile. Increases such as these are concerning and should be monitored.

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



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

**Percentage of Live Births with No Prenatal Care, 2014-2016
Essex County – Trend**



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

High Risk Sexual Behaviors

Teen Pregnancy

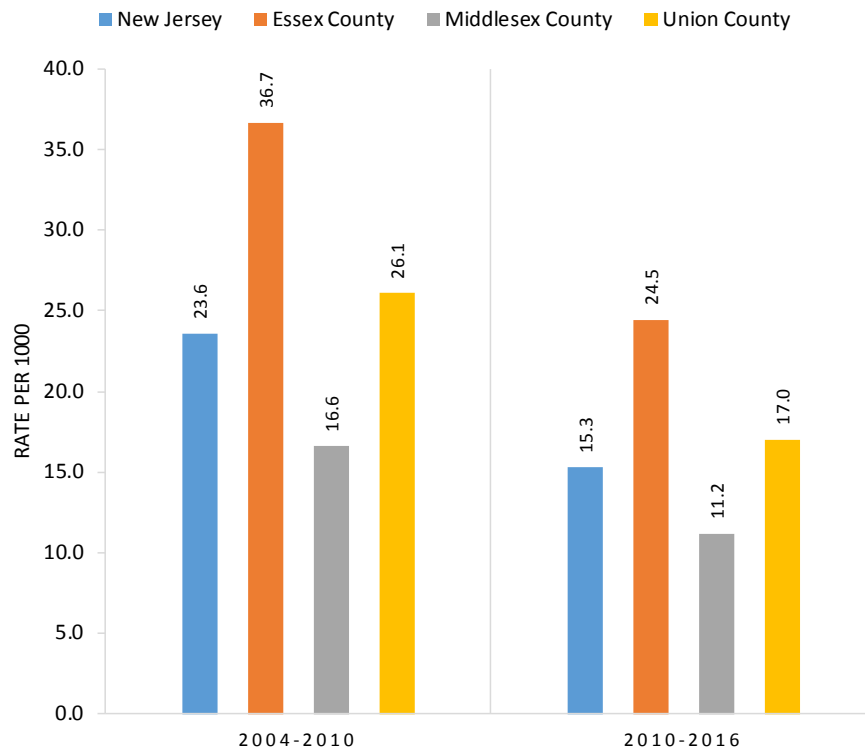
In 2016, there were 20.3 births/1,000 American adolescent females aged 15-19 years; approximately 209,809 babies were born to teens, with nearly eighty-nine percent of these births occurring outside of marriage. The national teen birth rate has trended downward over the past 20 years. In 1991, the U.S. teen birth rate was 61.8 births/1,000 adolescent females. However, the U.S. teen birth rate remains higher than that of many other developed countries, including Canada and the United Kingdom.⁴⁷ Pregnant teens are less likely than older women to receive recommended prenatal care and are more likely to have pre-term or low birth weight babies. Teen mothers are often at increased risk for STIs and repeat pregnancies, are less likely than their peers to complete high school and more likely to live below the poverty level and rely on public assistance. Risky sexual behaviors can have high economic costs for communities and individuals.⁴⁸

- The 2010-2016 Essex County (24.5/1,000) birth rate among teens aged 15-19 was 60.1%, higher than the State rate (15.3/1,000) and in the lowest performing quartile statewide.
- The birth rate among Essex County teens aged 15-17 decreased from 17.5/1,000 in 2007-2011, to 10.1/1,000 in 2012-2016, and was in the lowest performing quartile statewide.
- For both age cohorts, 15-17 and 15-19, the percent of Essex County teen births is consistently higher than statewide rates.

⁴⁷ <http://www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/teen-pregnancy/trends.html>

⁴⁸ <http://www.countyhealthrankings.org/our-approach/health-factors/sexual-activity>

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



Source: NJDOH Center for Health Statistics State Health Assessment Data

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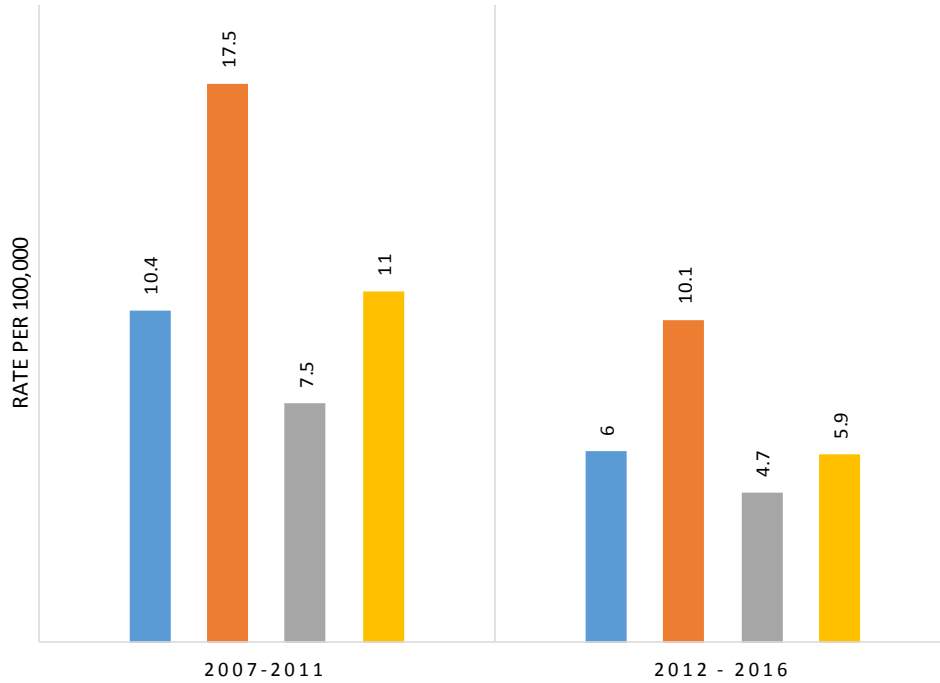
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National Benchmark: 15
Essex County 2016: 24.5

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

■ New Jersey ■ Essex County ■ Middlesex County ■ Union County



Source: NJDOH Center for Health Statistics State Health Assessment Data



Baseline: 40.2
Target: 36.2
Essex County 2016: 10.1

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

- The Newark 07114 2016 birth rate to teens aged 15-19 (81.42/1,000) was almost eight times the New Jersey rate (11.6/1,000).

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

GEOGRAPHIC AREA	RATE
New Jersey	11.16
Essex County	20.39
Newark Beth Israel	30.30
TOP 5 BY ZIP CODE	
07114 Newark	81.42
07107 Newark	50.94
07108 Newark	45.39
07017 East Orange	37.20
07106 Newark	35.83

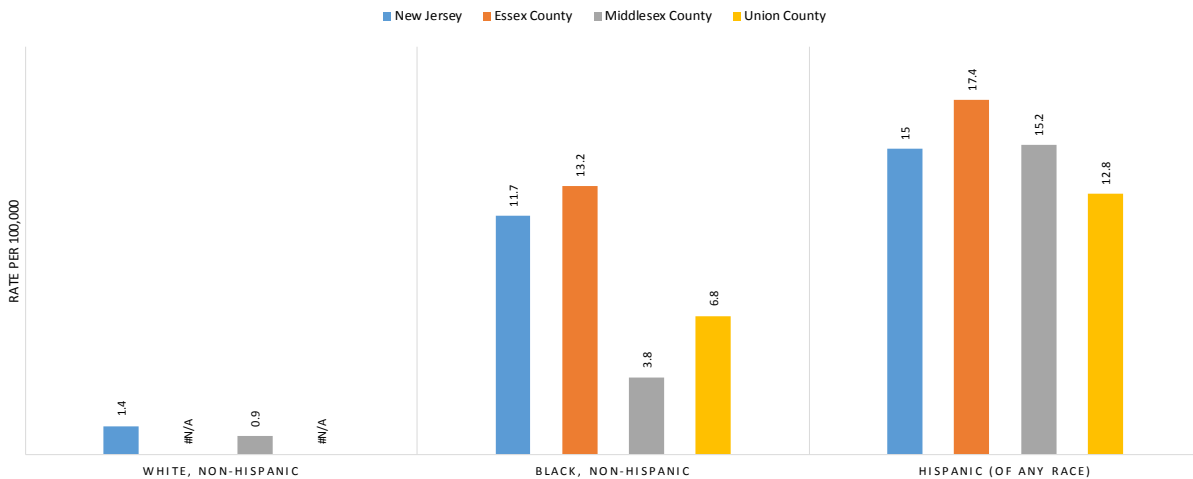
*Source: UB-04 2016 Discharges – All Deliveries To Mothers Age 15-19; Claritas Population Estimate

** NCHS Data Brief <http://www.cdc.gov/nchs/data/databriefs/db46.pdf>

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

- The 2012-2016 Essex County teen birth rate for Blacks and Hispanics was the highest relative to New Jersey and the comparison counties.
- The rate among Essex County teens, 15-17, was highest among Hispanics (17.4/1,000).

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



Source: Age 15-19 - County Health Rankings National Center for Health Statistics; Age 15-17- NJDOH Center for Health Statistics State Health Assessment Data

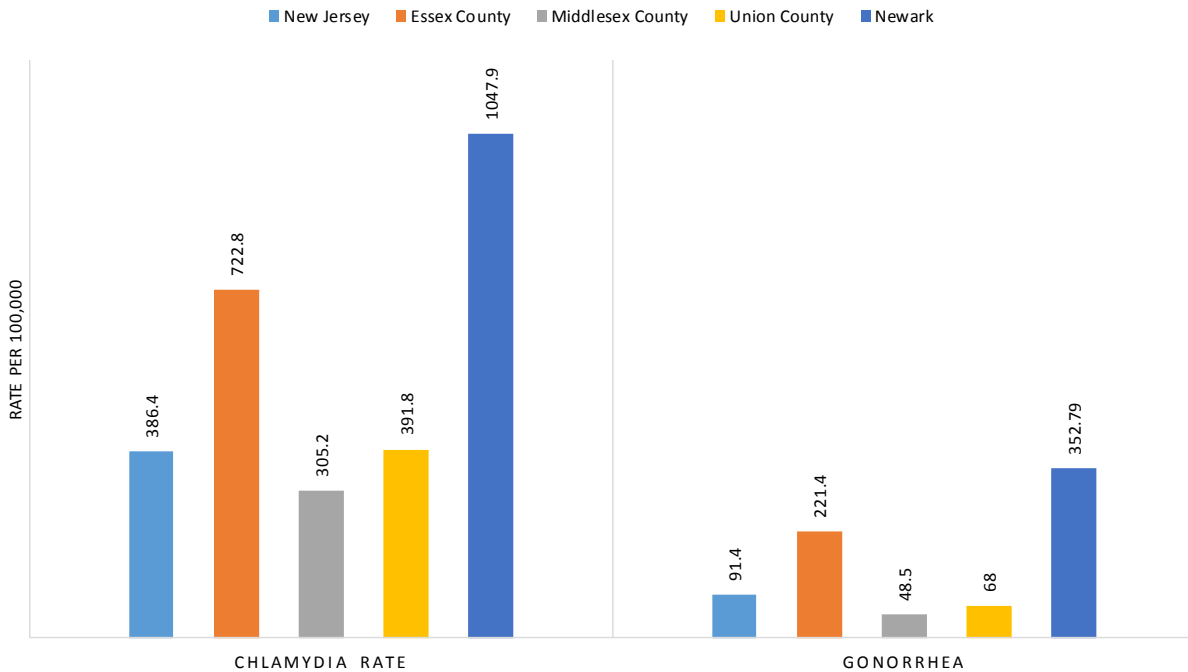
Sexually Transmitted Infection

Sexually transmitted infections (STI) are caused by bacteria, parasites and viruses contracted through relations with an infected individual. There are more than 20 types of STIs, including Chlamydia, Gonorrhea, Genital herpes, HIV/AIDS, HPV, Syphilis and Trichomoniasis. Most STIs affect both men and women, but in many cases health problems may be more severe for women. If pregnant, a STI can cause serious health complications for the baby.⁴⁹

- Chlamydia is the most prevalent STI. In 2016, Essex County (722.8/1,000) was nearly twice the New Jersey rate (386.4/1,000) and performed in the lowest quartile statewide.
- The rate of chlamydia in Essex County (722.8/1,000) was higher the CHR national benchmark (145.1/1,000).
- The rate of chlamydia (1,047/1,000) among Newark residents was nearly three times the statewide rate (386.4/1,000).
- In 2016, Essex County (221.4/100,000) had more than double the gonorrhea rate of New Jersey (91.4/100,000).
- In 2016, the gonorrhea rate (352.79/100,000) in Newark was more than three times the statewide rate (91.50/100,000).
- Essex County ranks in the lowest quartile of New Jersey counties with regard to chlamydia and gonorrhea infection rates.

⁴⁹ <http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html>

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



Source: NJ SHAD

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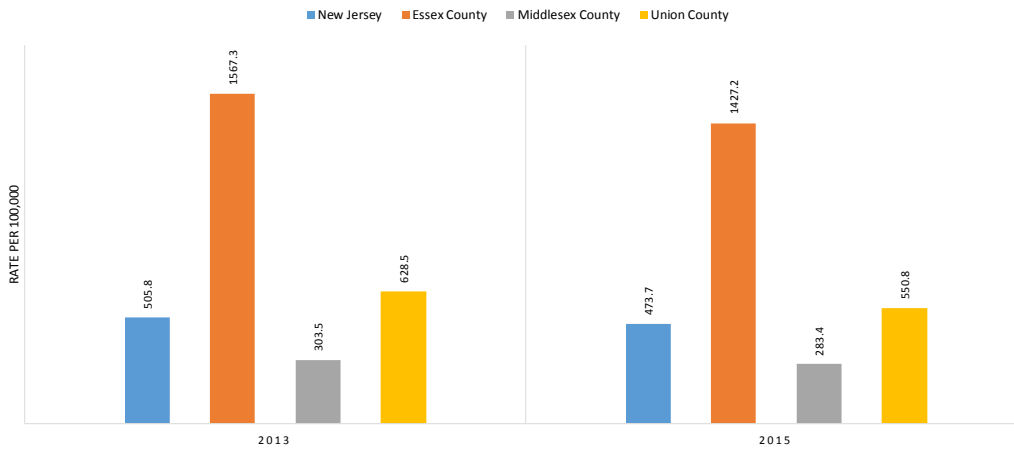
*National Benchmark: 145.1
Essex County 2016: 722.8*

HIV/AIDS

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

- County-wide HIV/AIDS prevalence rates declined between 2013 (1,567.3/100,000) and 2015 (1,427.2/100,000).
- In 2015, HIV/AIDS prevalence rate in Essex County (1,427.2/100,000) was more than triple the New Jersey rate (473.7/100,000). Essex County is in the lowest performing quartile statewide.
- Essex County had more HIV/AIDS cases than neighboring Middlesex and Union Counties.
- The prevalence rate was well above the CHR benchmark of 362/100,000.
- In 2017, the HIV prevalence rate among Newark residents (1,982.4/100,000) was nearly five times the rate statewide.

HIV Rates 2013-2015 State & County Comparisons



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

County Health Rankings & Roadmaps

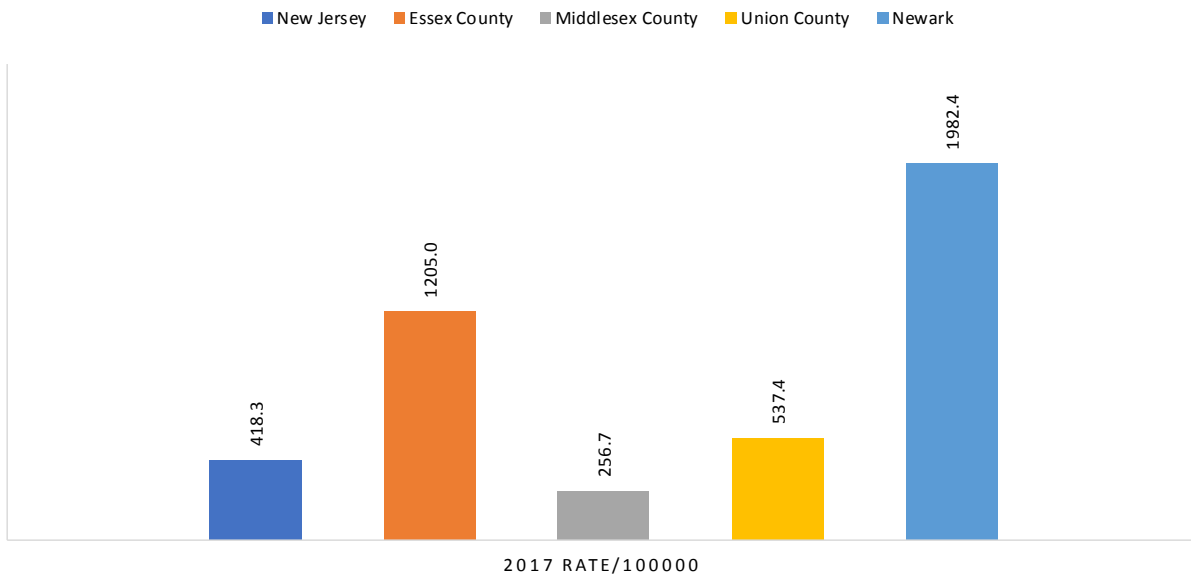
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National Benchmark: 362

Essex County 2015: 1,427.2

HIV Prevalence Rates 2017, per 100,000 population State & County Comparisons



<https://www.nj.gov/health/hivstdtb/hiv-aids/statmap.shtml>

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
STDs: Chlamydia <i>Rate per 100,000 Population</i>	N.A.		
STDs: Gonorrhea <i>Rate per 100,000 Population</i>	N.A.	N.A.	
Teen Births Ages 15-19 <i>Rate per 100,000 Female Population</i>			
Teen Births Ages 15-17 <i>Rate per 100,000 Female Population</i>		N.A.	
HIV/AIDS: Prevalence <i>Rate per 100,000 Population</i>	N.A.		

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

Individual Behavior

A CDC report indicates that people can live longer if they practice one or more healthy lifestyle behaviors including: eating a healthy diet, not smoking, regular exercise and limiting alcohol consumption. People who engage in all of these behaviors are 66 percent less likely to die early from cancer, 65 percent less likely to die early from cardiovascular disease and 57 percent less likely to die early from other causes compared to those who do not engage in any of these behaviors.⁵⁰

Tobacco Use

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

About 15% of U.S. adults smoke. Each day, nearly 3,200 youth smoke their first cigarette, and 2,100 people transition from occasional to daily smokers. Smokeless tobacco also leads to various cancers, gum and teeth problems, and nicotine addiction. Almost 6% of young adults use smokeless tobacco and half of new users are younger than 18.^{51, 52}

- Between 2012 and 2016, smoking rates have fluctuated in Essex County with an overall decrease of 1.9 percentage points.
- In 2016, there were 3.6% more smokers in Essex County (14.5%) than New Jersey (14.0%). Essex County had more adult smokers than neighboring Middlesex (12.5%) and Union (13.0%) Counties. Essex County performs in the middle quartile statewide.

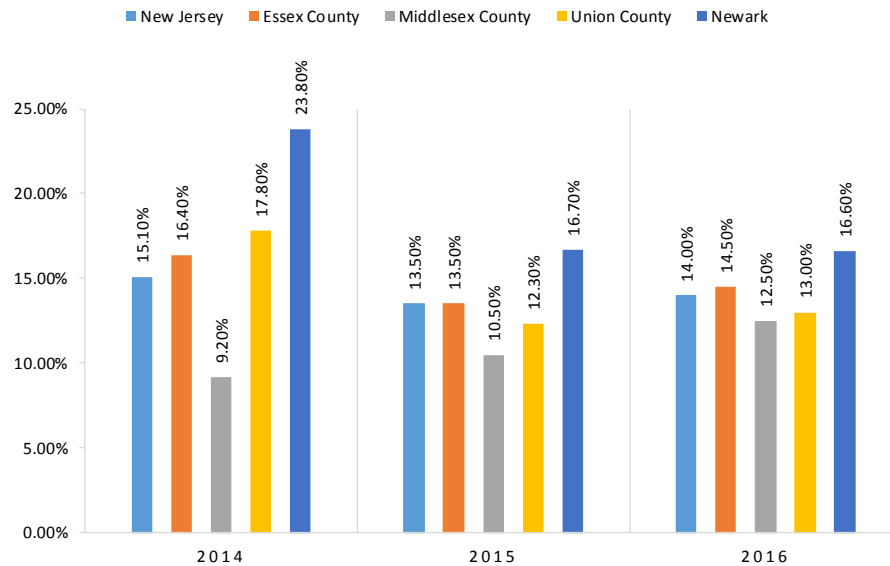
⁵⁰ <http://www.cdc.gov/features/livelonger/>

⁵¹ <http://www.countyhealthrankings.org/our-approach/health-factors/tobacco-use>

⁵² http://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm

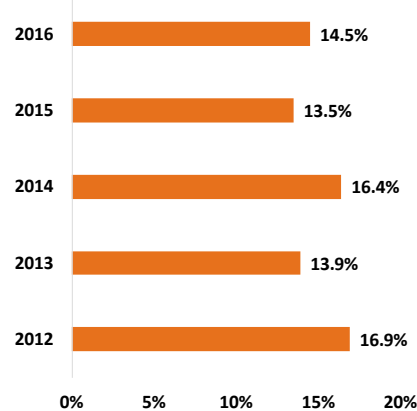
- Between 2014 and 2016, the percent of Newark residents reporting use declined nearly 24% (23.9% to 16.6%).
- The percent of current smokers in Newark was the highest of all the comparative geographies.
- In 2016, Essex County was also in the middle performing County Health Rankings benchmark and the *Healthy People 2020* target.

Adults Who Are Current Smokers State & County Comparisons, 2014-2016



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

Adults Who Are Current Smokers Essex County – Trend



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



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



National Benchmark: 14.0%
Essex County 2016: 14.5%

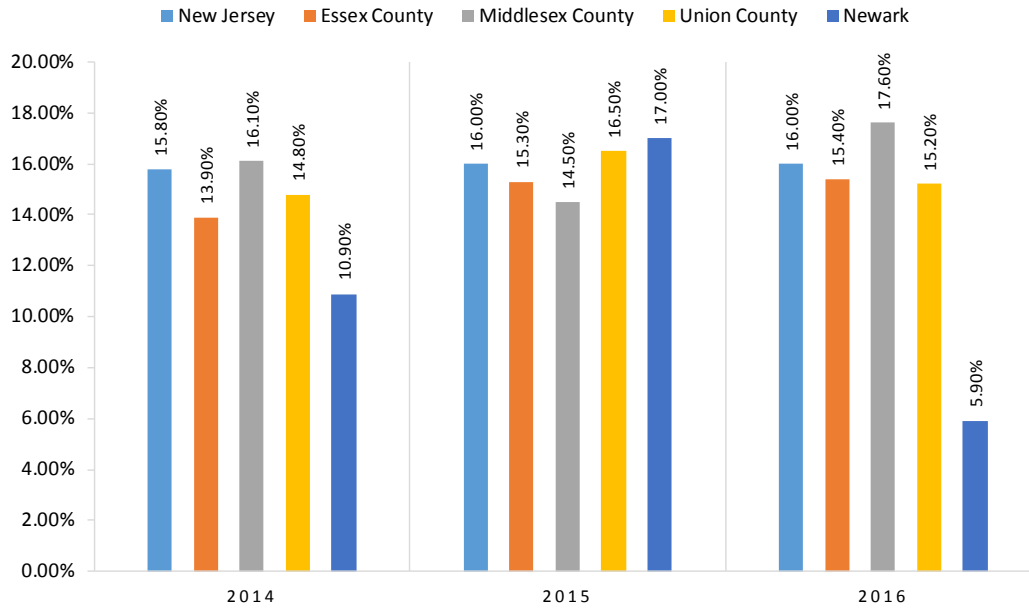
Alcohol Use

Although moderate alcohol use is associated with reduced risk of heart disease and diabetes, excessive consumption is the third leading cause of preventable death nationally. Excessive consumption considers both the amount and the frequency of drinking. Short-term, excessive drinking is linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, failure to fulfill responsibilities and motor vehicle crashes. Over time, excessive alcohol consumption is a risk factor for hypertension, acute myocardial infarction, fetal alcohol syndrome, liver disease and certain cancers.⁵³

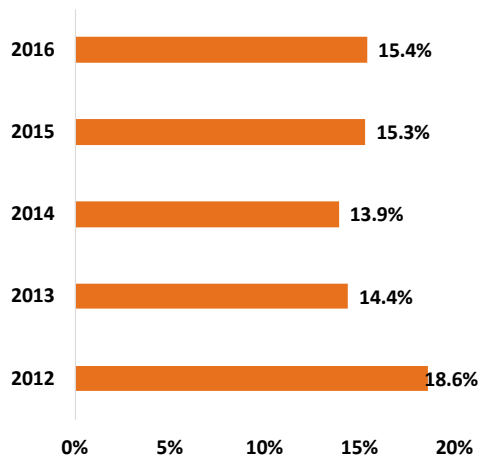
- Binge drinkers, those men that consume more than 5 drinks and women that consume more than 4 drinks in one occasion, increased from 13.9% in 2014, to 15.4% in 2016.
- In 2016, 15.4% of Essex County residents were binge drinkers compared to 16% statewide. Essex County had fewer binge drinkers than surrounding Middlesex County, but slightly more than Union County.
- Between 2014 and 2016, the reported binge drinking rate among Newark residents decreased from 10.9% to 5.9%.
- In 2016, Newark residents reported the lowest binge drinking rate in all the comparative geographies.
- Statewide, Essex County performs in the middle quartile.

⁵³ <http://www.countyhealthrankings.org/our-approach/health-factors/alcohol-drug-use>

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



Essex County



Source: CDC New Jersey Behavioral Risk Factor Surveillance System

Question: During the past 30 days how many days per week or per month did you have at least one drink of any alcoholic beverage? If response is not 0 then ask: Considering all types of alcoholic beverages how many times during the past 30 days did you have 5(for males)/4(for females) or more drinks on an occasion?

"Binge Drinking" is defined when someone has at least 5(for males)/4(for females) or more drinks on an occasion a month.

**County Health
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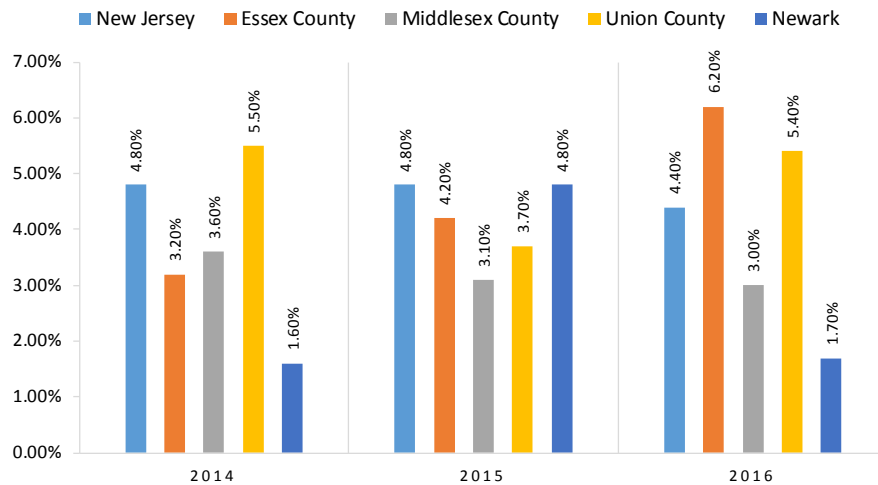
National Benchmark: 13.0%

Essex County 2016: 15.4%

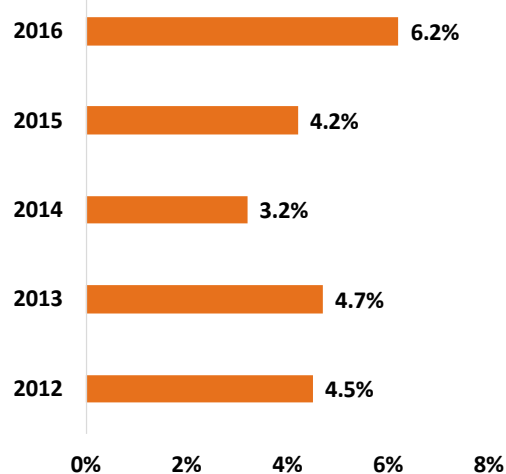
Heavy drinking is defined when someone has at least 60 drinks a month (for males) and 30 (for females).

- County-wide, residents who were heavy drinkers increased from 4.5% in 2012, to 6.2% in 2016.
- In 2016, Essex County had the highest percent of residents reporting heavy drinking, relative to the State and the surrounding counties.
- In 2016, only 1.7% of Newark residents reported heavy drinking, lower than any of the comparative geographic areas.
- Essex County ranked in the lowest quartile among the 21 counties in New Jersey.

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



Essex County



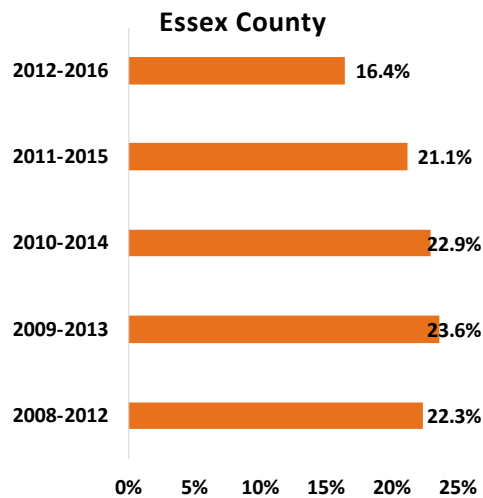
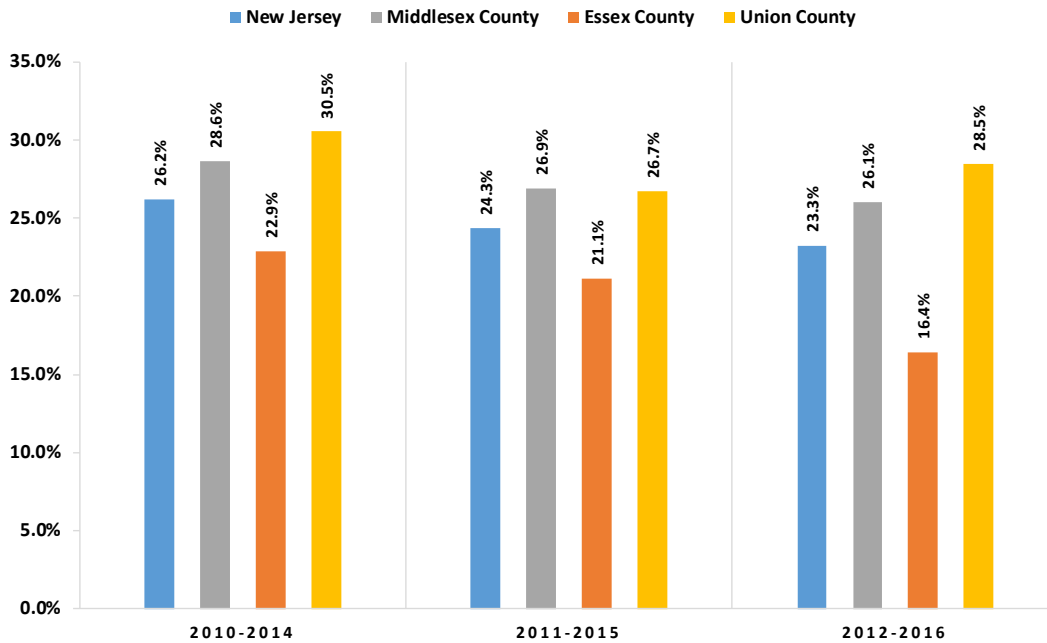
Source: CDC New Jersey Behavioral Risk Factor Surveillance System

Question: During the past 30 days how many days per week or per month did you have at least one drink of any alcoholic beverage? If response is not 0 then ask: Considering all types of alcoholic beverages how many drinks have you had during the past 30 days?

"Heavy Drinking" is defined when someone has at least 60(for males)/30(for females) or more drinks a month.

- Alcohol impaired driving deaths in Essex County have decreased from 22.9% in 2008-2012, to 16.4% in 2012-2016.
- The rate of alcohol impaired driving deaths in Essex County was historically the lowest compared to New Jersey and the comparison counties.

Alcohol-Impaired Driving Deaths State & County Comparisons, 2010-2016



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

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National Benchmark: 13.0%
Essex County 2016: 16.4%

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Tobacco Use <i>Adults Who Are Current Smokers</i>			
Excessive Drinking <i>Binge Drinkers</i>	N.A.		
Excessive Drinking <i>Heavy Drinkers</i>	N.A.	N.A.	
Alcohol Impaired Driving Deaths	N.A.		

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

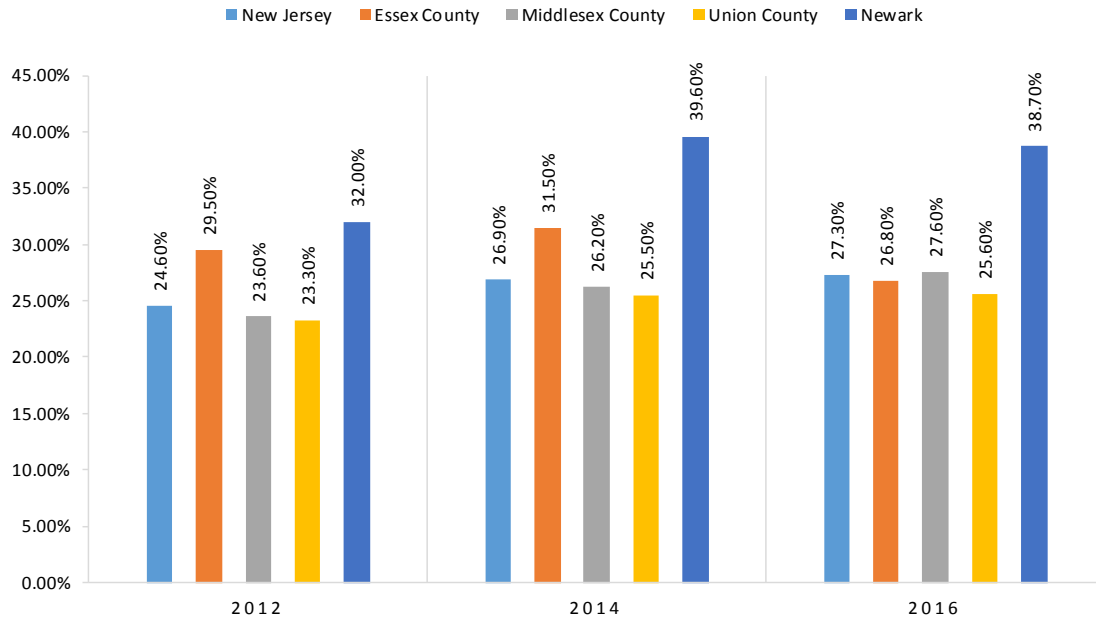
Obesity

Healthy food is a key component to good health; insufficient nutrition hinders growth and development. As of 2016, 41 million Americans struggled with hunger in the U.S. A household that is food insecure has limited or uncertain access to enough food to support a healthy life. Obesity among food insecure people, as well as low income individuals, occurs in part, because they are often subject to the same challenges as other Americans (more sedentary lifestyles, increased portion size) and because they face unique challenges in adopting and maintaining healthy behaviors, including limited resources and lack of access to affordable healthy food, cycles of food deprivation and overeating, high levels of stress and anxiety, fewer opportunities for physical activity, greater exposure to marketing of obesity promoting products, and limited access to health care.⁵⁴

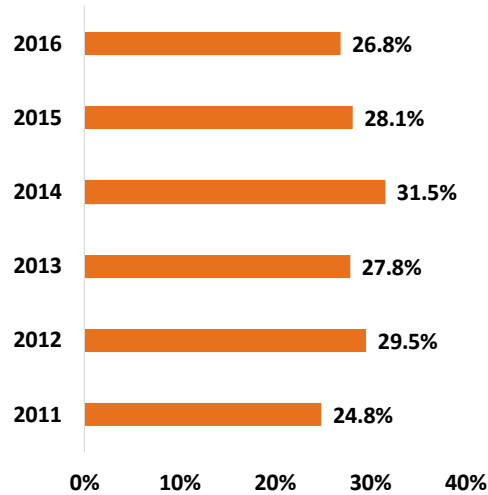
- The percent of Essex County residents with a Body Mass Index (BMI) ≥ 30 trended upward from 24.8% in 2011, to 26.8% in 2016.
- In 2016, Essex County (26.8%) had a lower rate of obesity than Middlesex County (27.6%) but a higher rate than the State and Union County.
- Between 2012 and 2016, the rate of Newark residents reporting obesity increased from 32% to 38.7%.
- In 2016, Newark residents reported the highest rate of obesity of all the comparative geographies.
- In 2016, a lower percent of Essex County residents (26.8%) are obese than the *Healthy People 2020* target (30.6%)
- In 2016, Essex County residents with a BMI ≥ 30 ranked in the middle quartile in New Jersey and with regard to the County Health Rankings.

⁵⁴ <http://www.frac.org>

Reported BMI ≥ 30 State & County Comparisons, 2012-2016



Essex County



Source: CDC Behavioral Risk Factor Surveillance System



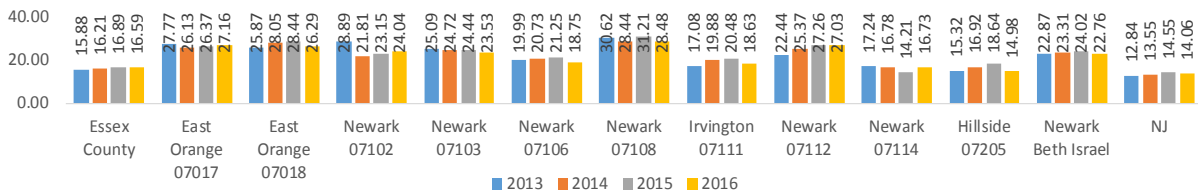
Baseline: 33.9%
Target: 30.5%
Essex County 2016: 26.8%

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National Benchmark: 26.0%
Essex County 2016: 26.8%

- In 2016, Newark 07108 residents had a higher rate of patients hospitalized with a diagnosis of obesity (28.48/1,000) as compared to Essex County (16.59/1,000).
- In 2016, patients hospitalized from Newark 07108 had higher rates of obesity than hospitalized residents of NBIMC's Service Area.

Disease Incidence: Obesity, Rate per 1,000 Population



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

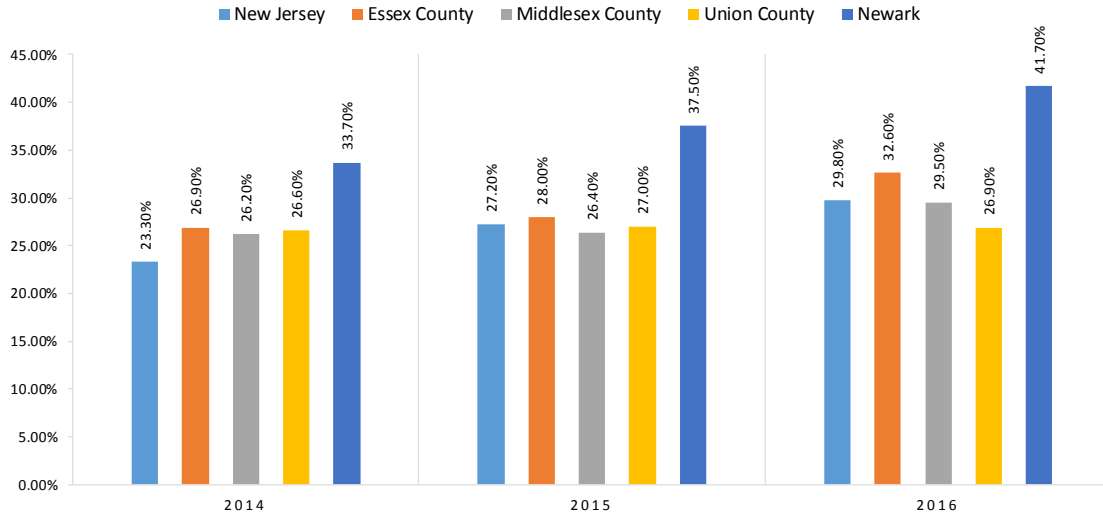
Exercise

Inadequate physical activity contributes to increased risk of coronary heart disease, diabetes and some cancers. Nationally, half of adults and nearly three-quarters of high school students do not meet the CDC's recommended physical activity levels.⁵⁵

- Within Essex County, the percent of individuals reporting no leisure time physical activity trended upward from 26.9% in 2014, to 32.6% in 2016.
- From 2014 to 2016, Essex County had a higher percentage of residents reporting no leisure time physical activity than the State and comparison counties.
- Between 2014 and 2016, the percent of Newark residents reporting no leisure-time physical activity increased from 33.7% to 41.7%.
- The percent of individuals from Newark reporting no leisure-time physical activity was highest among all the comparison geographies.
- Compared to all counties statewide, Essex County performs in the middle quartile.
- Essex County performs in the lowest quartile compared to the County Health Rankings benchmark.

⁵⁵ <http://www.countyhealthrankings.org/our-approach/health-factors/diet-and-exercise>

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



Source: CDC Behavioral Risk Factor Surveillance System

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National Benchmark: 23.0%
Essex County 2016: 32.6%

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

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

Health Screenings

Screening tests can detect disease and conditions in early stages, when they may be easier to treat. Screening tests for a wide range of cancer sites are now available and can be effective in identifying cancer at an early stage. Tumor registry data from 2016 notes tremendous opportunities are available to identify lung, oral, colon-rectal and cervical cancers, much earlier via screening tests. A high percentage of these cancers are being detected at late stages (3 or 4).

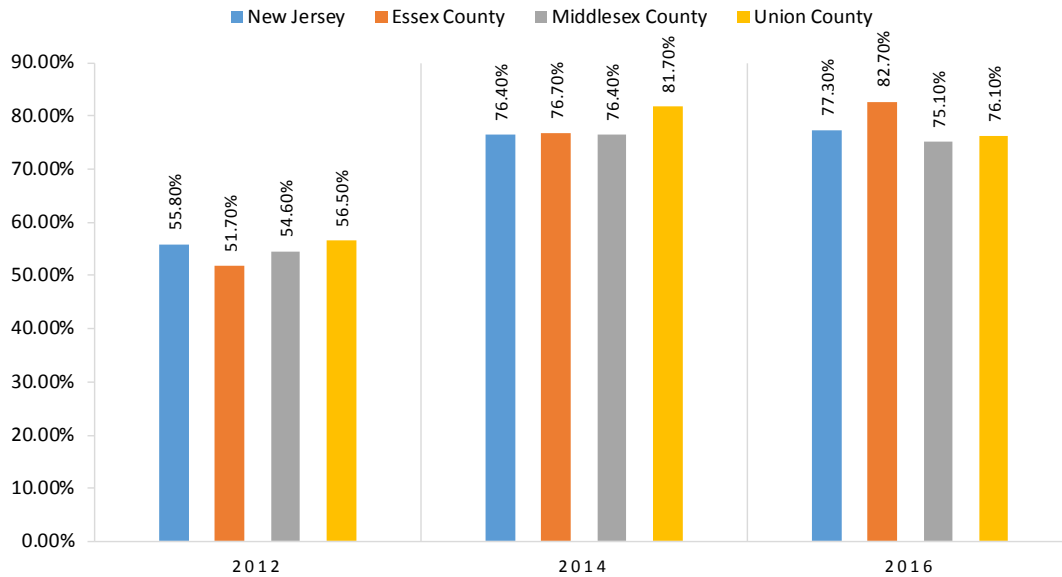
Cancer Screening

Breast Cancer (mammography)

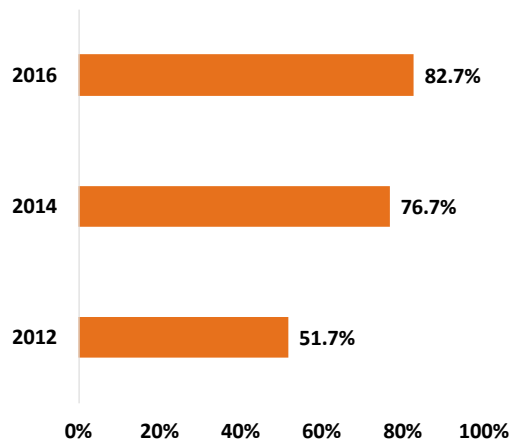
According to the American Cancer Association, women ages 40 to 44 should have the choice to start annual breast cancer screening with mammograms (x-rays of the breast) if they wish to do so. Women age 45 to 54 should get mammograms every year. Women 55 and older should switch to mammograms every 2 years,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

- In 2016, 82.7% of Essex County women over age 40 had a mammography within the past two years, up 31 percentage points since 2012. Compared to all counties statewide, Essex County performs in the top quartile.
- In 2016, Essex County performed in the top quartile in terms of the County Health Ranking benchmark and *Healthy People 2020* target.

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



Essex County



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



Baseline: 69.8%
Target: 81.1%
Essex County 2016: 82.7%

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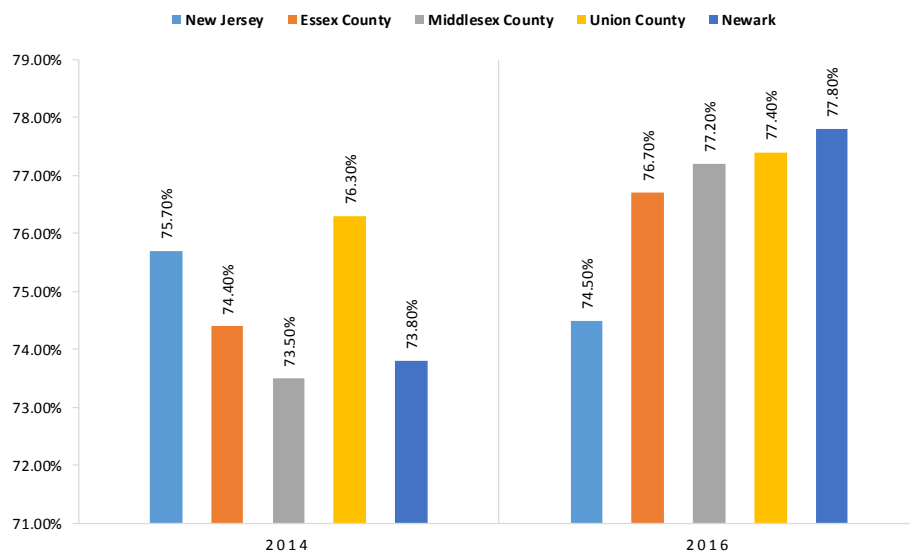
National Benchmark: 71.0%
Essex County 2016: 82.7%

Cervical Cancer (pap smear)

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

- In 2016, 76.7% of Essex County women over age 18 had a pap smear within the past three years as compared to 74.5% of New Jersey women 18+. Slightly fewer Essex County women over age 18 had a pap test within 3 years than in Middlesex (77.2%) and Union (77.4%) Counties, and the City of Newark (77.8%). Compared to the State overall, Essex County performs in the middle quartile.
- Between 2014 and 2016, Essex County women who had a pap test within the past three years increased over 2 percentage points from 74.4% to 76.7%.
- Similar to New Jersey and Essex County, there was an increase in the percent of women reporting receiving a pap test in Newark of 4 percentage points.
- Data from the 2016 Tumor Registry indicates 45.5% of cervix/uteri cancers were identified at stage 3 or 4. This indicates a tremendous opportunity to support and initiate cervical cancer screenings in the region.

Women How Had Received a Pap Test State & County Comparisons, 2014-2016



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



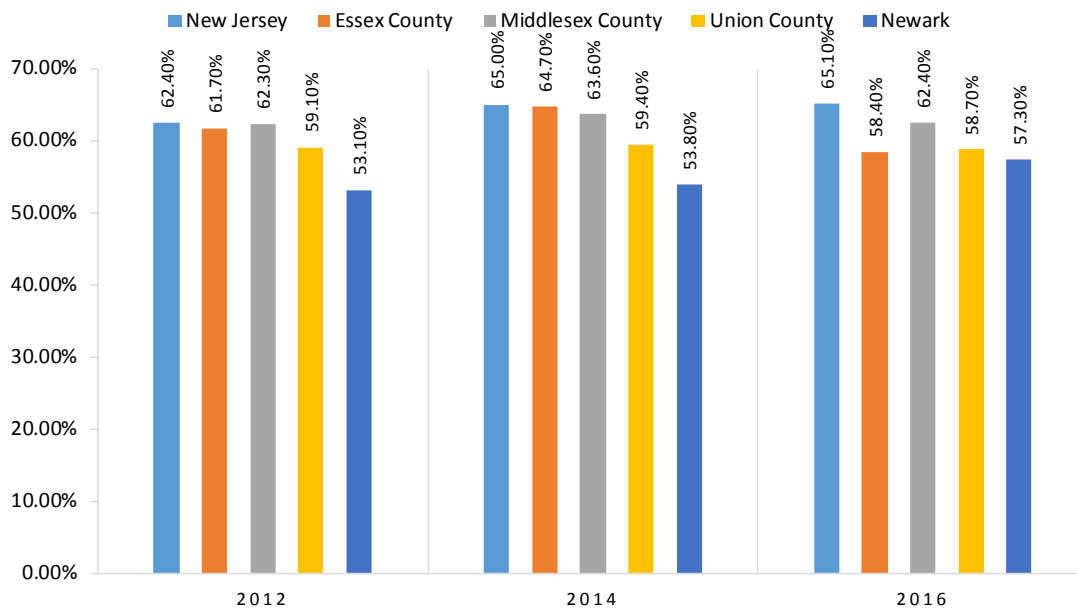
Baseline: 60.2%
Target: 66.2%
Essex County 2016: 76.7%

Colon-rectal Cancer (sigmoidoscopy or colonoscopy)

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

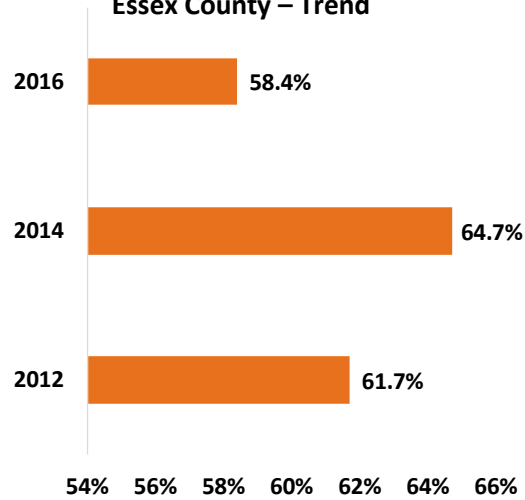
- In 2016, a lower percentage of Essex County adults over age 50 (58.4%) participated in colon-rectal screening than adults statewide (65.1%). Compared to all New Jersey counties, Essex County performs in the lowest performing quartile.
- Between 2013 and 2016, the number of Newark residents reporting they were screened for colon cancer rose from 53.1% to 57.3%.
- In 2016, the percent of Essex County residents screened for colon cancer was 1.1% higher than the rate for Newark residents.
- In 2016, fewer Essex County adults (58.4%) over age 50 had a colonoscopy/sigmoidoscopy than in 2012 (61.7%). Essex County was below the *Healthy People 2020* target of 70.5% of adults (50+) ever having colon-rectal screening in 2016.
- According to the 2016, NBIMC tumor registry data, over 40% of all colon cancers were identified at stage 3 or 4, suggesting an opportunity to promote and initiate colon cancer screening throughout the region.

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



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

**Adults Age 50+ Who Ever Had a Colonoscopy or Sigmoidoscopy
Essex County – Trend**



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

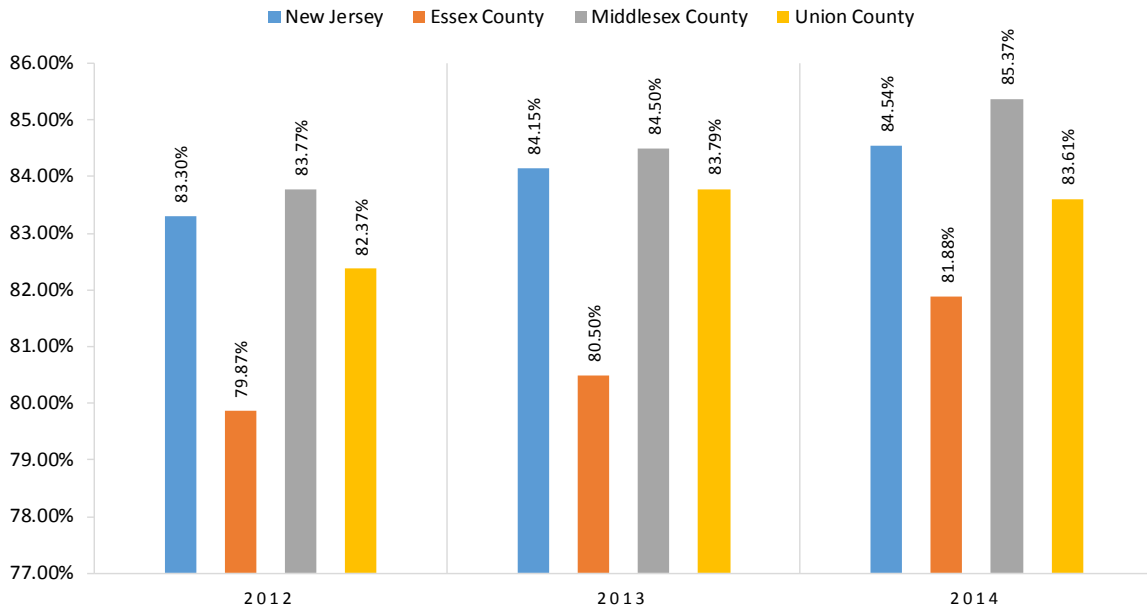


Diabetes

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

- In 2014, almost 82% of Essex County diabetic Medicare enrollees received HbA1c screening, lower than the State and surrounding counties. As compared to all New Jersey counties, Essex County performs in the bottom quartile.
- The percent of Essex County diabetic Medicare enrollees receiving HbA1c screening has trended upward since 2009.
- In 2014, fewer Essex County diabetic Medicare enrollees (81.9%) were screened than the CHR national benchmark (91%). Essex County ranked in the middle quartile of the CHR benchmark.

Diabetic Medicare Enrollees That Received Screening State & County Comparisons, 2012-2014

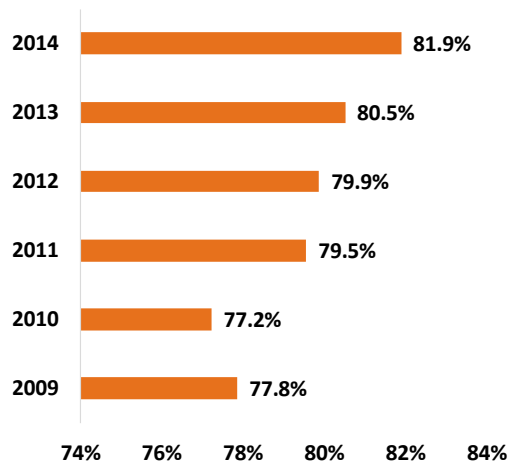


Source: County Health Rankings – Dartmouth Atlas of Health Care

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National Benchmark: 91.0%
Essex County 2014: 81.9%

Essex County



Source: County Health Rankings – Dartmouth Atlas of Health Care

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

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

Immunizations

It is better to prevent disease than to treat it after it occurs; vaccines prevent disease and save millions of lives. Vaccines introduce the antigens that cause diseases. Immunity, the body’s means to preventing disease, recognizes germs and produces antibodies to fight them. Even after many years, the immune system continues to produce antibodies to thwart disease from recurring. Through vaccination we can develop immunity without suffering from disease.⁵⁶

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

Young children are readily susceptible to disease and the consequences can be serious or life-threatening. Childhood immunizations minimize impact of vaccine preventable diseases. Combined 4 vaccine series (4:3:1:3) refers to 4 or more doses of DTP/DT, 3 or more doses of poliovirus vaccine, 1 or more doses of MCV and 3 or more doses of Hib.⁵⁷ Conflicting information in the news and on the internet about children's immunizations may cause vaccine hesitancy among select parents. Health care providers have been encouraged to use interventions to overcome vaccine non-compliance, including parental counseling, increasing access to vaccinations, offering combination vaccines, public education, and reminder recall strategies.

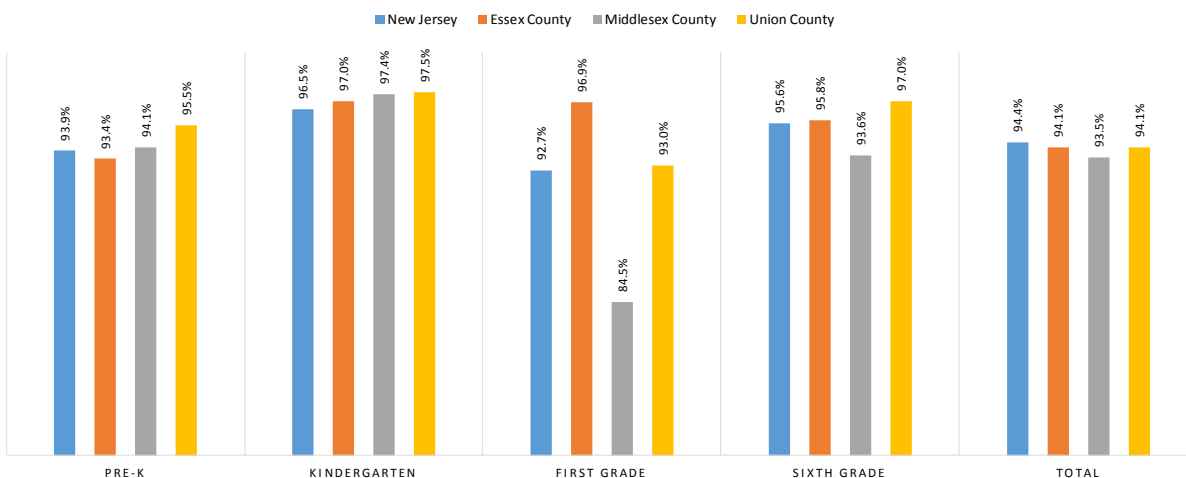
Childhood immunization is an evidenced-based strategy, which is known to reduce the incidence, prevalence and mortality of many communicable diseases in many Western Countries including the U.S.

- In 2016, 96.9% of first grade students in Essex County had received all required immunizations compared to 92.7% statewide.
- 94.1% of all Essex County students received all required immunizations, comparable to the statewide percentage (94.4%).
- Essex County is in the top performing quartile statewide.

Childhood Immunization: Percent of Children Meeting All Immunization Requirements

⁵⁶ <http://www.cdc.gov/vaccines/vac-gen/howvpd.htm#why>
⁵⁷ <http://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/tech-notes.html>

State and County Comparisons, 2016



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

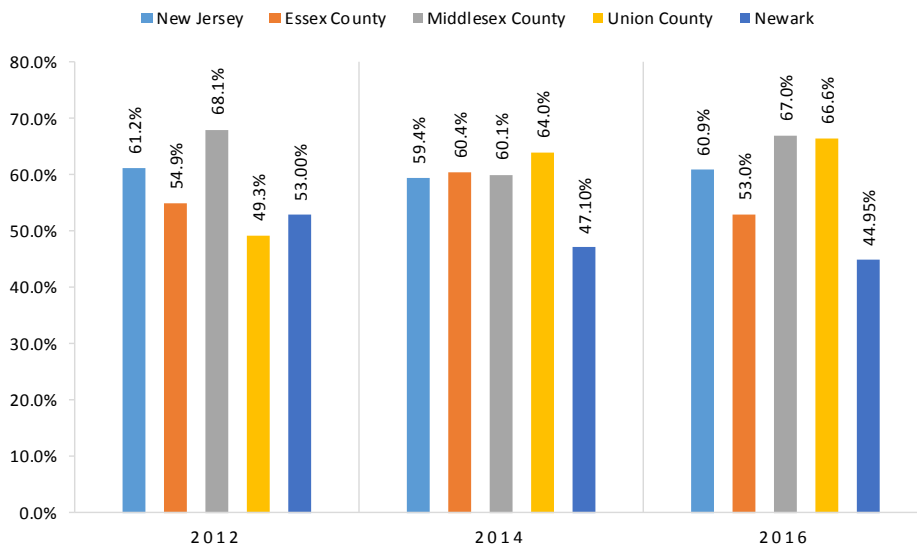
Adult Flu

Immunizations are not just for children. As we age, the immune system weakens putting us at higher risk for certain diseases. Greater than 60 percent of seasonal flu-related hospitalizations occur in people 65 and older. The single best way to protect against the flu is an annual vaccination.⁵⁸

- Essex County had the lowest percent of adults receiving flu shots in comparison to residents of New Jersey and the tri-county area.
- Between 2011 and 2016, the percentage of Essex County adults who had a flu shot fluctuated with an overall increase of 5.5 percentage points.
- The percent of 2016 Essex County adults who received the flu shot in the past year (53.0%) was lower than the *Healthy People 2020* target of 90.0%.
- Between 2012 and 2016, the percentage of Newark resident receiving a flu shot decreased from 53% to 45%.
- Newark had the lowest percent of residents receiving a flu shot in all the comparison geographies.
- Essex County performs in the lowest *Healthy People 2020* quartile.
- As compared to all counties statewide, Essex County performs in the middle quartile.

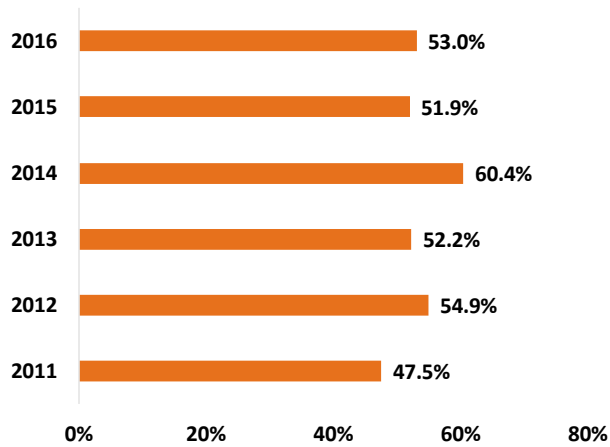
⁵⁸ <http://www.cdc.gov/vaccines/adults/rec-vac/index.html>

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



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

Essex County



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



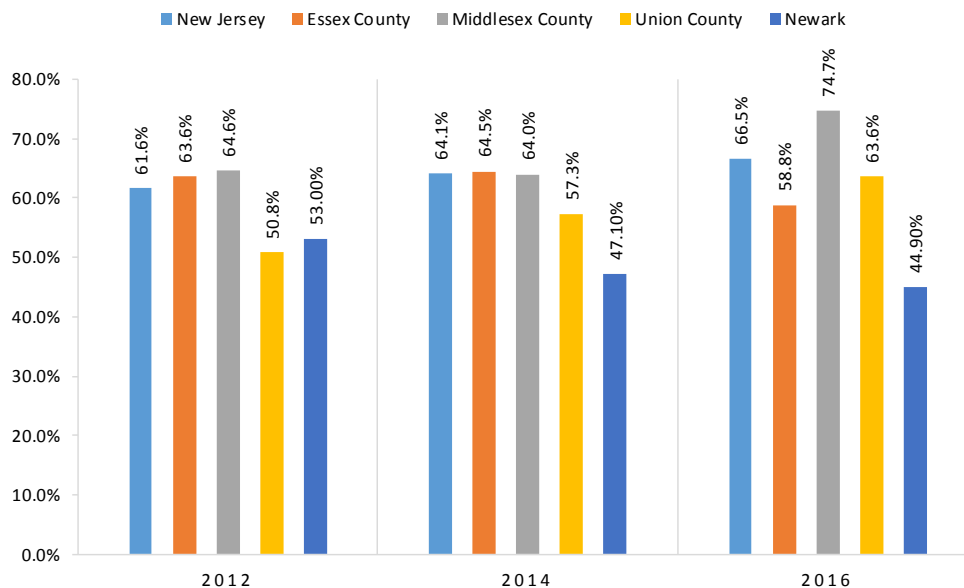
Baseline: 66.6%
Target: 90.0%
Essex County 2016: 53.0%

Adult Pneumonia

The pneumococcal vaccine protects us against some of the 90 types of pneumococcal bacteria. Pneumococcal vaccine is recommended for all adults 65 years or older.⁵⁹

- The percent of Essex County adults age 65+ who had a pneumonia vaccine decreased from 2011 through 2016, from 71.3% to 58.8%.
- Between 2012 and 2016, the percent of Newark residents over 65 who received a pneumonia shot declined 8.1 percentage points.
- In 2016, Newark residents 65+ had the lowest percent of residents who had a pneumonia shot in all geographies.
- In 2016, the percent of Essex County (58.8%) adults that have never had a pneumonia vaccine is higher than statewide (66.5%) and less than the *Healthy People 2020* target (90.0%). As compared to all counties statewide, Essex County performs in the bottom quartile. Essex County performs in the bottom quartile in the *Healthy People 2020* target as well.

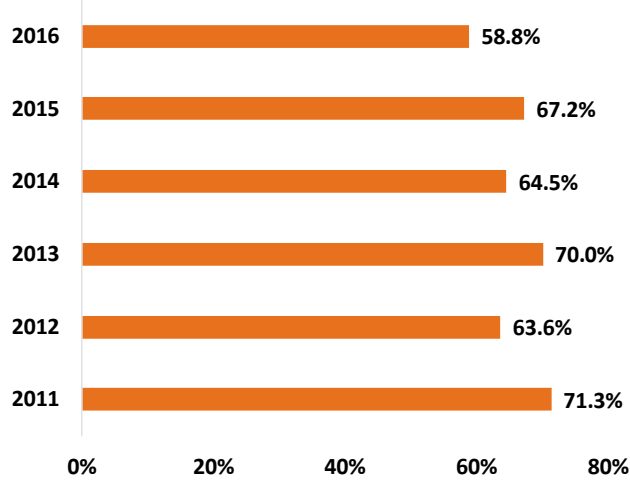
Adults Age 65+ Who Had a Pneumonia Vaccination State & County Comparisons, 2012-2016



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

⁵⁹ <http://www.cdc.gov/pneumococcal/about/prevention.html>

Adults Age 65+ Who Had a Pneumonia Vaccination Essex County



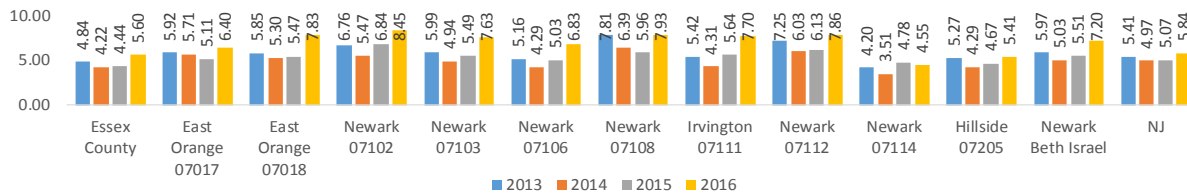
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)



Baseline: 60.0 %
Target: 90.0%
Essex County 2016: 58.8%

- NBIMC Service Area residents who used a hospital service had a higher rate of pneumonia (7.2/1,000) than residents of the County (5.6/1,000).
- In 2016, Newark 07102 residents who used a hospital service had the highest rate of pneumonia (8.45/1,000), and Newark 07114 at 4.55/1,000 was the lowest as compared to all geographies.

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



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

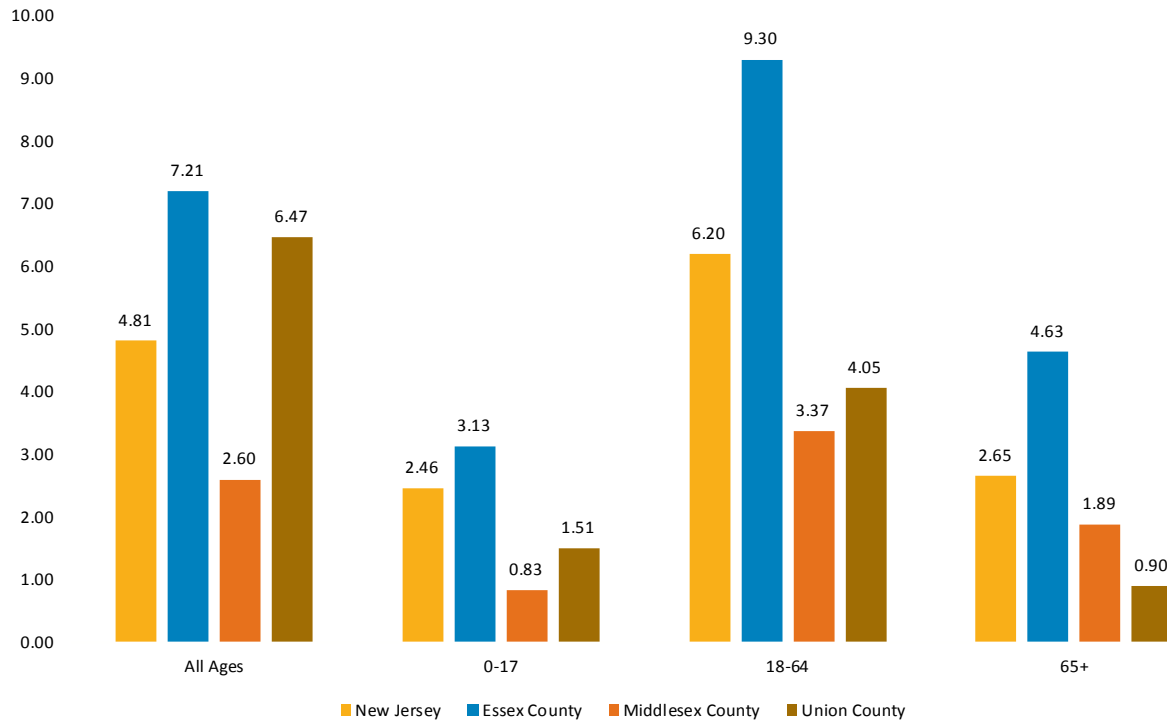
Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Flu Shot <i>Adults Age 65+ Who Have NOT Had a Flu Shot in the Past Year</i> %No		N.A.	
Pneumonia Vaccination <i>Adults Age 65+ Who Have NOT Ever Had a Pneumonia Vaccination</i> %Never		N.A.	
Children Meeting All Immunization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

4. Behavioral Health Utilization

Mental Health

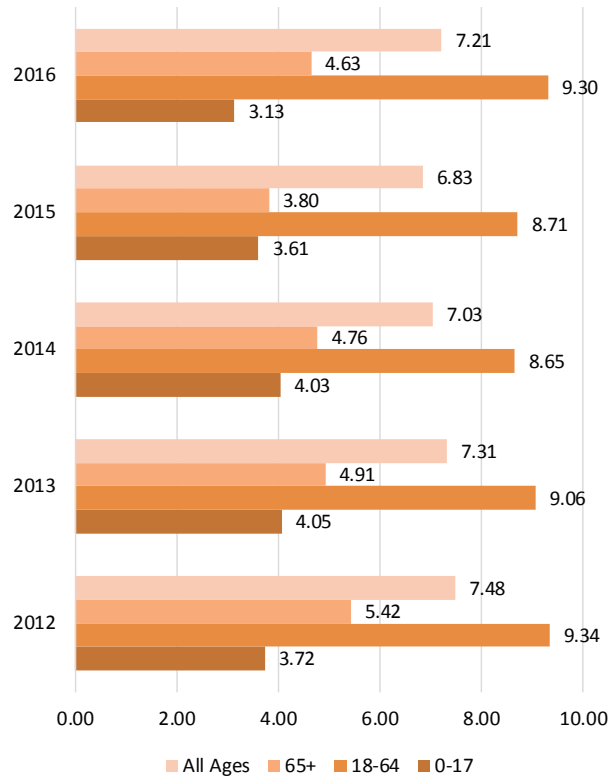
- In 2016, Essex County (7.21/1,000) had the highest rate of residents with an inpatient hospitalization for a mental health condition across all age cohorts, as compared to the State and comparison counties.
- Within Essex County, by age cohort in 2016, adults 18-64 (9.30/1,000) had the highest rate of mental/behavioral health inpatient hospital admissions compared to older adults 65+ (4.63/1,000) and children (3.13/1,000).
- Essex County had a slightly lower rate of patient hospitalizations for mental/behavioral health conditions in 2016 (7.21/1,000) than in 2012 (7.48/1,000).

**Inpatient Admissions for Mental/Behavioral Health Conditions
By Age; Rate / 1,000 Population
State & County Comparisons, 2016**



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

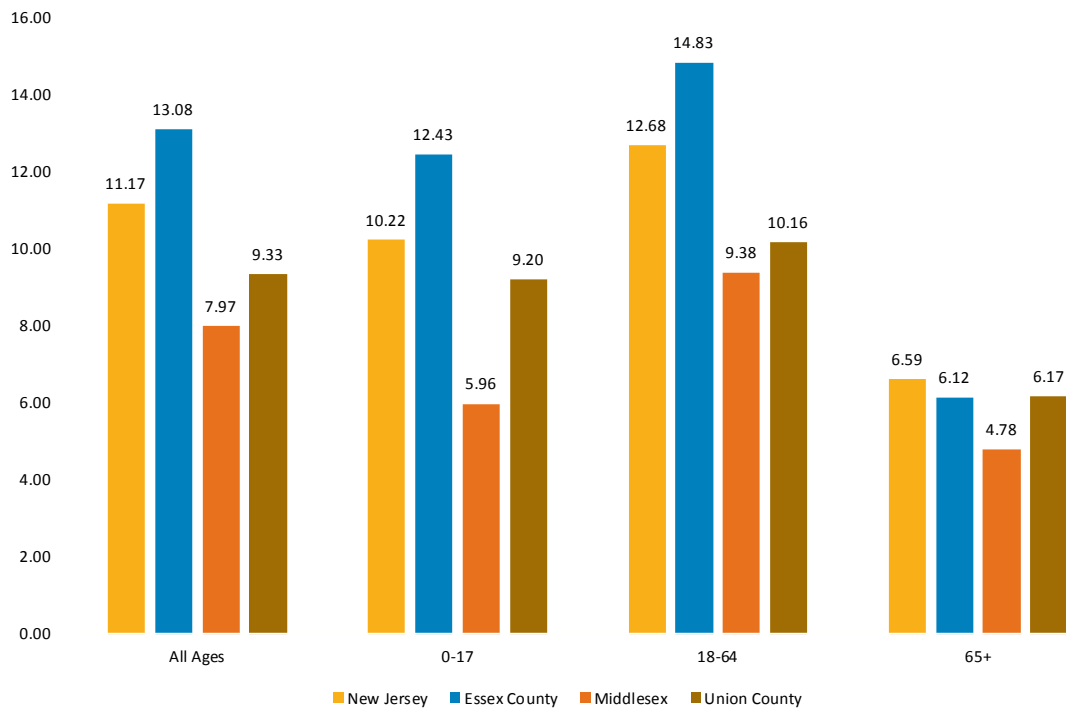
**Inpatient Admissions for Mental/Behavioral Health Conditions
By Age; Rate / 1,000 Population
Essex County – Trend**



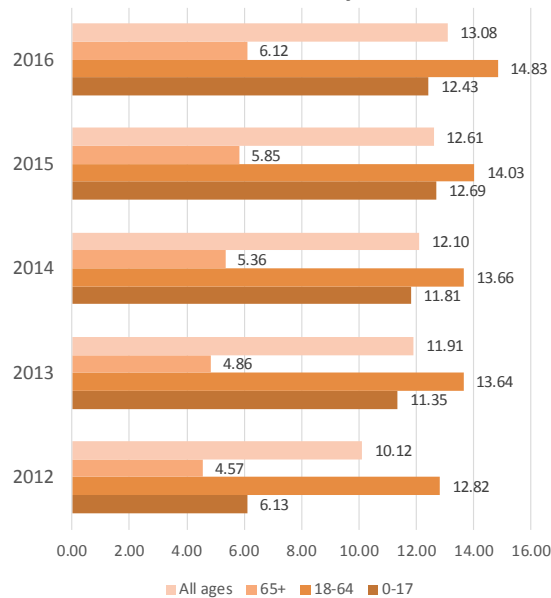
Source: NJDHSS 2012 - 2016 UB-04 Data MDC 19 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, Essex County (13.08/1,000) had a higher ED visit rate for mental health conditions than the State (11.17/1,000).
- In 2016, Essex County adults 18-64 (14.93/1,000) had the highest rate of ED visits compared to children (12.43/1,000) and older adults 65+ (6.12/1,000).
- Essex County ED visits for mental/behavioral health conditions increased between 2012 (10.12/1,000) and 2016 (13.08/1,000).

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



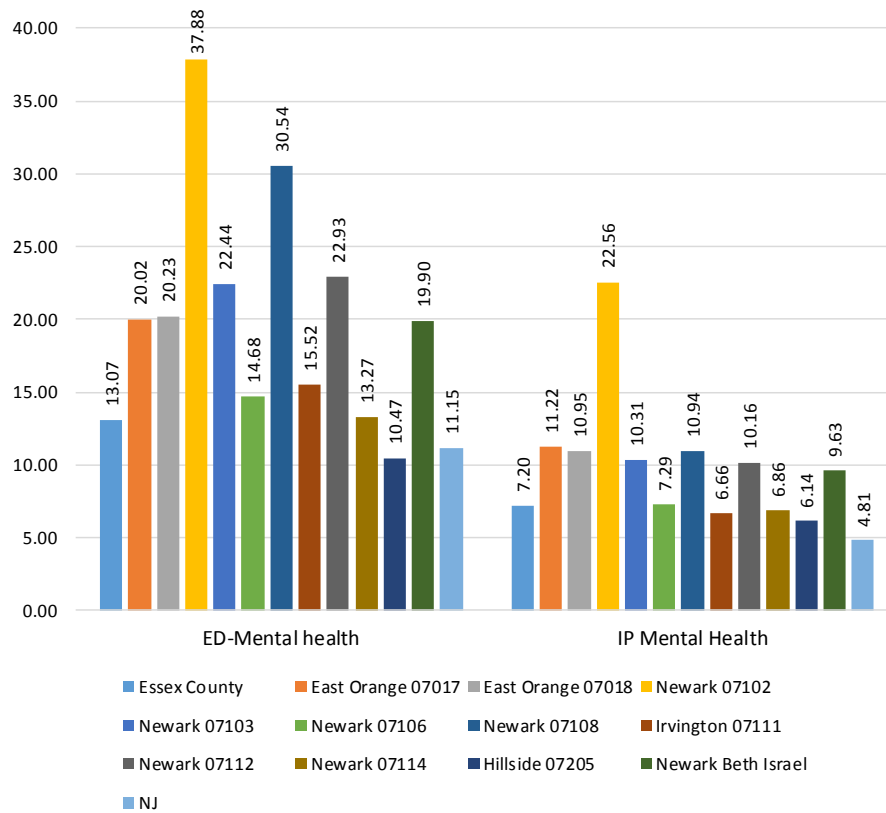
Essex County



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

- In 2016, inpatient hospitalizations for mental/behavioral health for NBIMC’s Service Area (9.63/1,000) exceeded the New Jersey rate (4.81/1,000) and was higher than the Essex County rate (7.20/1,000).
- In 2016, the emergency department rate for mental/behavioral health in Newark 07112 (37.88/1,000) was greater than Essex County (13.07/1,000) and greater than New Jersey (11.15/1,000).
- In 2016, the emergency department rate for mental health in Hillside (10.47/1,000) was less than the New Jersey rate (11.15/1,000) and less than the Essex County rate (13.07/1,000).

Mental Health Use Rate /1,000 Population: 2016



*Source: UB-04 2016 Discharges; Claritas Population Estimate

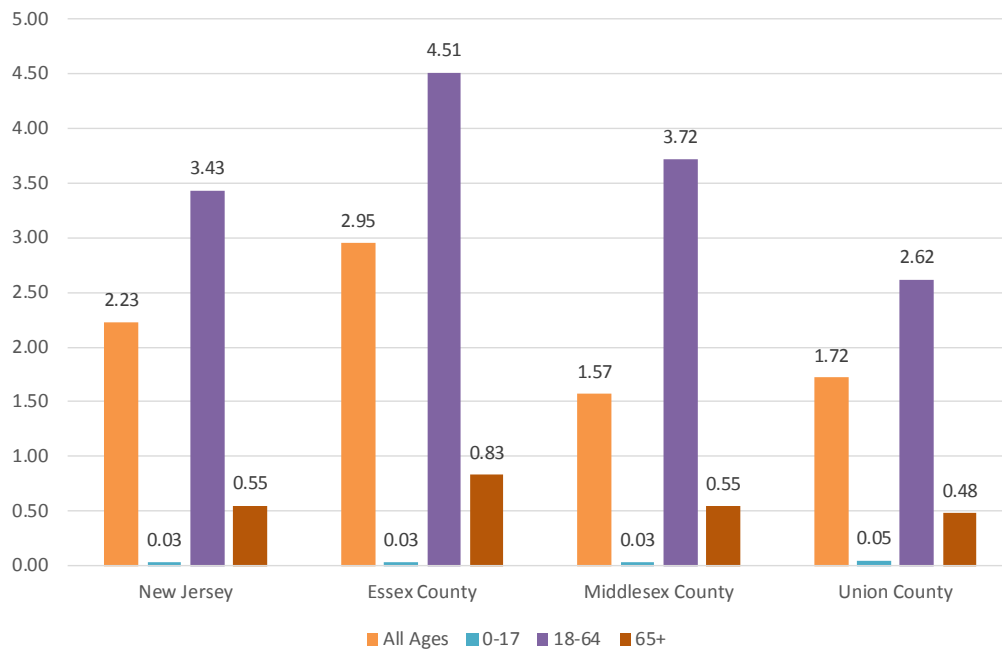
** Mental Health Defined As MDC 19, Substance Abuse Defined As MDC 20

Substance Abuse

Substance abuse has a major impact on individuals, families and communities. In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95 percent of people with substance use problems are considered unaware of their problem. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.⁶⁰

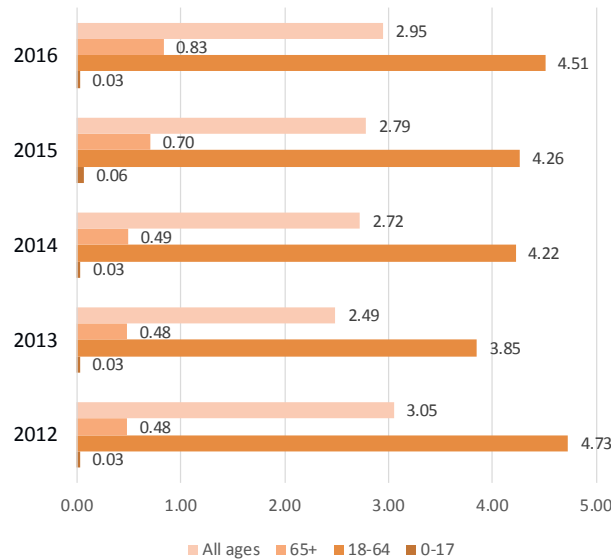
- In 2016, Essex County had a higher use rate for residents with an inpatient admission for substance abuse than the State and all comparison counties, and among all age cohorts except among those patients aged 0-17.
- Inpatient use rates by age cohort in Essex County trended upward among those 18-44.

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



⁶⁰ <http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse>

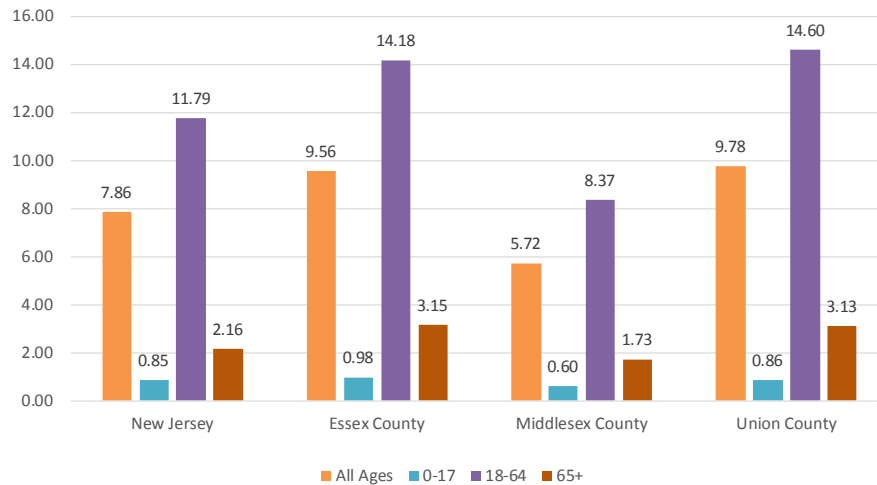
Inpatient Substance Abuse Treatment Admissions: Rate / 1,000 Population Essex County – Trend



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

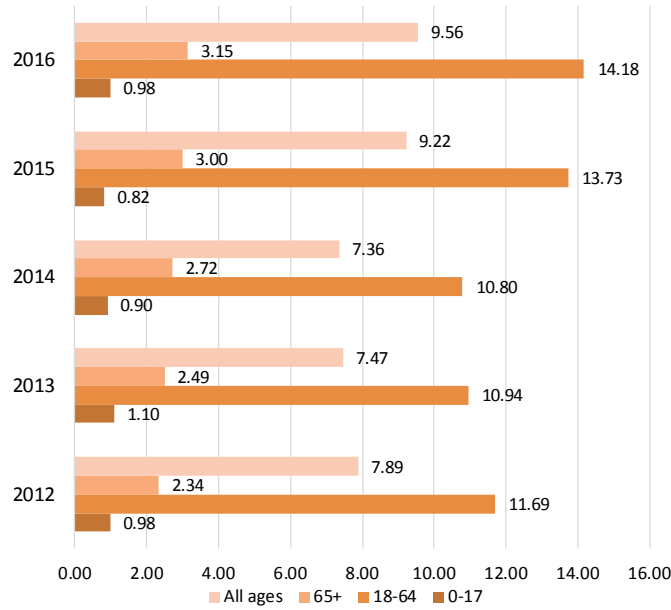
- In 2016, Essex County (9.56/1,000) had a higher ED visit rate for substance abuse than the State (7.86/1,000).
- Between 2012 and 2016, ED visit rate for substance abuse in Essex County increased from 7.89/1,000 to 9.56/1,000.
- In 2016, Essex County residents aged 18-64 had the second highest rate of ED visits for substance abuse (14.18/1,000), after Union County (14.60/1,000).

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



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

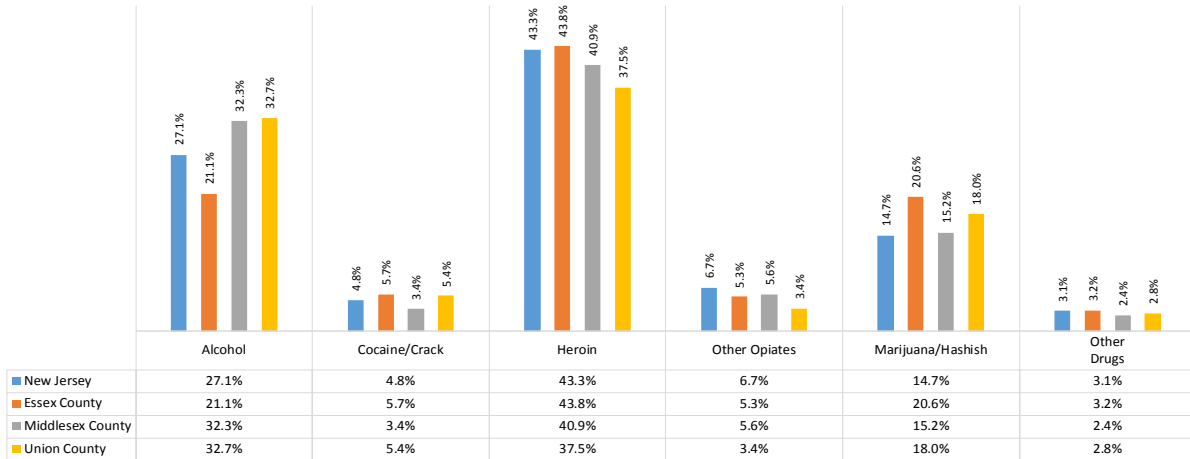
ED Visits for Substance Abuse: By Age; Rate / 1,000 Population Essex County – Trend



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

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

Primary Drug Treatment Admissions State & County Comparisons 2016



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

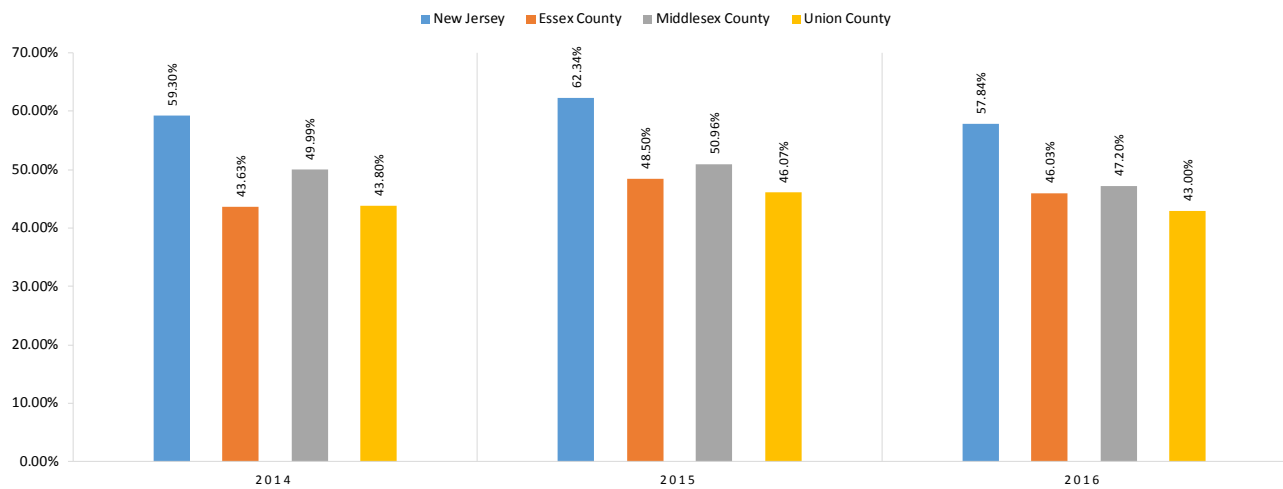
Between 2014 and 2016, the number of drug dispensation went down across the State, but up in Essex County.

- In 2016, the number of drug dispensations reached slightly less than 50% of the Essex County population.

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

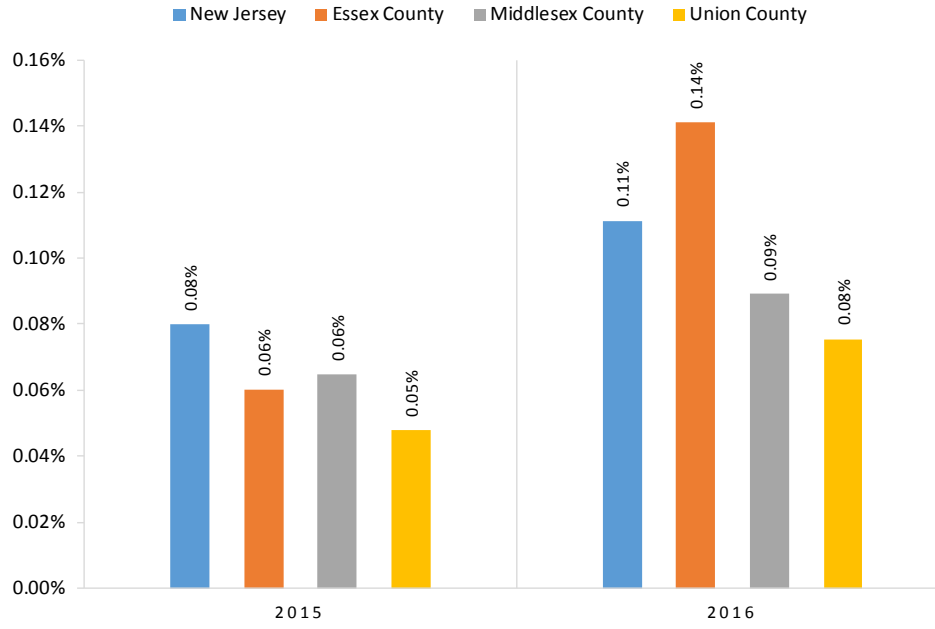
- Between 2015 and 2016, the percent of Naloxone administrations increased statewide; and in Essex, Middlesex and Union County. In Essex County, Naloxone administrations increased from 481 administrations to 1,131.

Opioid Dispensations State & County Comparisons 2016



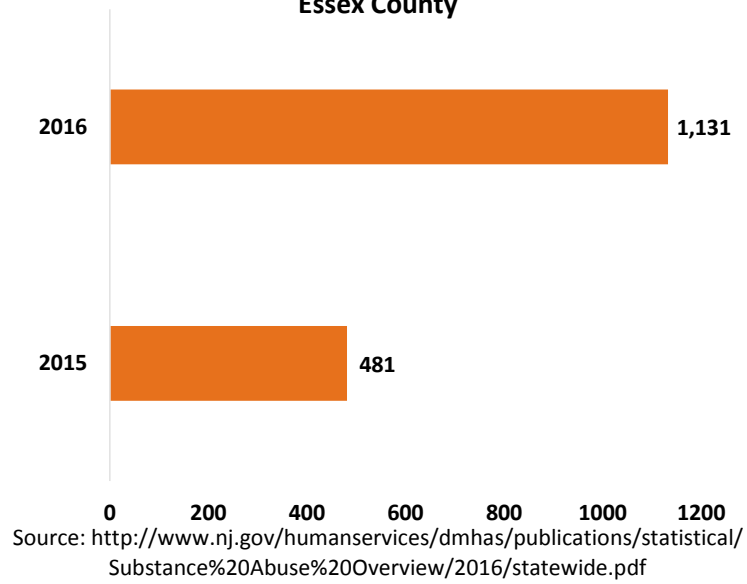
Source: <http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf>

Naloxone Administrations State & County Comparisons 2016



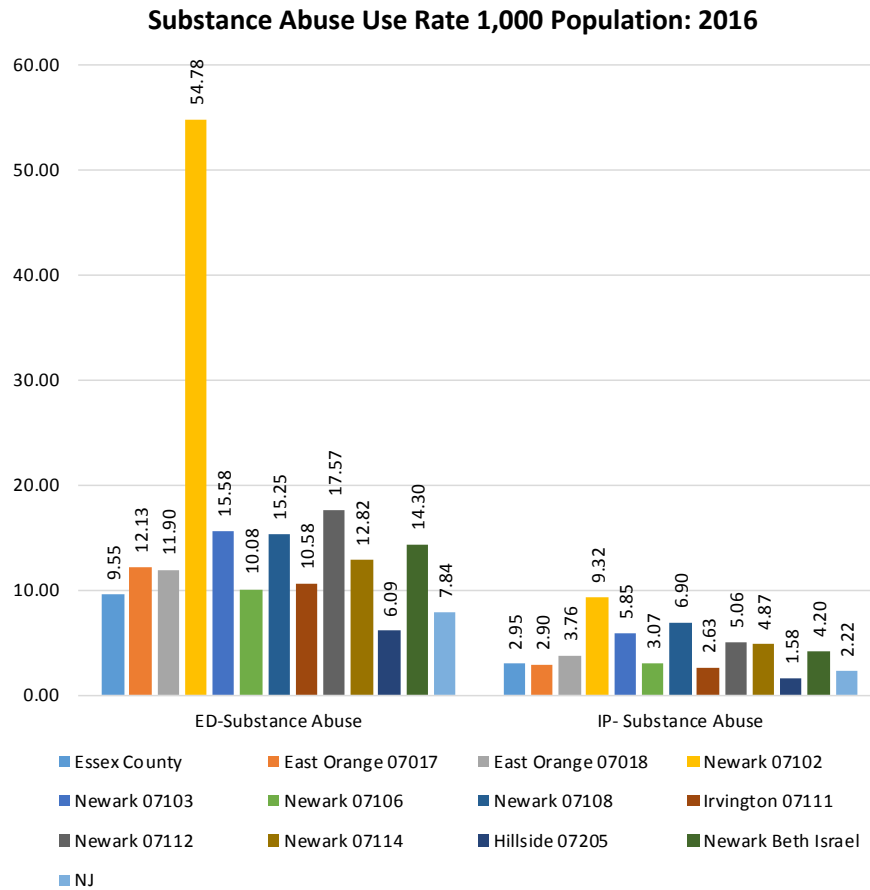
Source: <http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf>

Essex County



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

- Inpatient hospitalization to general hospitals for substance abuse in the NBIMC Service Area (4.20/1,000) was higher than the County rate (2.95/1,000), and the State (2.22/1,000).
- Newark 07102 (9.32/1,000) rate for inpatient hospitalization for substance abuse was higher than Essex County (2.95/1,000).
- In 2016, emergency department visits for substance abuse in NBIMC's Service Area (14.30/1,000) was higher than the Essex County rate (9.55/1,000) and the New Jersey rate (7.84/1,000).
- In 2016, emergency department utilization rates for substance abuse in Newark 07102 (54.78/1,000) was higher than the Essex County rate (9.55/1,000).



*Source: UB-04 2016 Discharges; Claritas Population Estimate

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

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Treatment Admissions for Alcohol <i>Percentage of Total Treatment Admissions</i>	N.A.	N.A.	Green
Treatment Admissions for Cocaine/Crack <i>Percentage of Total Treatment Admissions</i>	N.A.	N.A.	Yellow
Treatment Admissions for Heroin <i>Percentage of Total Treatment Admissions</i>	N.A.	N.A.	Yellow
Treatment Admissions for Other Opiates <i>Percentage of Total Treatment Admissions</i>	N.A.	N.A.	Green
Treatment Admissions for Marijuana <i>Percentage of Total Treatment Admissions</i>	N.A.	N.A.	Red
Treatment Admissions for Other Drugs <i>Percentage of Total Treatment Admissions</i>	N.A.	N.A.	Yellow
Total Substance Abuse Treatment Admissions <i>Rate/ 100000 Population</i>	N.A.	N.A.	Yellow
Opioid Dispensations	N.A.	N.A.	Green
Naloxone Administrations	N.A.	N.A.	Yellow
RED: Poorest Performing Quartile			Red
Yellow: Middle Quartiles			Yellow
Green: Best Performing Quartile			Green

E. HEALTH OUTCOMES

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

1. Mortality - Leading Cause of Death

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

- Between 2013 and 2016, Essex County age-adjusted mortality rates (AAMR) improved (decreased) for Homicide (-16.5%), lower respiratory diseases (-15.3%), diseases of the heart (-8.3%), and cancer (-0.9%).
- Between 2013 and 2016, seven of the top 10 leading causes of death for Essex County increased including: Alzheimer’s disease (38.4%), unintentional injuries (34.7%), nephritis (9.3%), diabetes (4.8%), septicemia (1.7%), and stroke (1.5%).

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

CAUSES OF DEATH	2008	2013	2016	% Change '13-'16
Diseases of heart	209.0	181.0	165.9	-8.3%
Cancer (malignant neoplasms)	186.4	149.4	148.0	-0.9%
Unintentional injuries	28.2	30.3	40.8	34.7%
Stroke (cerebrovascular diseases)	36.8	33.1	32.6	-1.5%
Diabetes mellitus	29.6	25.1	26.3	4.8%
Septicemia	31.2	23.2	23.6	1.7%
Chronic lower respiratory diseases (CLRD)	29.2	24.8	21.0	-15.3%
Nephritis, nephrotic syndrome and nephrosis (kidney disease)	23.4	15.0	16.4	9.3%
Alzheimer's disease	14.4	11.2	15.5	38.4%
Homicide (assault)	13.7	17.6	14.7	-16.5%

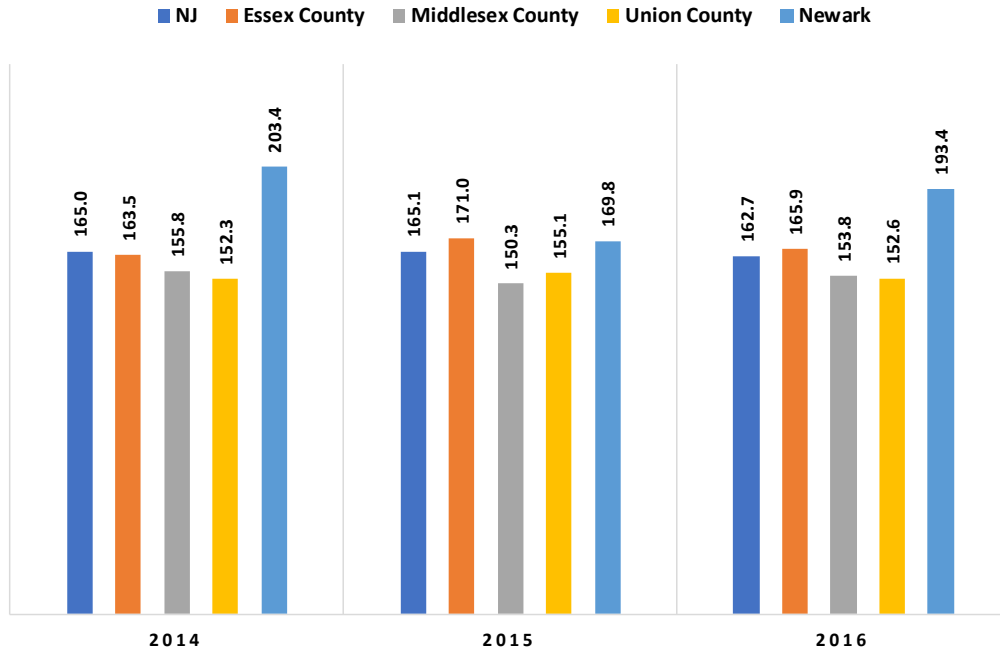
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Heart Disease (1)

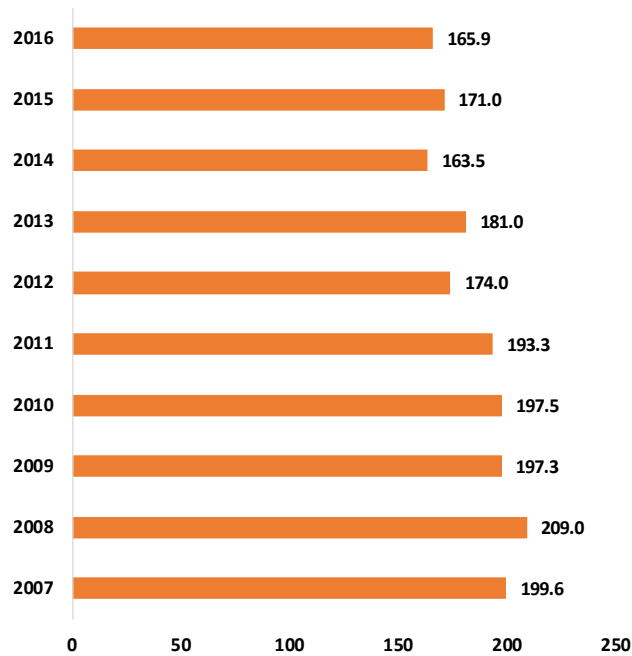
Heart disease includes several conditions, most commonly, coronary artery disease, angina, heart failure and arrhythmias. Nationally, statewide and in Essex County, heart disease remains the leading cause of death. Responsible for 1 in every 4 deaths, approximately 610,000 people die of heart disease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

- The County AAMR for heart disease deaths decreased between 2007 (199.6/100,000) and 2016 (165.9/100,000).
- The 2016 Essex County mortality rate due to heart disease (165.9/100,000) was slightly higher than the statewide rate (162.7/100,000).
- In 2016, the Newark AAMR for heart disease (193.4/1,000) was the highest across all comparative geographies.
- The AAMR for heart disease deaths among Newark residents decreased between 2014 (203.4/100,000) and 2016 (193.4/100,000).
- In 2016, across the County, Blacks (184.7/100,000) had the highest heart disease mortality rate as compared to Whites (151.6/100,000) and Hispanics (118.8/100,000).

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



Essex County

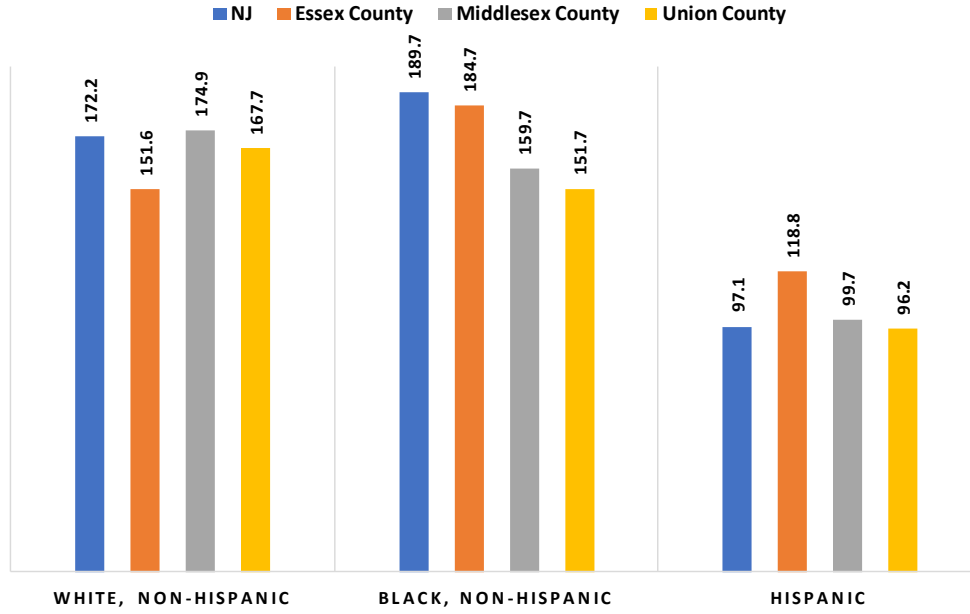


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

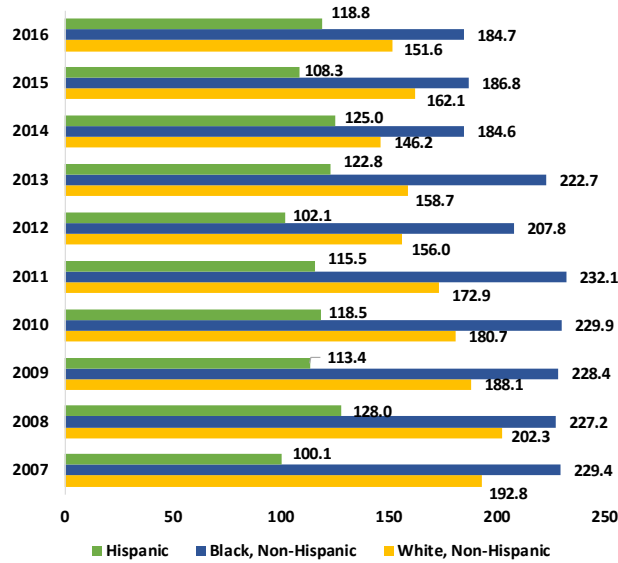


Baseline: 129.2
Target: 103.4
Essex County 2016: 165.9

**Deaths Due to Diseases of the Heart by Race/Ethnicity, 2016
Essex County Age-Adjusted Rate/100,000 Population**



Essex County



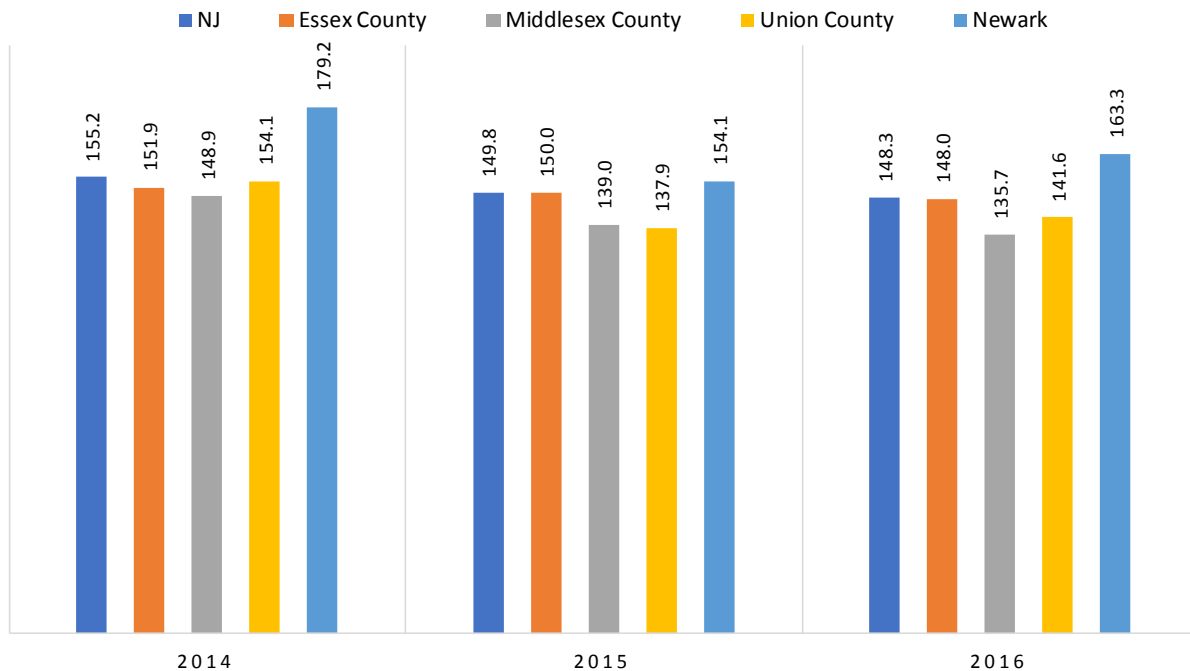
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Cancer (2)

Although there are many types of cancer, all originate from abnormal cells with untreated disease.⁶¹ Approximately half of American men and one-third of women will develop some form of cancer throughout their lifetimes. Cancer risk may be reduced by basic lifestyle modifications including limiting or avoiding tobacco, sun protection, being physically active and eating healthy foods. Early detection greatly improves positive outcomes. Cancer is the second leading cause of death in the United States, New Jersey and Essex County.⁶²

- Essex County deaths due to cancer increased 0.9% from 2013 (149.4/100,000) to 2016 (148.0/100,000). The 2016 County mortality rate was slightly lower than New Jersey (148.3/100,000) and ranks in the middle performing quartile statewide.
- Between 2014 and 2016, cancer mortality increased among Newark residents from 179.2/100,000 in 2014 to 163.3/100,000 in 2016.
- The Newark AAMR for cancer was the highest among all the geographic areas.
- The 2016 Essex County cancer AAMR (148.0/100,000) performed slightly better than the *Healthy People 2020* target of 161.4/100,000, and was in the top performing quartile.

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

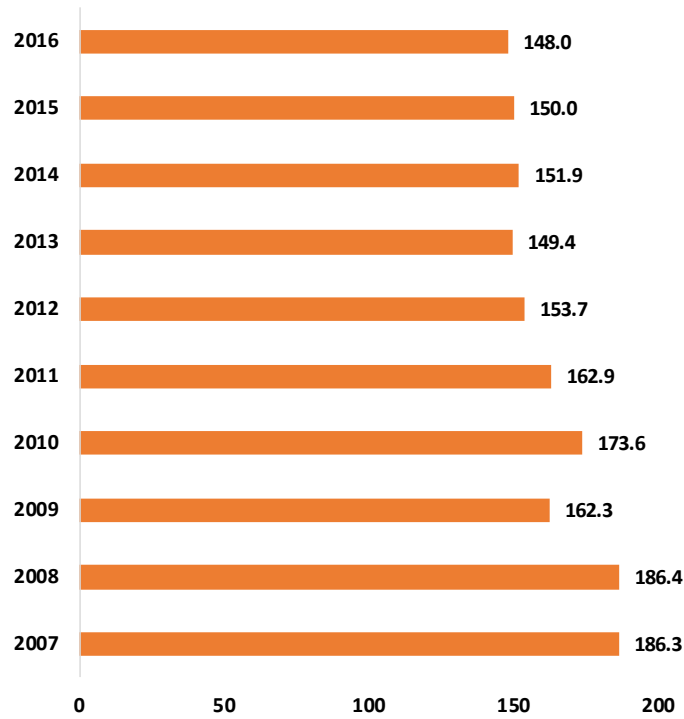


Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

⁶¹ <http://www.cancer.org/cancer/cancerbasics/what-is-cancer>

⁶² <http://www.cancer.org/cancer/cancerbasics/questions-people-ask-about-cancer/>

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



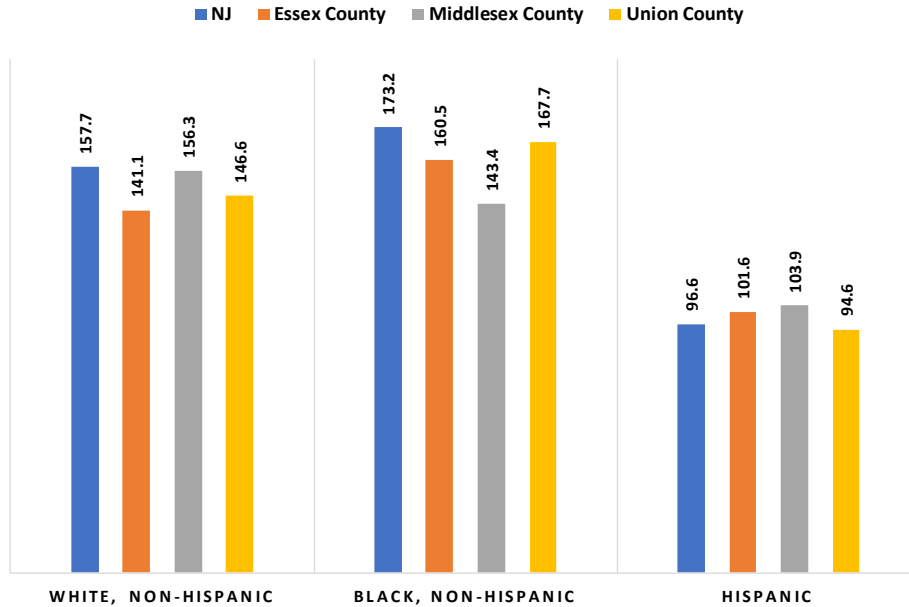
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.



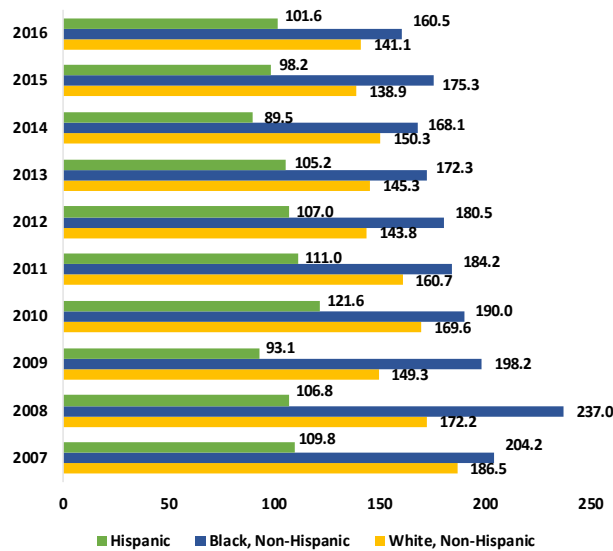
*Baseline: 179.3
Target: 161.4
Essex County 2016: 148.0*

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

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



Essex County



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

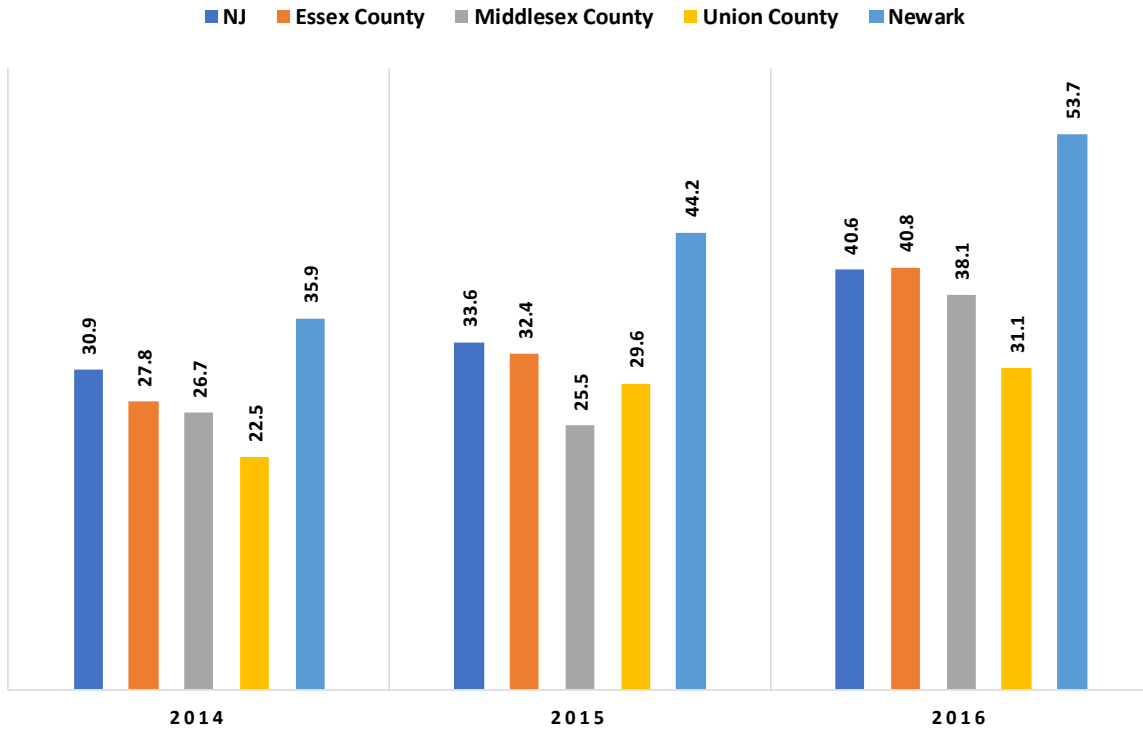
Unintentional Injuries (3)

The majority of unintentional injuries are preventable and predictable. Deaths due to unintentional injury often occur as a result of motor vehicle accidents, falls, firearms, drownings, suffocations, bites, stings, sports/recreational activities, natural disasters, fires, burns and poisonings. Public Health prevention strategies including minimum age drinking requirements, seatbelt and helmet laws, smoke alarms, exercise programs and other safety awareness campaigns reduce unintentional injury and death.⁶³

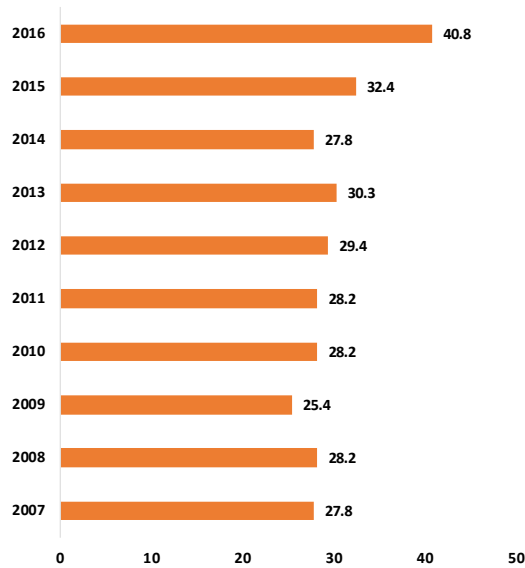
- The unintentional injury death rate increased steeply between 2007 (27.8/100,000) and 2016 (40.8/100,000) in Essex County. Essex County ranked in the middle performing quartile among New Jersey counties.
- The 2016 Essex County unintentional injury AAMR was less than 1 percentage point higher than the statewide rate.
- Between 2014 and 2016, the AAMR for deaths due to unintentional injuries in Newark increased substantively (from 35.9/100,000 in 2014, to 53.7/100,000 in 2016).
- In 2016, Newark had a higher rate of deaths due to unintentional injuries than any of the comparative geographies.

⁶³ <http://www.cdph.ca.gov/programs/ohir/Pages/UnInjury2010Background.aspx>

Unintentional Injuries State & County Comparisons, 2014-2016



Essex County



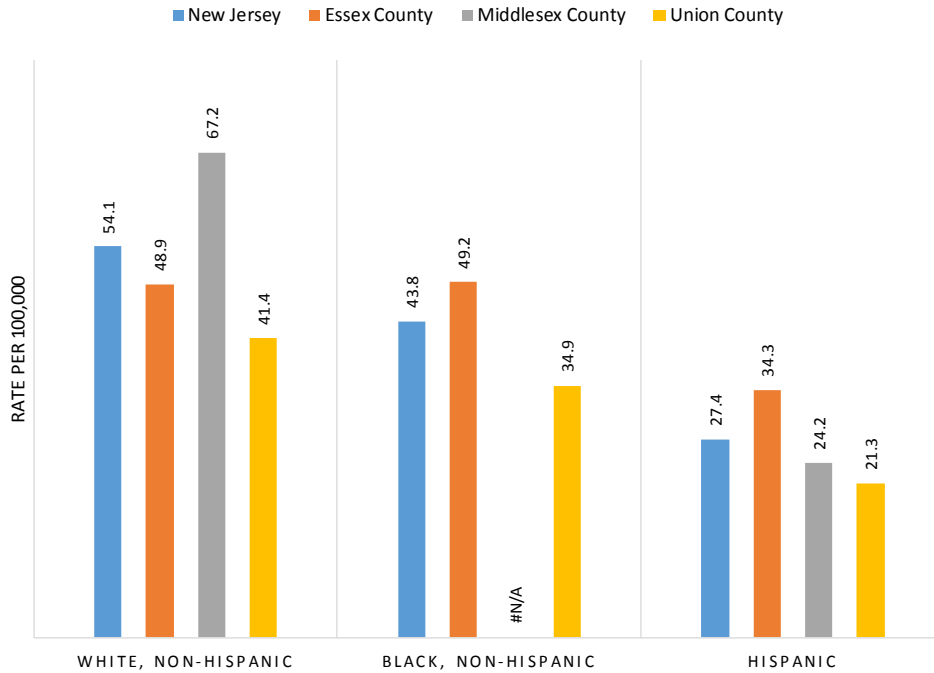
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.



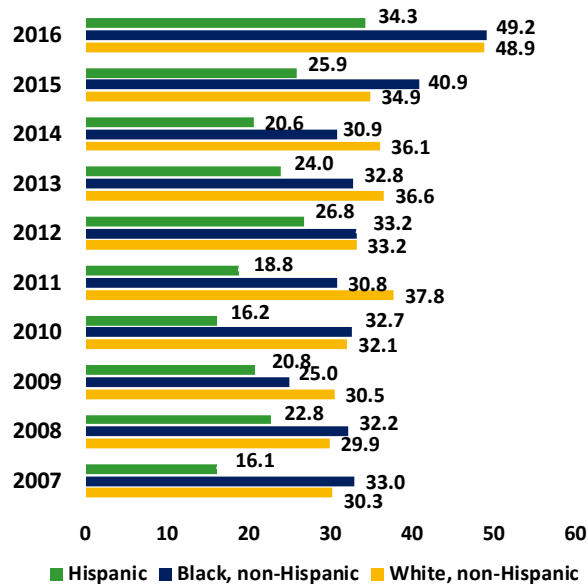
Baseline: 40.4
Target: 36.4
Essex County 2016: 40.8

- The 2016, unintentional injury death rate for Blacks (49.2/100,000) was higher than the rate for Whites (48.9/100,000) and Hispanics (34.3/100,000).

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



Essex County



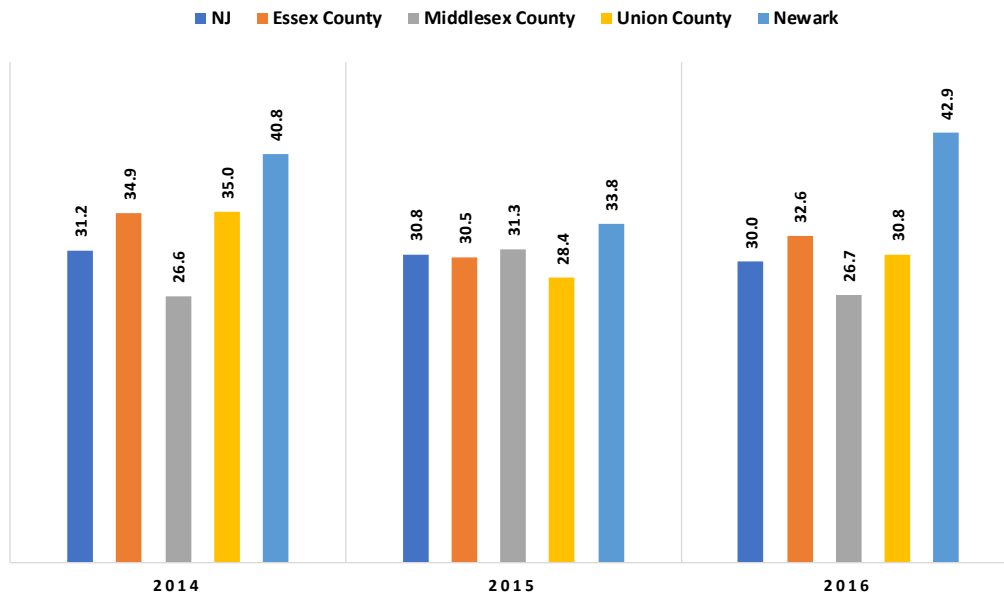
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Stroke (Cerebrovascular Diseases) (4)

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

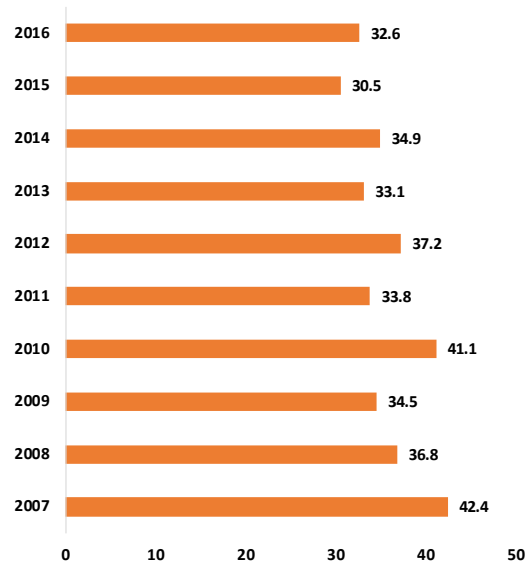
- The Essex County stroke AAMR decreased from 2014 (34.9/100,000) to 2016 (32.6/100,000). In 2016, the County AAMR was lower than the *Healthy People 2020* target (34.8/100,000).
- Between 2014 and 2016, the AAMR for stroke deaths in Newark increased from 40.8/100,000 to 42.9/100,000.
- In 2016, the stroke mortality rate in Newark was higher than the rate statewide and in Essex County.
- The 2016 Essex County stroke AAMR (32.6/100,000) was higher than the State (30.0/100,000) and ranks in the middle quartile statewide.

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



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

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



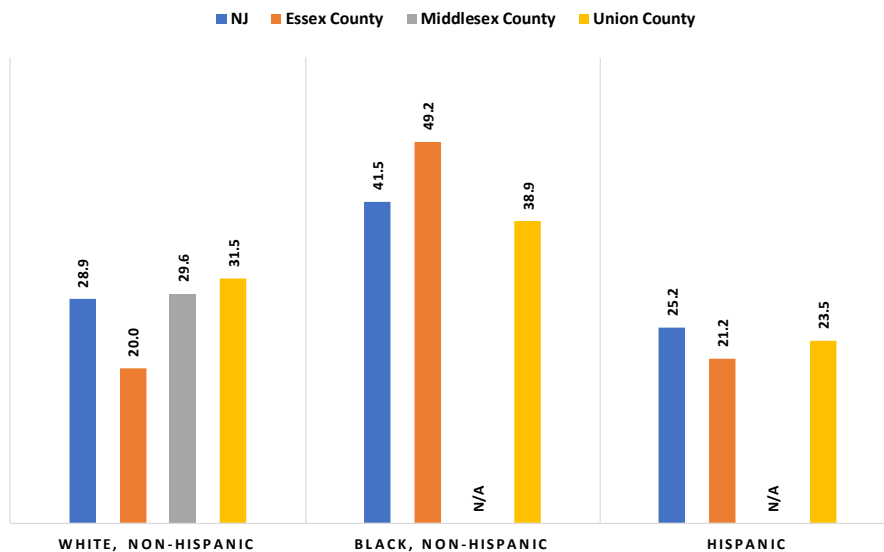
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.



Baseline: 43.5
Target: 34.8
Essex County 2016: 32.6

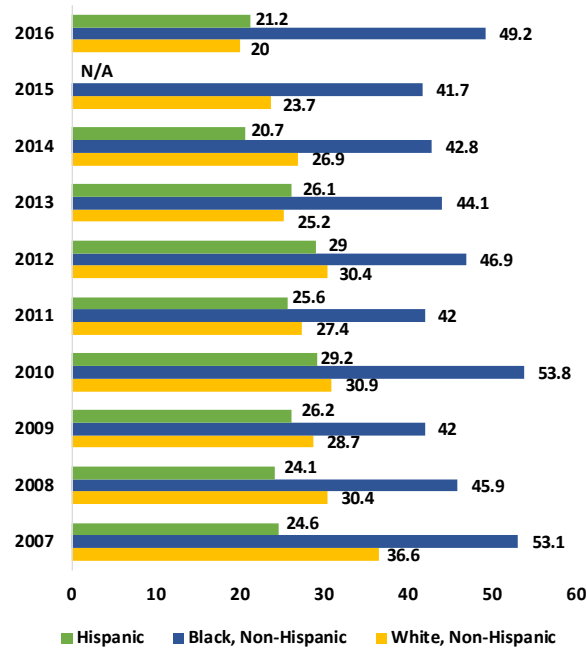
- By race/ethnicity, between 2014 and 2016, Blacks (49.2/100,000) had the highest death rate due to stroke compared to Whites (20.0/100,000) and Hispanics (21.2/100,000).

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



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

**Deaths Due to Stroke: Age-Adjusted Rate/100,000 Population
By Race/Ethnicity
Essex County – Trend**



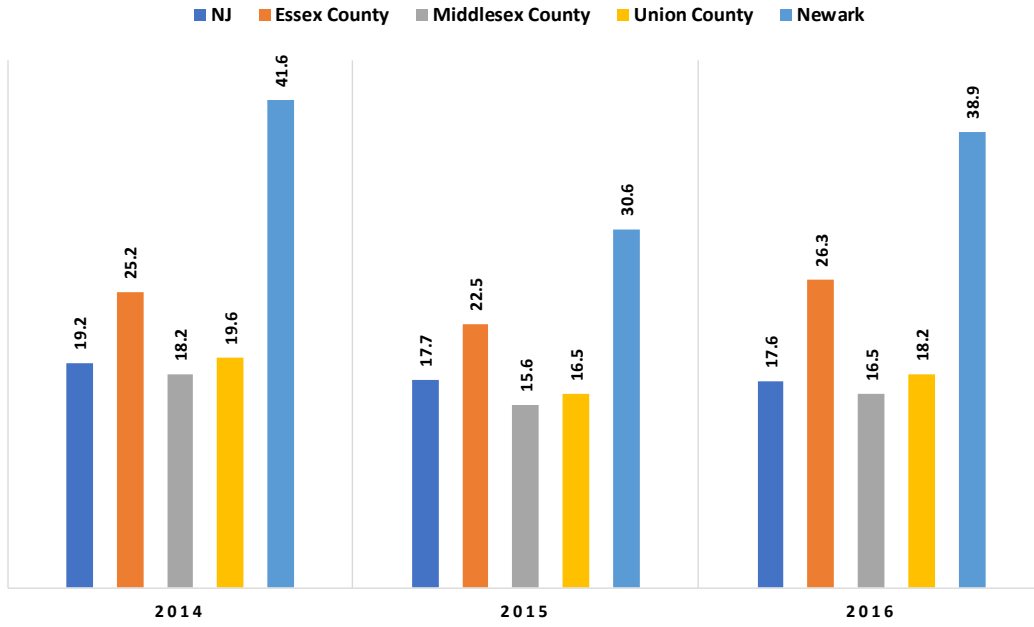
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

Diabetes (5)

Diabetes Mellitus (or diabetes) is a chronic life-long condition that affects the body’s ability to use the energy found in food. There are three types of diabetes – type 1 diabetes, type 2 diabetes, and gestational diabetes. All types of diabetes have one central commonality. In diabetes, the body does not make enough insulin, or it cannot use the insulin it does produce, or a combination of both. Insulin is essential in taking the glucose the body takes in in the form of sugars and carbohydrates and using it for energy. Since cells cannot take in glucose without insulin, it builds up in the blood. High levels of blood glucose can damage blood vessels in the kidneys, heart, eyes or nervous system. That is why diabetes, especially if left untreated, can cause heart disease, stroke, kidney disease, blindness or damage to nerves in the feet.

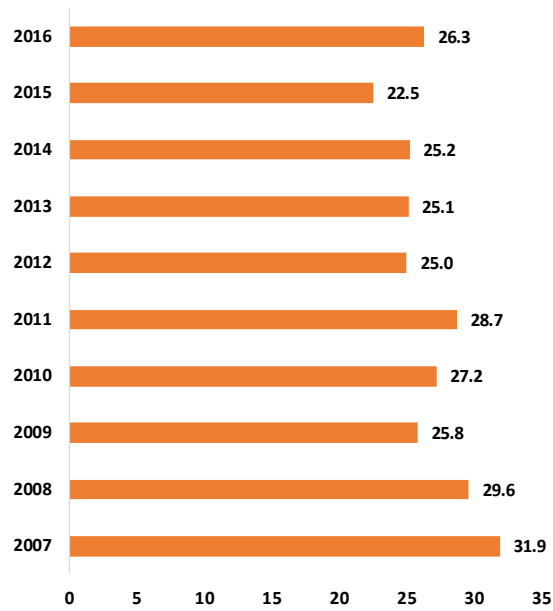
- In 2016, the AAMR due to diabetes in Essex County was higher than the statewide rate, and the rate in the comparison counties.
- Since 2011, the county-wide AAMR for diabetes has fluctuated with a small overall increase.
- Between 2014 and 2016, the AAMR for diabetes among Newark residents decreased from 41.6/100,000 to 38.9/100,000.
- In 2016, Newark had the highest mortality rate for diabetes of the comparative geographies.

Deaths Due to Diabetes State & County Comparisons, 2014-2016



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

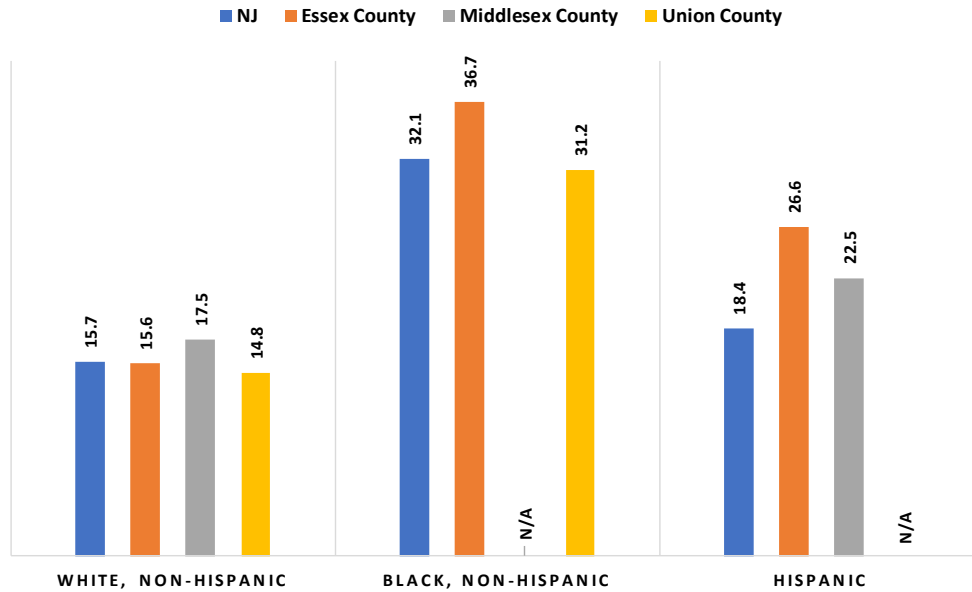
Essex County



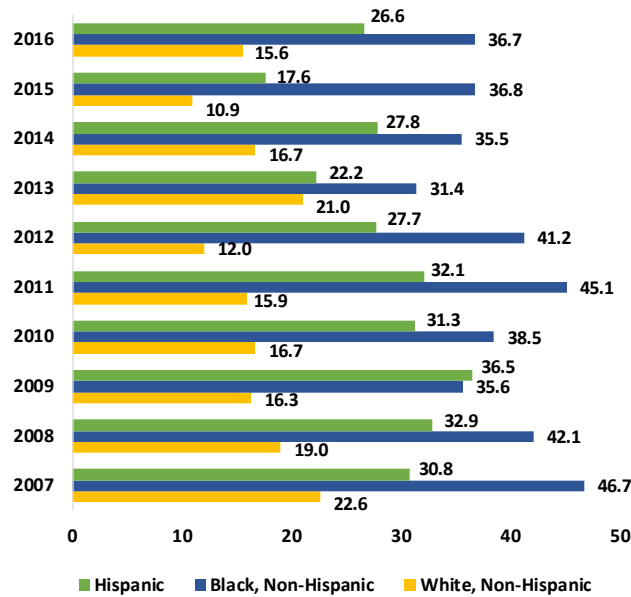
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

- By race, Blacks had the highest AAMR for diabetes (36.7/100,000) compared to Whites (15.6/100,000), and Hispanics (26.6/100,000).

Deaths Due to Diabetes By Race/Ethnicity State & County Comparisons, 2014-2016



Essex County



Source: NJSHAD: New Jersey Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health Data – 2016 is most recent year available

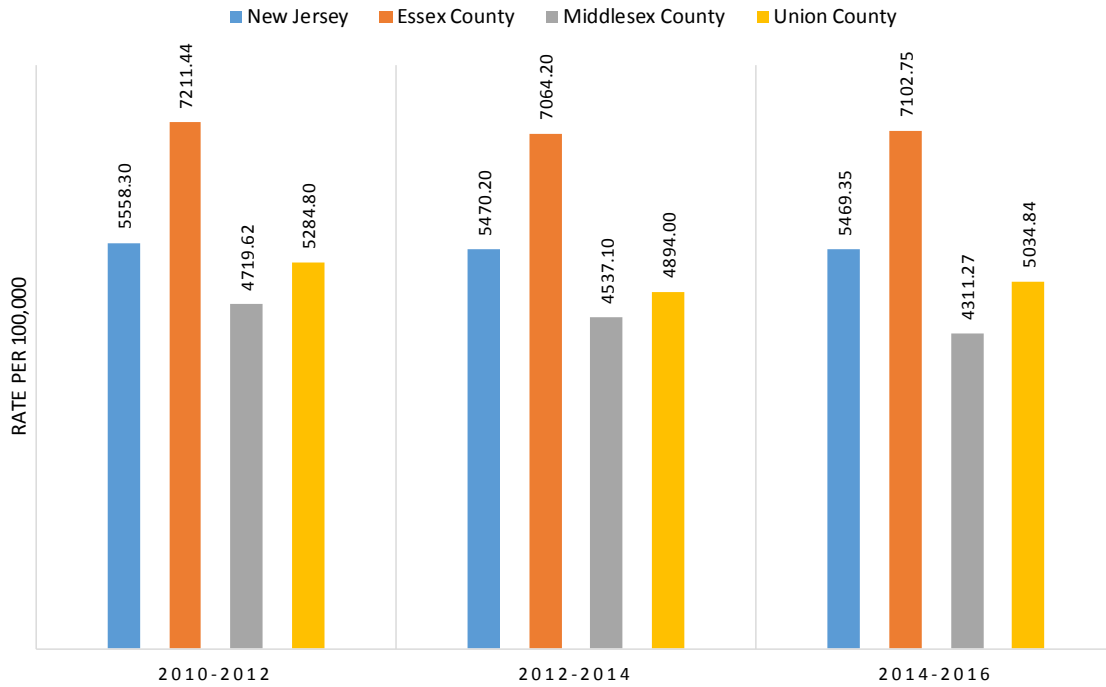
Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Deaths Due to Diseases of The Heart <i>Age-Adjusted Rate/100000 Population</i>		N.A.	
Deaths Due to Diseases of The Heart (Black, Non-Hispanic) <i>Age-Adjusted Rate/100000 Population</i>	N.A.	N.A.	
Deaths Due to Malignant Neoplasms (Cancer) <i>Age-Adjusted Rate/100000 Population</i>		N.A.	
Deaths Due to Malignant Neoplasms (Cancer) (Black, Non-Hispanic) <i>Age-Adjusted Rate/100000 Population</i>	N.A.	N.A.	
Deaths Due to Unintentional Injuries <i>Age-Adjusted Rate/100000 Population</i>		N.A.	
Deaths Due to Unintentional Injuries (Black, Non-Hispanic) <i>Age-Adjusted Rate/100000 Population</i>	N.A.	N.A.	
Deaths Due to Cerebrovascular Disease (Stroke) <i>Age-Adjusted Rate/100000 Population</i>		N.A.	
Deaths Due to Cerebrovascular Disease (Stroke) (Black, Non-Hispanic) <i>Age-Adjusted Rate/100000 Population</i>	N.A.	N.A.	
Deaths Due to Diabetes <i>Age-Adjusted Rate/100000 Population</i>		N.A.	
RED: Poorest Performing Quartile			
Yellow: Middle Quartiles			
Green: Best Performing Quartile			
	N.A.	N.A.	

2. Premature Deaths

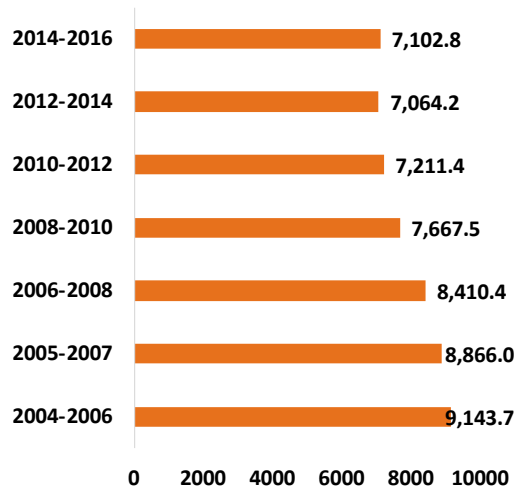
An alternate method to reviewing crude or age-adjusted death rates as a measure of premature mortality is assessing Years of Potential Life Lost (YPLL). YPLL calculate the number of years of potential life lost for each death occurring before a predetermined end point, in this case, age 75 per 100,000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

- The Essex County YPLL rate decreased from 7,211.44/100,000 for the period 2010-2012, to 7,102.75/100,000 for the period from 2014-2016. The 2014-2016 Essex County YPLL rate (7,102.75/100,000) was higher than the statewide rate (5,469.35/100,000) and ranks in the middle performing statewide quartile.
- The 2014-2016 Essex County YPLL rate (7,102.75/100,000) underperformed the County Health Ranking benchmark (5,300/100,000) and was in the worst performing quartile.

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



Essex County



Source: County Health Rankings; National Vital Statistics System

Note: Every death occurring before the age of 75 contributes to the total number of years of potential life lost

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

National Benchmark: 5300
Essex County 2016: 7102.8

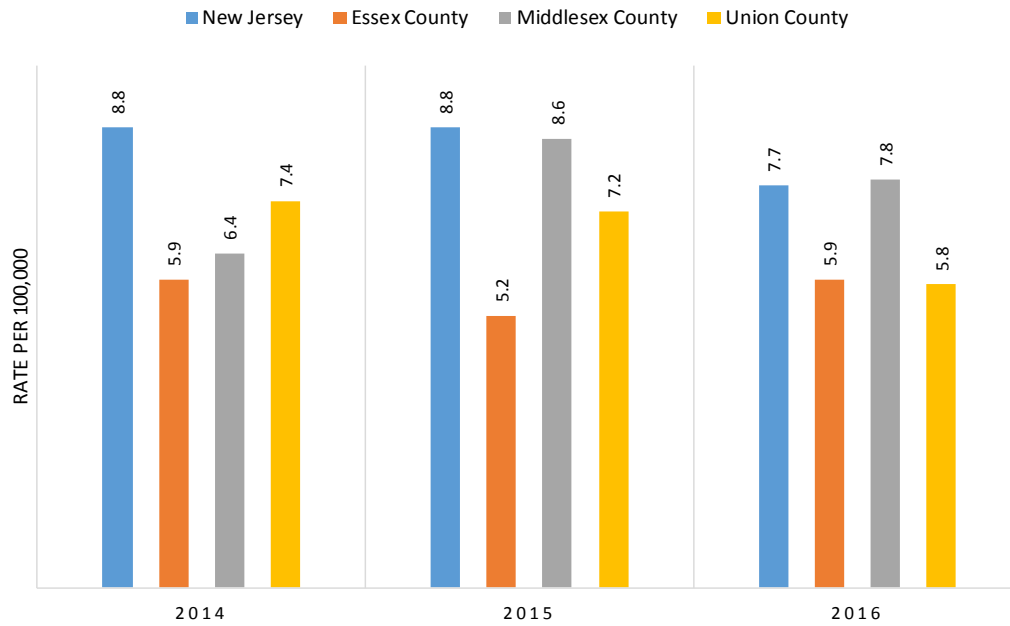
Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Premature Death: Years of Potential Life Lost Before Age 75 <i>Age-Adjusted Rate/100000 Population</i>	N.A.		

3. Behavioral Health-Related Deaths

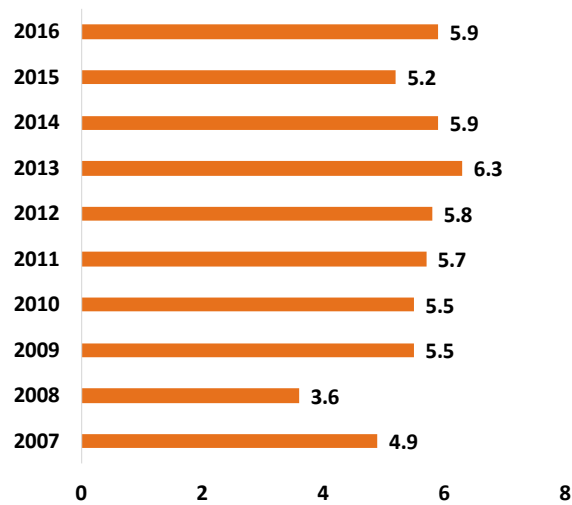
Mental health is a state of well-being in which an individual realizes his or her own abilities, copes with normal life stresses, works productively, and is able to contribute to his or her community. Mental illness is a diagnosable mental disorder or condition characterized by alterations in thinking,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

- Statewide deaths due to suicide decreased from 2014 (8.8/100,000) to 2016 (7.7/100,000), or 12.5%, while Essex County’s suicide rate remained constant at 5.9/100,000 for the same period.
- Essex County’s 2016 suicide rate was lower than the rate statewide and for Middlesex County.
- The 2016 Essex County suicide rate (5.9/100,000) is 72.9% lower than the *Healthy People 2020* target (10.2/100,000).

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



Essex County



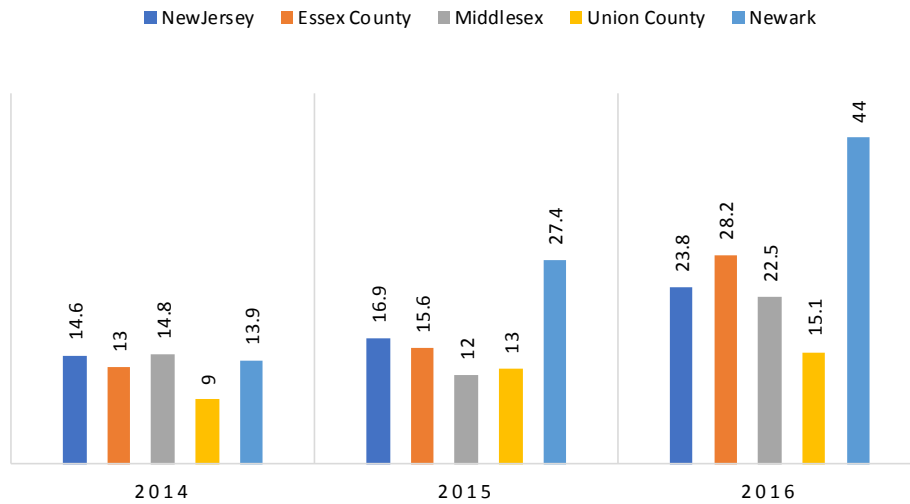
Source: NJDOH Center for Health Statistics; NJ State Health Assessment Data



Baseline: 11.3
Target: 10.2
Essex County 2016: 5.9

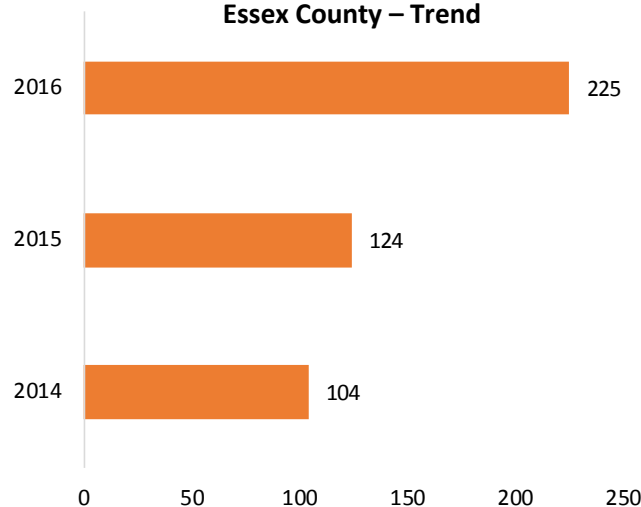
- Between 2014 and 2016, the rate of drug overdose deaths in Essex County increased from 13.0/100,000 to 28.2/100,000.
- Drug overdose deaths in Essex County increased from 104 to 225, or more than doubled.

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



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

Drug Overdose Deaths Essex County – Trend



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



National Benchmark: 10
Essex County 2016: 17

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

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

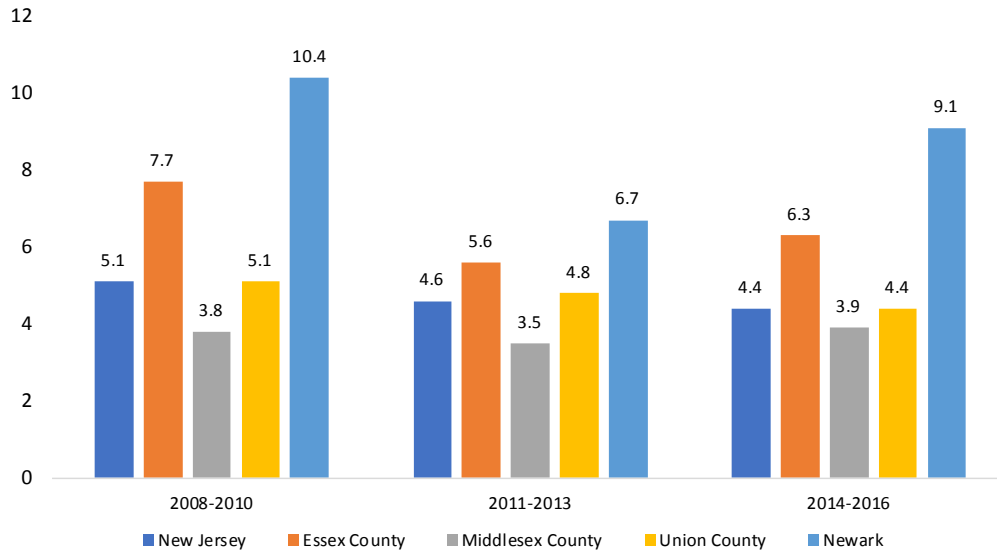
4. Infant Mortality

Infant mortality, the death of a baby prior to his or her first birthday, is *traditionally* used as an indicator of the health and well-being of a nation. Infant mortality is calculated as the number of infant deaths under age 1 per 1,000 live births. Great disparities exist in infant mortality by age, race, and ethnicity. Most frequent causes are serious birth defect, preterm birth / low birth weight, Sudden Infant Death Syndrome (SIDS), maternal complications of pregnancy, and injury.⁶⁴

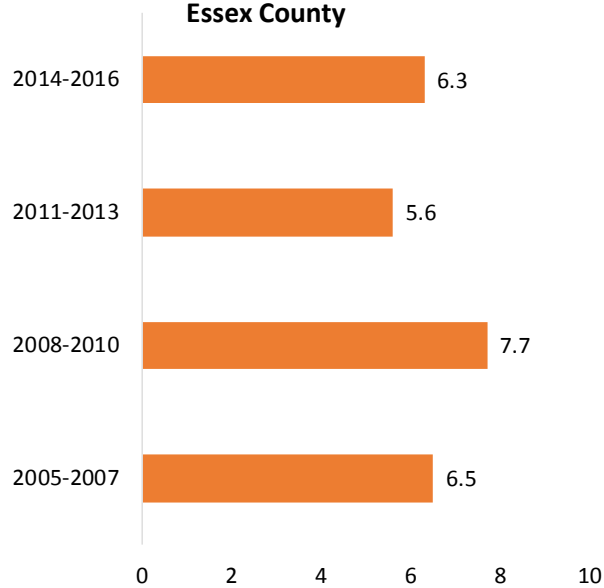
- The overall infant mortality rate declined statewide from the period 2008-2010 (5.1/1,000) to 2014-2016 (4.4/1,000).
- The Essex County infant mortality rate decreased from (7.7/1,000) in 2008-2010 to (6.3/1,000) in 2014-2016.
- Essex County ranks in the middle performing quartile among New Jersey counties for overall infant mortality in 2014-2016, but is among the worst performing quartiles in terms of the County Health Ranking benchmark.
- Essex County’s infant mortality rate ranks in the middle quantile, with regard to the Healthy People 2020 target.
- Newark’s infant mortality rate (9.1/1,000) is more than twice that of the State.
- The Black infant mortality rate decreased between 2007-2009 from 12.3/1,000 to 9.3/1,000 in 2013-2015.
- Despite this decrease, the Essex County Black infant mortality rate is higher than for Blacks in surrounding counties.

⁶⁴ <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>

**Infant Mortality Rate: Rate of Infant (Under 1 Year) Deaths/1,000 Live Births
State & County Comparisons, 2008-2016**



Essex County



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

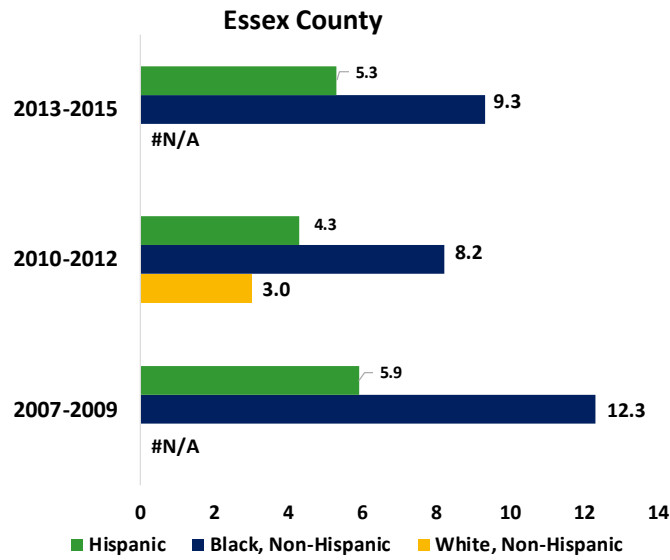
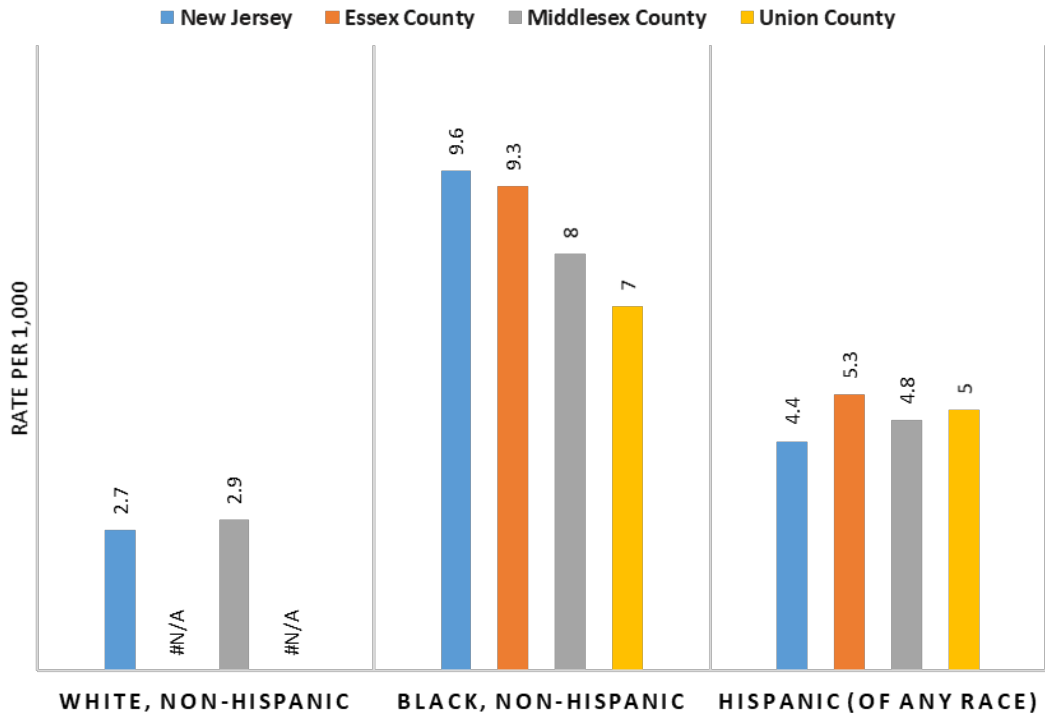


Baseline: 6.7
Target: 6.0
Essex County 2016: 6.6



National Benchmark: 4.0
Essex County 2016: 6.6

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



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

5. Low and Very Low Birth Weight Infants

Birth weight is the most important factor affecting neonatal mortality and a significant determinant of post neonatal mortality. Low birth weight infants (less than 2,500 grams) are at an increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders.⁶⁵ Racial disparities in low birth weight babies persist; nationally, non-Hispanic Black infants continue to die at nearly twice the rate of non-Hispanic Whites.

Low Birth Weight

- In 2016, Essex County had a higher percentage of low birth weight babies (9.7%) than Middlesex County (8.0%), Union County (7.6%), and the State (8.1%).
- The 2016 percent of Essex County low birth weight babies was higher than the *Healthy People 2020* target of 7.8%.
- In 2016, Newark had a higher percentage of low birth weight infants than the County and the State (10.8%).
- The percentage of Essex County low birthweight babies was higher among Blacks (13.1%) than for Whites (6.4%) and Hispanics (7.8%) in 2016.

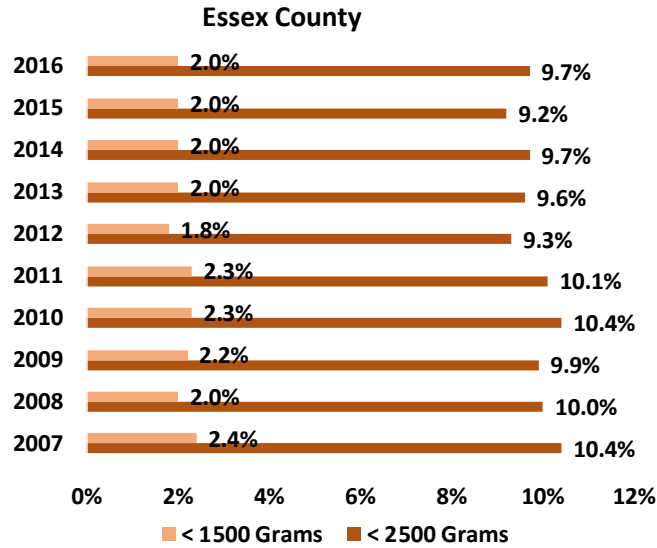
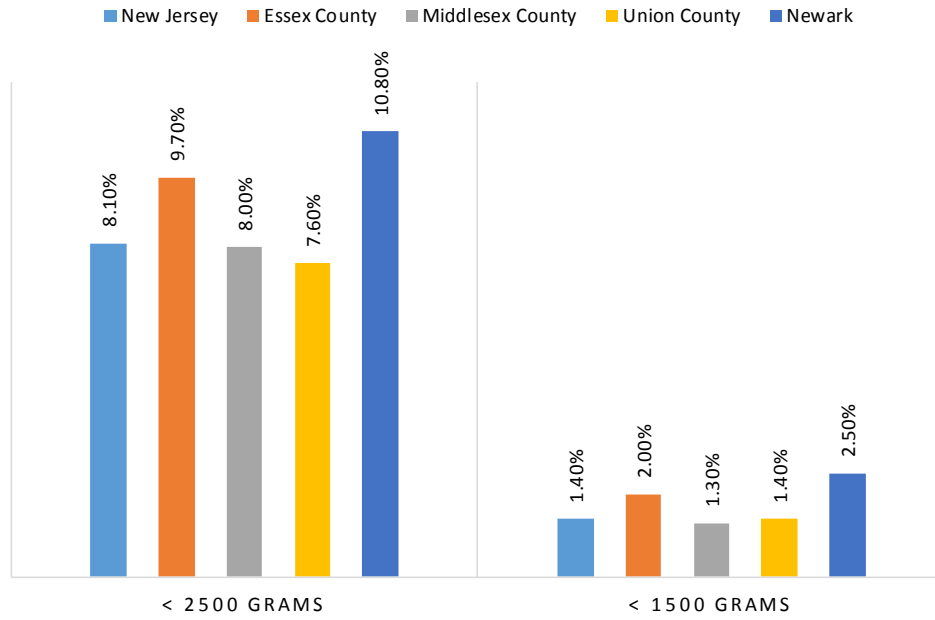
Very low birth weight babies (less than 1,500 grams) are at greater risk of adverse outcomes than low birth weight babies.

Very Low Birth Weight

- In 2016, 2.0% of Essex County babies were very low birth weight as compared to 1.4% statewide.
- The 2016 percent of very low birth weight babies in Essex County was higher than the rates in Middlesex (1.3%) and Union (1.4%) Counties.
- In 2016, Newark (2.5%) had the highest rate of very low birth weight infants compared to all geographies.
- By race, between 2011 and 2016, the percentage of very low birthweight babies: decreased for Whites from 1.1% to 0.5%; increased from 3.2% to 3.4% for Blacks; and increased from 1.1% to 1.4% for Hispanics.

⁶⁵ http://www.cdc.gov/PEDNSS/how_to/interpret_data/case_studies/low_birthweight/what.htm

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

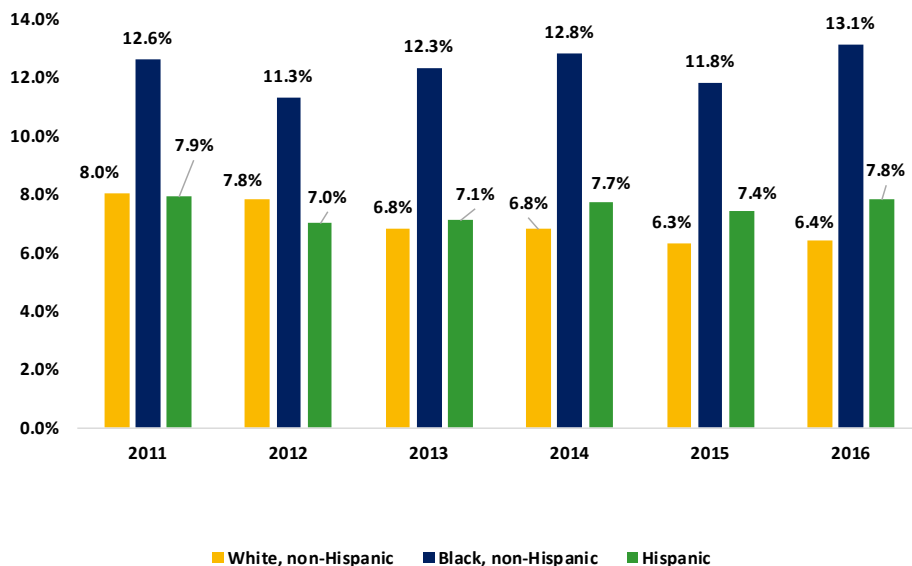


Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
 Note: Percentages are based on the total number of live births for the County and State



<1500/<2500
 Baseline: 1.5% / 8.2%
 Target: 1.4% / 7.8%
 Essex County 2016: 2.00% / 9.70%

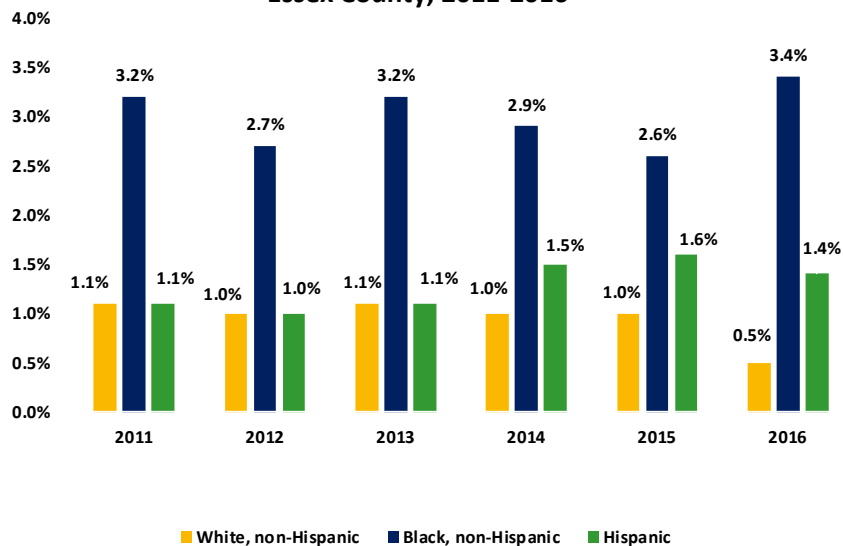
Low Birth Weight by Mother's Race/Ethnicity: Percent of Live Births with Low Birth Weight Essex County, 2011-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database

Note: *Percentages are based on the total number of Low or Very Low Birth Weight Births / Live births for the County and State

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



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database

Note: *Percentages are based on the total number of Low or Very Low Birth Weight Births / Live births for the County and State

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

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

6. Health Status and Behavioral Health Status

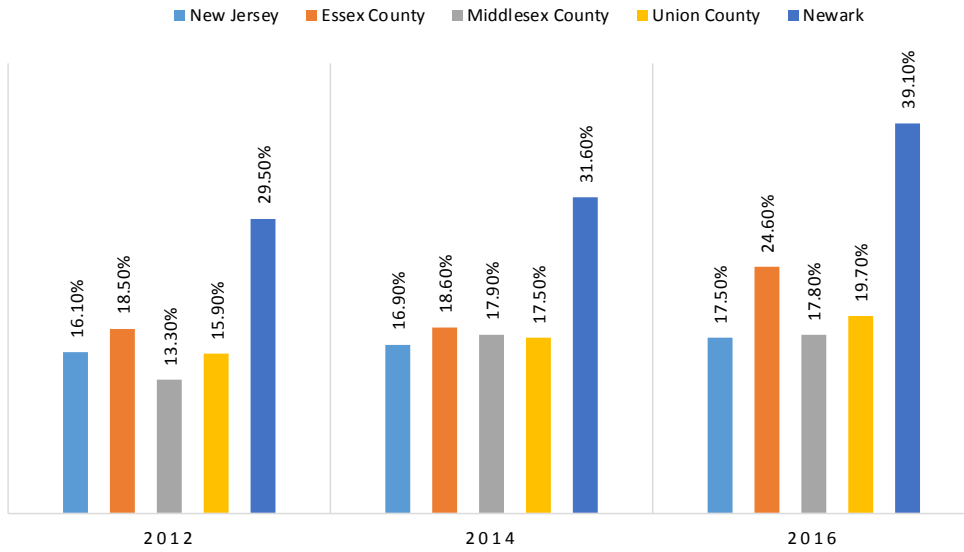
Health status and behavioral health status are broad multidimensional concepts including self-report measures of physical and mental health.

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

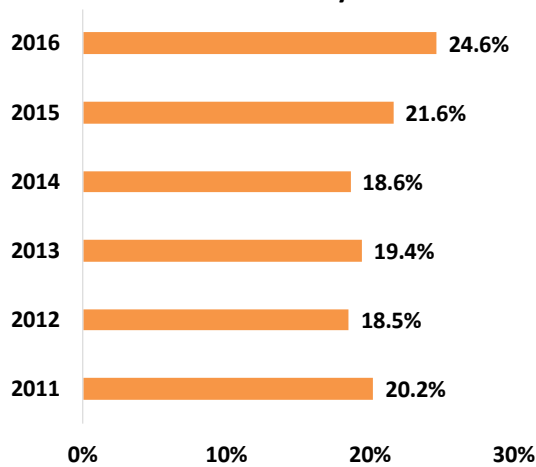
General Health Status

- Between 2012 and 2016, BRFSS data reported an increase in the percent of Essex County residents who indicate their health as “poor or fair,” from 18.5% to 24.6%.
- In 2016, 17.5% of New Jersey respondents report that their health is “fair or poor,” lower than the rate among Essex, Middlesex and Union County residents.
- Between 2012 and 2016, the percent of Newark residents reporting their health to be “fair or poor” rose by nearly 10 percentage points.
- In 2016, nearly 40% of Newark residents reported their health to be “fair or poor”.
- As compared to all New Jersey counties, Essex County residents with “fair or poor” health rank in the middle performing quartile.
- As compared to the County Health Ranking, Essex County residents report with “fair or poor” health rank in the poorest performing quartile.

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



Essex County



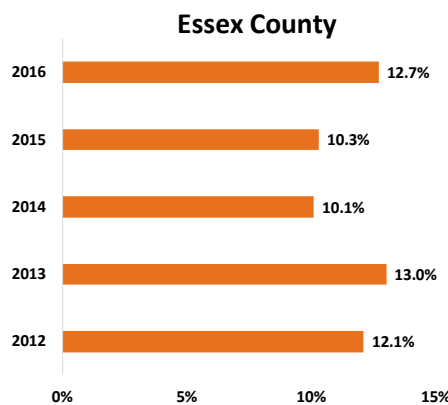
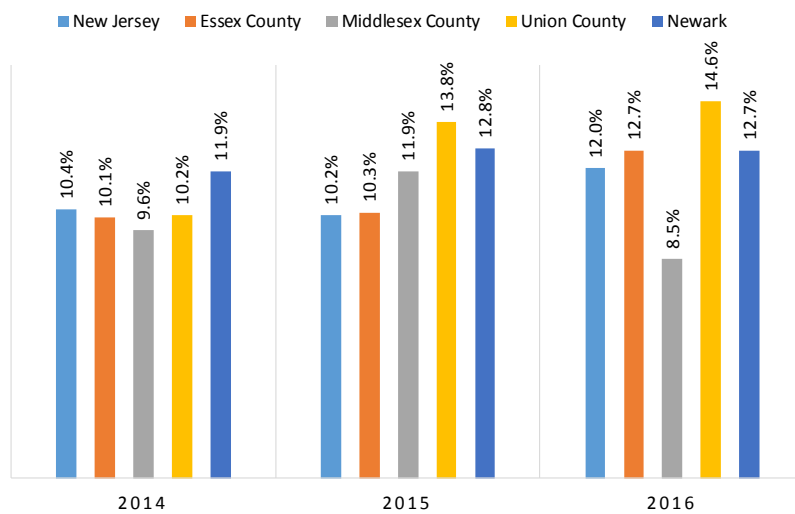
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

**County Health
Rankings & Roadmaps**
Building a Culture of Health, County by County
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National Benchmark: 12%
Essex County 2016: 24.6%

- NJBRFSS reports that the number of Essex County adults with 14 or more physically unhealthy days (in the last 30 days) increased 2.6 percentage points between 2014 (10.1%) and 2016 (12.7%).
- Essex County residents with 14+/30 days of poor physical health rank in the middle quartile in New Jersey and in the poorest performing quartile compared to the County Health Ranking benchmark.
- Between 2014 and 2016, the percent of Newark residents reporting 14 days or more physically unhealthy days increased 0.8 percentage points from 11.9% to 12.7%.
- In 2016, the percentage of Newark residents reporting 14 day or more unhealthy days was the same as the Essex County rate.

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



Source: New Jersey Behavioral Risk Factor Survey

Note: The physical health measure is based on response to the question: “Now thinking about your physical health which includes physical illness and injury for how many days during the past 30 days was your physical health not good?”

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

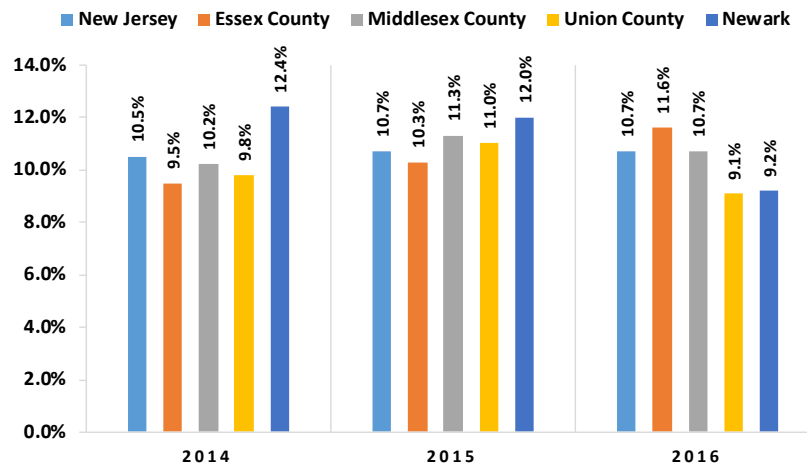
National Benchmark: 3.0%
 Essex County 2016: 12.7%

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Reported “Fair” or “Poor” Health <i>Percentage of Respondents</i>	N.A.		
Physically Unhealthy Days Reported in the Past 30 Days <i>Average Age-Adjusted Number</i>	N.A.		
RED: Poorest Performing Quartile			
Yellow: Middle Quartiles			
Green: Best Performing Quartile			

Behavioral Health Status

- County-wide, adults who report 14 or more of the past 30 days with “not good” mental health status increased from 9.5% in 2014, to 11.6% in 2016. The 2016 Essex County report of 14+/30 days with “not good” mental health was higher than New Jersey at 10.7%.
- Unlike Essex County, the percent of Newark residents reporting 14 or more days of poor mental health decreased from 12.4% to 9.2%, or by 3.2 percentage points.
- As compared to all New Jersey counties, Essex County residents with 14+/30 days in poor physical health ranks in the middle quartile.
- As compared to County Health Ranking Essex County ranks in the bottom quartile.

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



Source: New Jersey Behavioral Risk Factor Survey

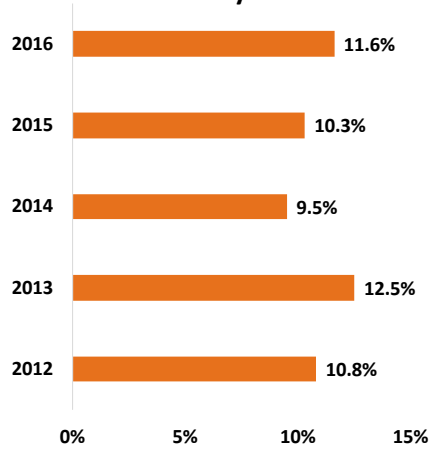
Note: The physical health measure is based on response to the question: “Now thinking about your physical health which includes physical illness and injury for how many days during the past 30 days was your physical health not good?”



National Benchmark: 3.1%
 Essex County 2016: 11.6%

A Robert Wood Johnson Foundation program

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

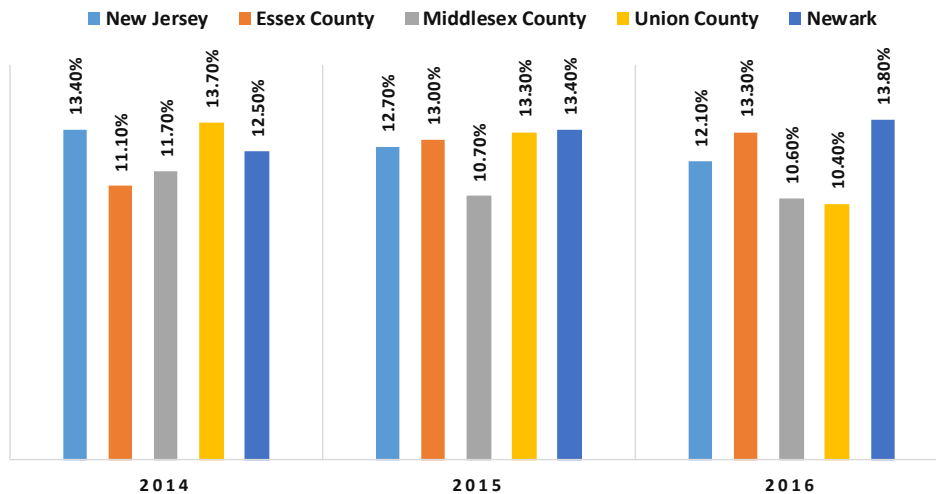


Source: New Jersey Behavioral Risk Factor Survey

Note: The physical health measure is based on response to the question: “Now thinking about your physical health which includes physical illness and injury for how many days during the past 30 days was your physical health not good?”

- Between 2014 and 2016, the percent of Essex County residents reporting a history of depression increased from 11.1% to 13.3%.
- Between 2014 and 2016, the percent of Newark residents reporting a history of depression increased from 12.5% to 13.8%; higher than all comparative geographies.
- The Essex County rate for history of depression was higher than the statewide rate (12.1%) and ranked in the middle quartile.

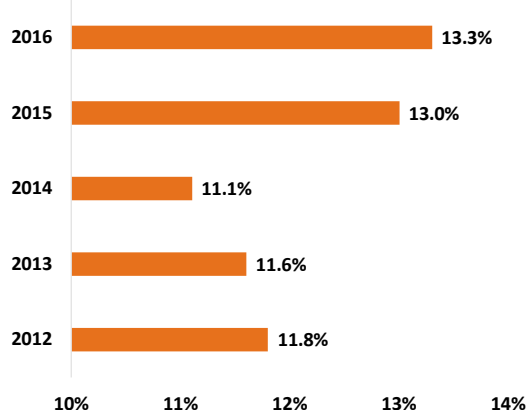
**History of Diagnosed Depression
State & County Comparisons 2014-2016**



Source: New Jersey Behavioral Risk Factor Survey

Note: The frequent mental distress health measure is based on response to the question: “Now thinking about your mental health which includes stress depression and problems with emotions for how many days during the past 30 days was your mental health not good?”

History of Diagnosed Depression Essex County – Trend



Source: New Jersey Behavioral Risk Factor Survey

Note: The frequent mental distress health measure is based on response to the question: “Now thinking about your mental health which includes stress depression and problems with emotions for how many days during the past 30 days was your mental health not good?”

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Mentally Unhealthy Days Reported in the Past 30 Days Average Age-Adjusted Number	N.A.		
History of Diagnosed Depression	N.A.	N.A.	
RED: Poorest Performing Quartile			
Yellow: Middle Quartiles			
Green: Best Performing Quartile			

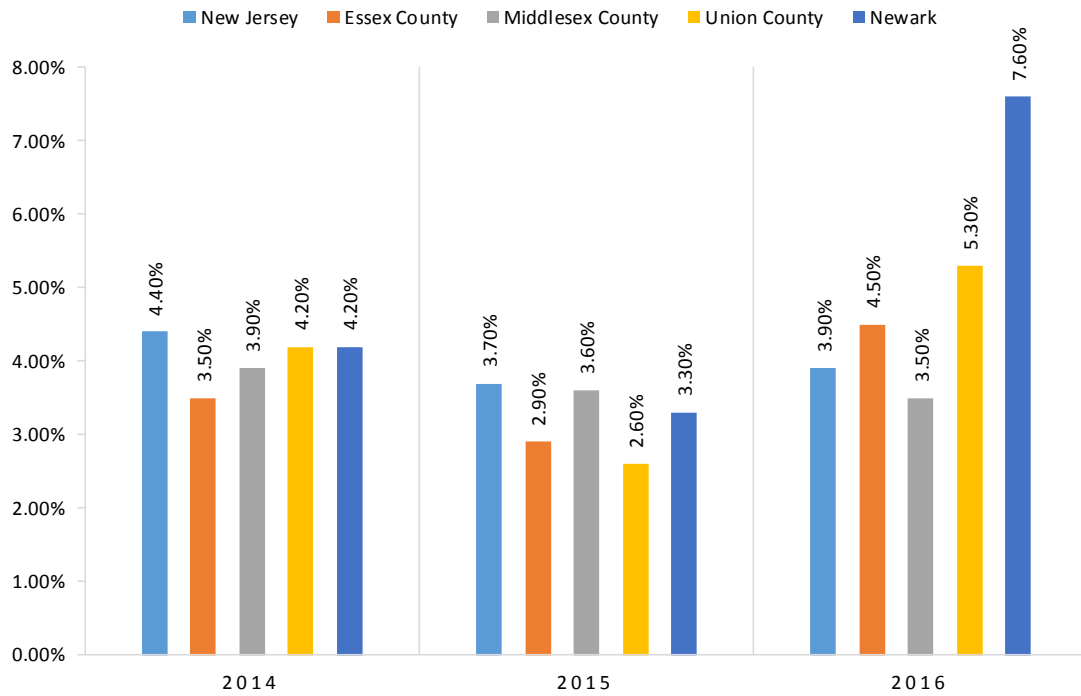
7. Morbidity

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

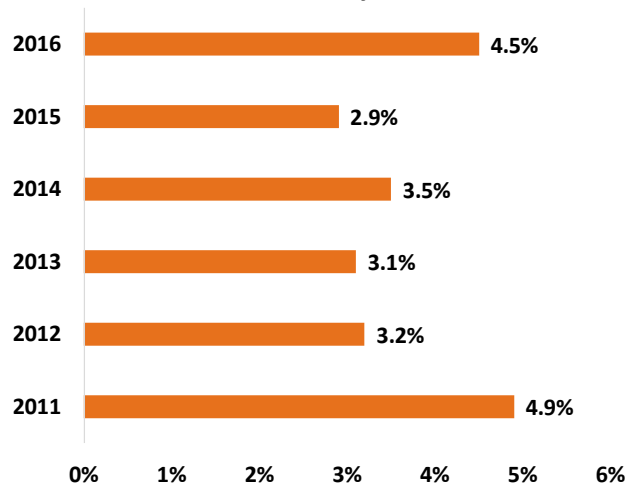
Heart Disease

- According to BRFSS, the percent of Essex County residents told they have angina or coronary heart disease increased from 3.5% in 2014, to 4.5% in 2016. In 2016, BRFSS indicates 3.9% of New Jersey respondents have angina or coronary heart disease.
- Between 2014 and 2016, the percent of Newark residents reporting cardiovascular disease increased 3.4 percentage points from 4.2% to 7.6%.
- The rate in Newark was highest of all the comparative geographies.
- As compared to New Jersey, Essex County residents reporting angina or coronary heart disease ranks in the middle performing quartile.

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



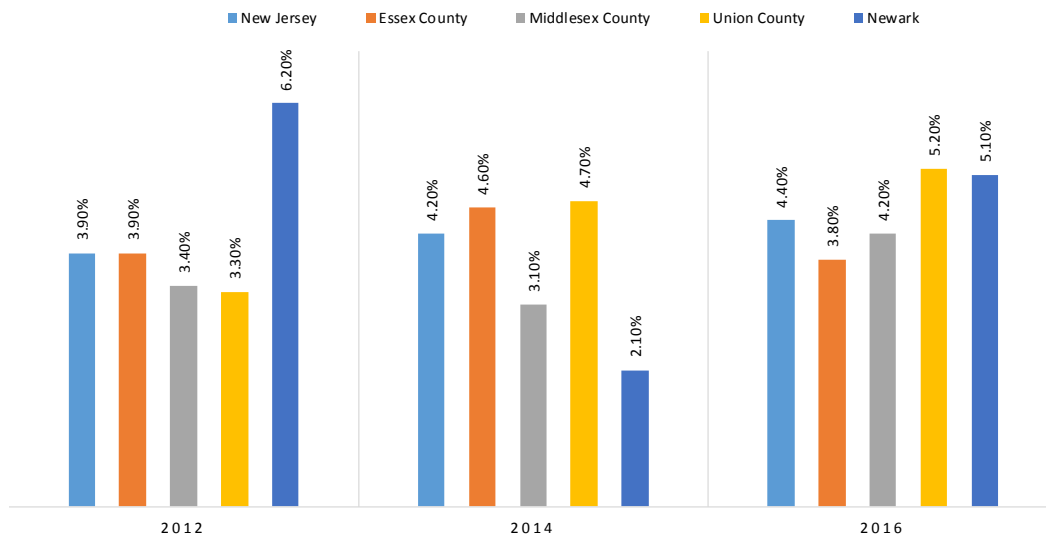
Essex County



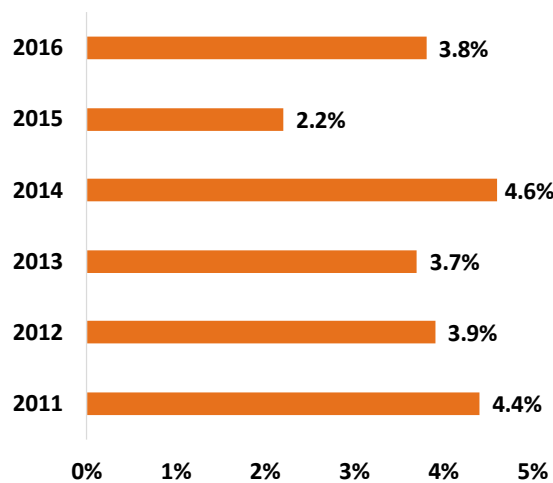
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

- According to BRFSS, the percent of Essex County residents told they have had a heart attack declined 0.1 percentage point from 3.9% in 2012 to 3.8% in 2016. In 2016, BRFSS indicated 4.4% of New Jersey respondents were told they had a heart attack.
- Between 2012 and 2016, the percent of Newark residents reporting a heart attack decreased from 6.2% to 5.1%.
- The rate reported by Newark residents was higher than both the State and County.
- Essex County ranks in the middle performing quartile compared to all 21 New Jersey counties for residents who had a heart attack.

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



Essex County

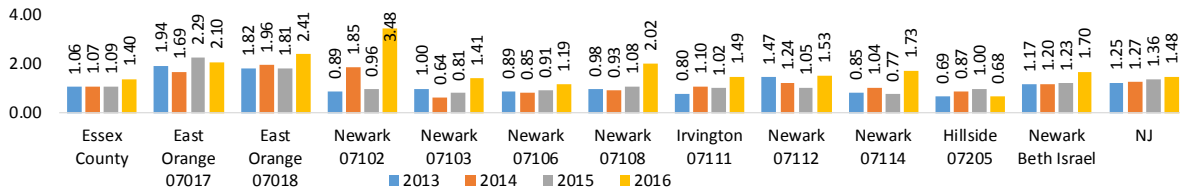


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

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

- The rate of Essex County residents using a hospital service with a heart attack diagnosis (2013-2016) was lower than those in the State and the NBIMC Service Area.
- In 2016, Newark 07102 residents exhibited the highest rate of patients hospitalized with a diagnosis of heart attacks at 3.48/1,000 and Hillside residents reported the lowest rate of heart attack at 0.68/1,000.

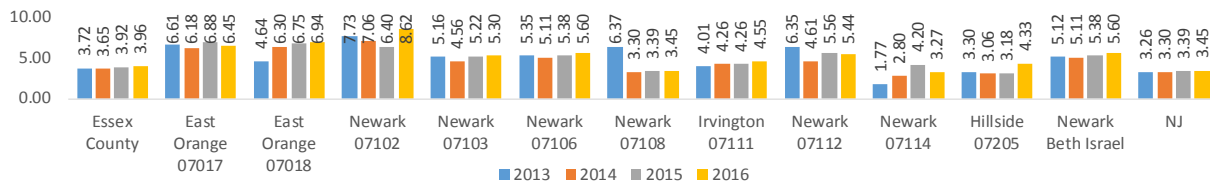
Heart Attack: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



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

- Between 2013 and 2016, the rate of patients hospitalized with a diagnosis of heart failure in Essex County was lower than NBIMC’s Service Area.
- In 2016, Newark 07102 residents exhibited the highest rate of patients hospitalized with a diagnosis of heart failure/CHF at 8.62/1,000 and Newark 07114 residents had the lowest rate at 3.27/1,000.

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

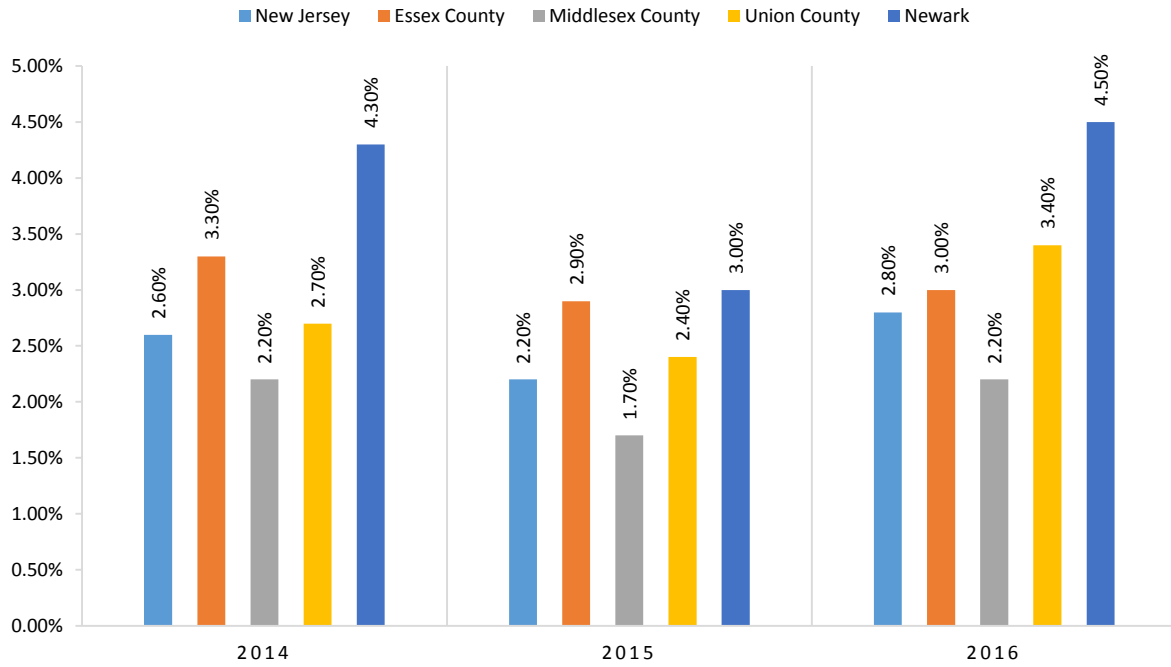


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 291-293

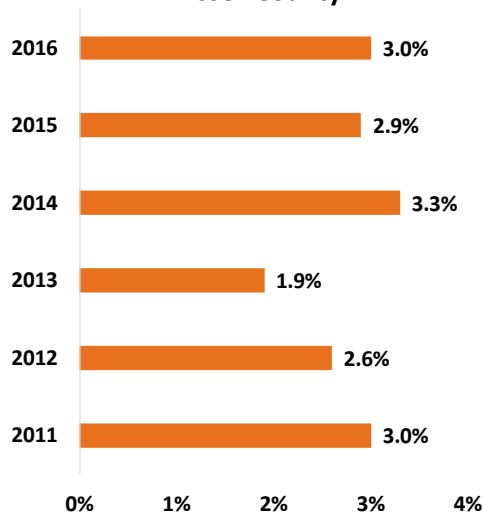
Stroke

- In 2016, BRFSS reported 3.0% of Essex County respondents indicated they had a stroke.
- In 2016, Essex County (3.0%) reported a higher rate of strokes than the State (2.8%) and Middlesex County (2.20%).
- In 2016, 4.5% of Newark residents reported they had a stroke.
- Newark residents reported the highest percentage of patients with a stroke of all the comparative geographies.
- Essex County ranks in the middle quartile of New Jersey counties for percentage of the population that had a stroke.

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



Essex County



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

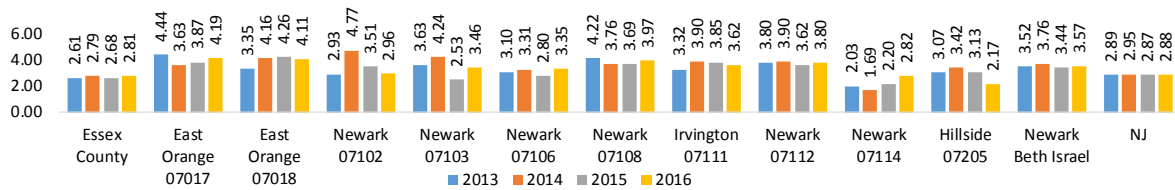


Baseline: 43.5
Target: 34.8
Essex County 2016: 36.3

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

- From 2013 through 2016, Essex County had a lower rate of patients using a hospital service with stroke/TIA diagnosis compared to the State.
- In 2016, East Orange 07017 (4.19/1,000) had the highest rate for patients hospitalized for stroke/TIA diagnosis in the service area, and Hillside (2.17/1,000) had the lowest.

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



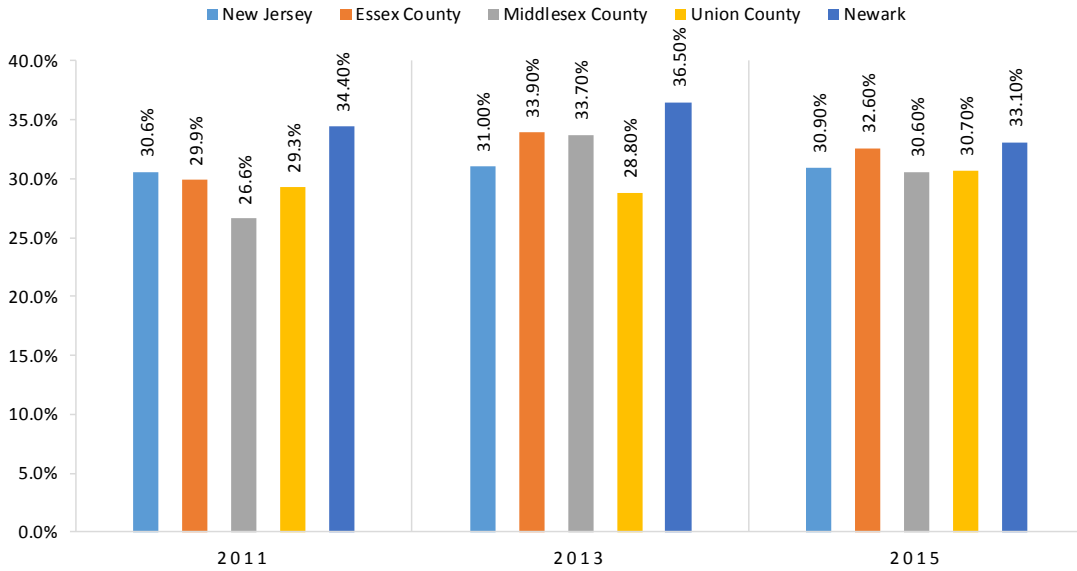
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 061-069

Hypertension and High Cholesterol

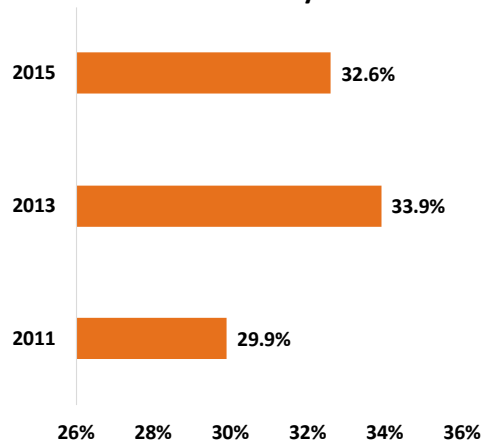
According to the American Heart Association, risk factors associated with developing cardiovascular disease include: high blood pressure, high cholesterol, cigarette smoking, physical inactivity, poor diet, overweight and obesity and Diabetes.

- In 2015, BRFSS reported 32.6% of Essex County adults were aware that they suffered from hypertension, more than New Jersey adults (30.9%), and adults in comparative counties.
- Between 2011 and 2015, Essex County adults who were told they had high blood pressure increased 2.7 percentage points.
- Between 2011 and 2016, the percent of Newark adults who reported high blood pressure decreased from 34.4% to 33.1%.
- The reported rate of adults with high blood pressure was highest in Newark, as compared to the other areas.
- In 2015, Essex County (32.6%) was higher than the *Healthy People 2020* target (26.9%) for adults with high blood pressure.

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



Essex County



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

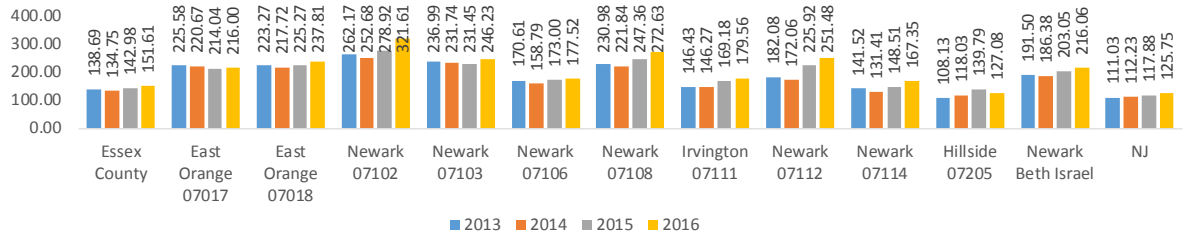


Baseline: 29.7%
Target: 26.9%
Essex County 2016: 32.6%

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

- Newark 07102 had the highest rate of patients using a hospital service with a diagnosis of hypertension for each year from 2013 through 2016.
- In 2016, NBIMC’s Service Area (216.06/1,000) had a higher rate of patients using a hospital service with a hypertension diagnosis than Essex County (151.61/1,000).

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

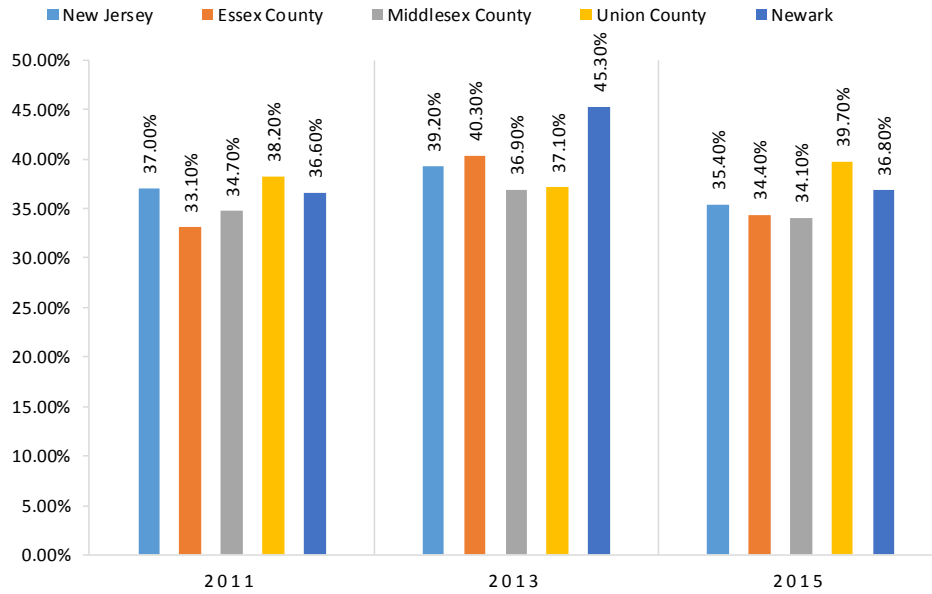


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes in Range 401-405.99 (Appearing Anywhere In First 13 DX Codes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

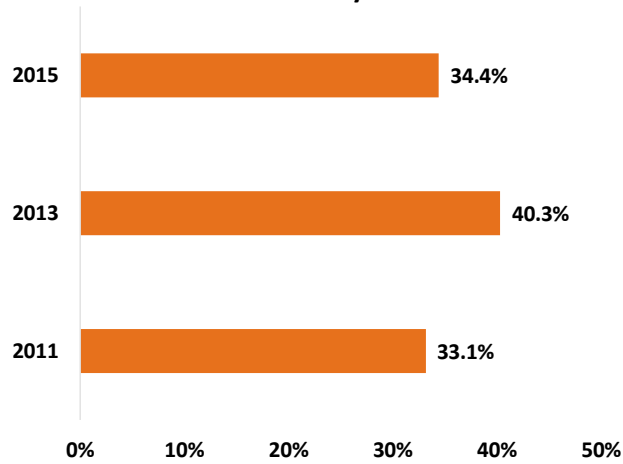
Cholesterol

- In the 2015 BRFSS, 34.4% of Essex County adults who had their cholesterol checked were told it was high, similar to New Jersey adults (35.4%).
- The percent of Essex County adults reporting high cholesterol trended upward from 2011 (33.1%) through 2015 (34.4%).
- The percent of Newark adults reporting high cholesterol between 2011 and 2015 increased only slightly from 36.6% to 36.8%.
- In 2015, the percent of Newark residents reporting high cholesterol was higher than the rate statewide and in the County.
- The 2015 Essex County percent of adults who had their cholesterol checked and were told it was high was more than double the *Healthy People 2020* target of 13.5%. Essex County is in the lowest performing quartile with respect to the *Healthy People 2020* target.

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



Essex County



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

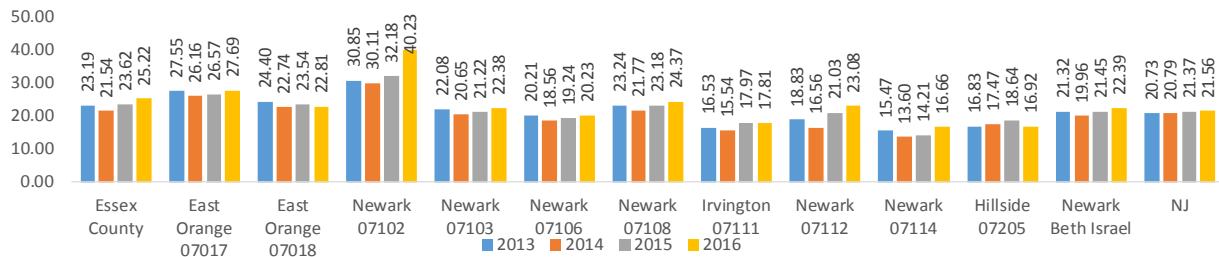


Baseline: 15.0%
Target: 13.5%
Essex County 2015: 34.4%

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

- The rate of patients using a hospital service with a diagnosis of high cholesterol was highest in Newark 07102 in 2016.
- In 2016, the rate of patients using a hospital service with a diagnosis of high cholesterol was lowest in Newark 07114 (16.66/1,000).

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

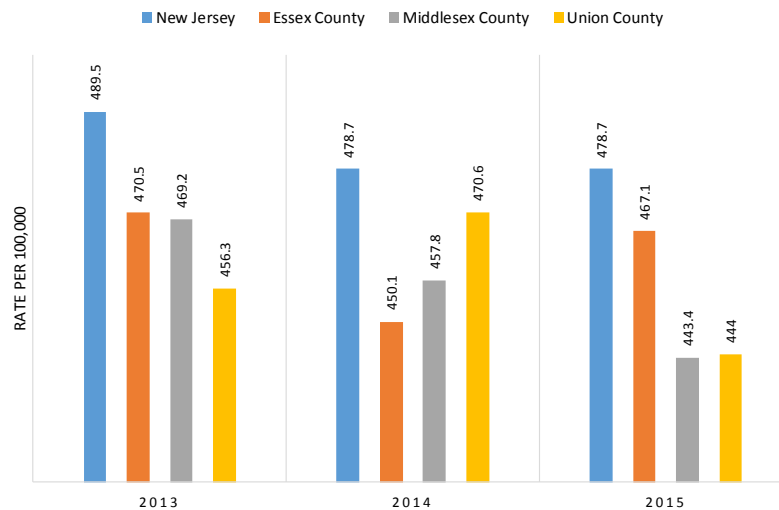


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes 272.0 or 272.2 (Appearing Anywhere In First 13 DX Codes On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

Cancer

- Incidence of overall invasive cancer in Essex County decreased from 470.5/100,000 in 2007, to 467.1/100,000 in 2015.
- In 2015, the overall incidence of cancer in Essex County was lower than the State but higher than comparison counties.
- For additional information on cancer incidence rates, as well as NBIMC’s tumor registry data, please see **Appendix C**.

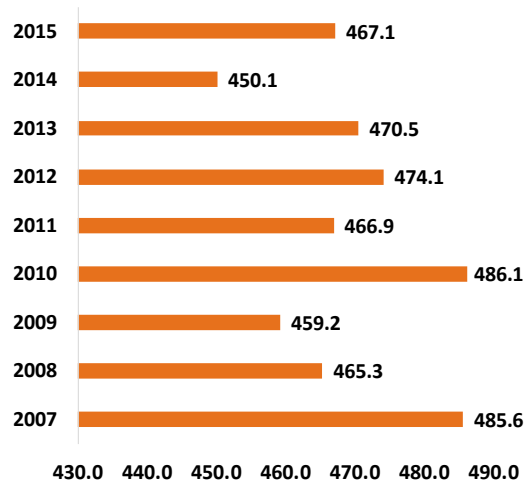
Overall Invasive Cancer Incidence: Age-Adjusted Rate / 100,000 Population State & County Comparisons, 2013-2015



Source: NJDOH New Jersey Cancer Registry

Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100,000 for Breast Cancer is based on Females

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



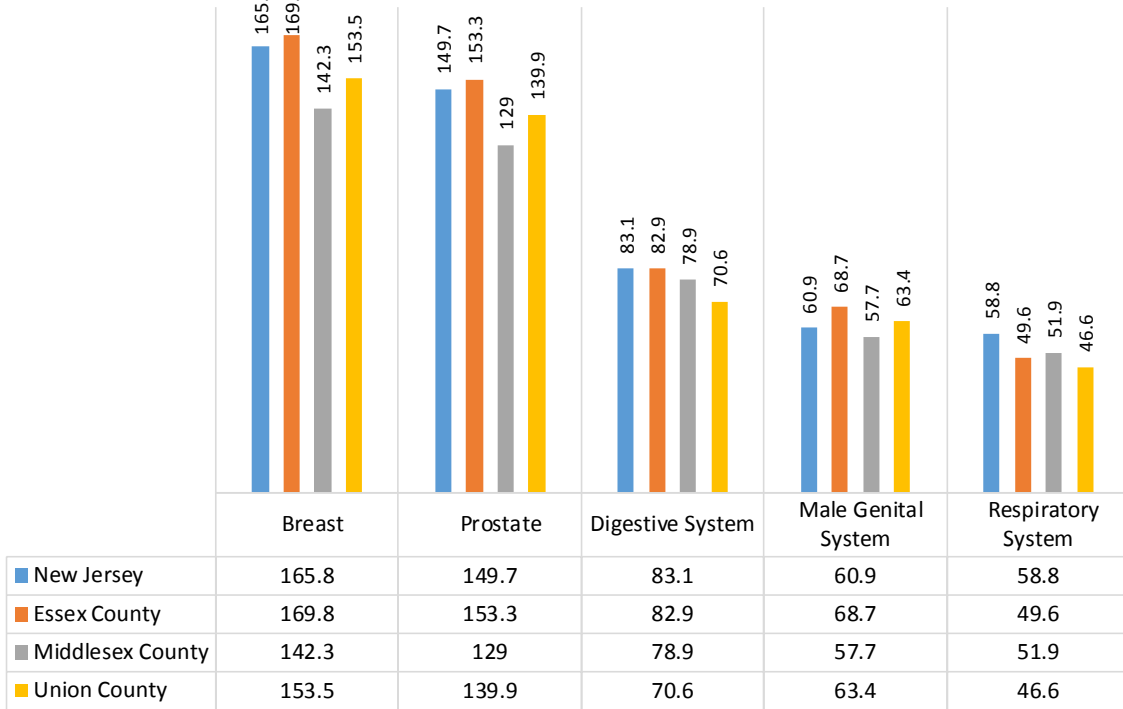
Source: NJDOH New Jersey Cancer Registry

Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100,000 for Breast Cancer is based on Females

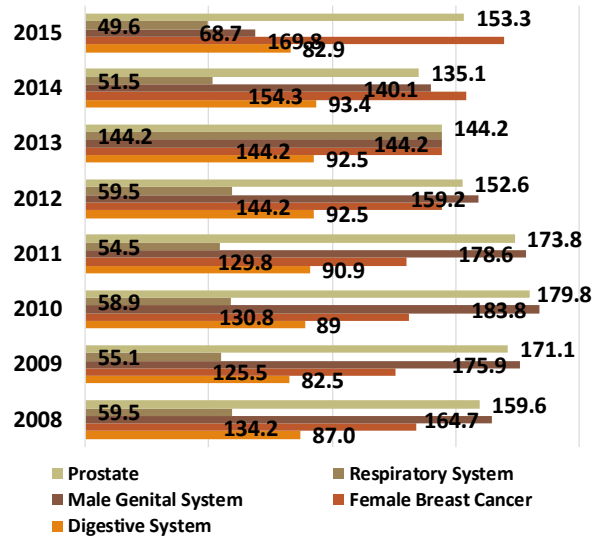
Incidence by Site

- In Essex County, breast (169.8/100,000) and prostate (153.3/100,000) cancers had the highest incidence rates among the top five cancers, followed by digestive system (82.9/100,000), male genital system (68.7/100,000), and respiratory system (49.6/100,000).
- In 2015, digestive system, and respiratory system rates in Essex County were lower than New Jersey.
- Between 2008 and 2015, incidence trends for Essex County by site were:
 - Breast increased 3.1%
 - Digestive System decreased 5.0%
 - Prostate declined 4.1%
 - Male Genital System increased 15.5%
 - Respiratory System decreased 20%
- Prostate, breast, digestive system and male genital system cancer incidence for Essex County perform in the middle quartile in comparison to all 21 New Jersey counties. Respiratory system cancer incidence in Essex County performs in the top quartile.

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



Essex County



Source: NJDOH New Jersey Cancer Registry

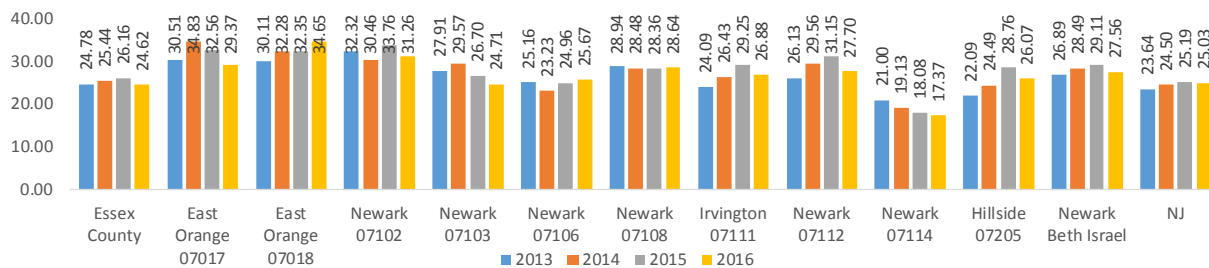
Note: The Rate / 100000 for Prostate Cancer is based on Males and the Rate / 100000 for Breast Cancer is based on Females

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
Overall Cancer Incidence <i>Age-Adjusted Rate per 100,000 Population</i>	N.A.	N.A.	
Prostate Cancer Incidence <i>Age-Adjusted Rate per 100,000 Population</i>	N.A.	N.A.	
Breast Cancer Incidence <i>Age-Adjusted Rate per 100,000 Population</i>	N.A.	N.A.	
Respiratory System Cancer Incidence <i>Age-Adjusted Rate per 100,000 Population</i>	N.A.	N.A.	
Digestive System Cancer Incidence <i>Age-Adjusted Rate per 100,000 Population</i>	N.A.	N.A.	
Male Genital System Cancer Incidence <i>Age-Adjusted Rate per 100,000 Population</i>	N.A.	N.A.	

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

- The 2016 rate of patients using a hospital service with a cancer diagnosis per 1,000 population was highest in East Orange 07018.
- In 2016, the rate for patients discharged with a cancer diagnosis/1,000 population was lower in the County (24.62/1,000) than in the NBIMC Service Area (27.56/1,000).

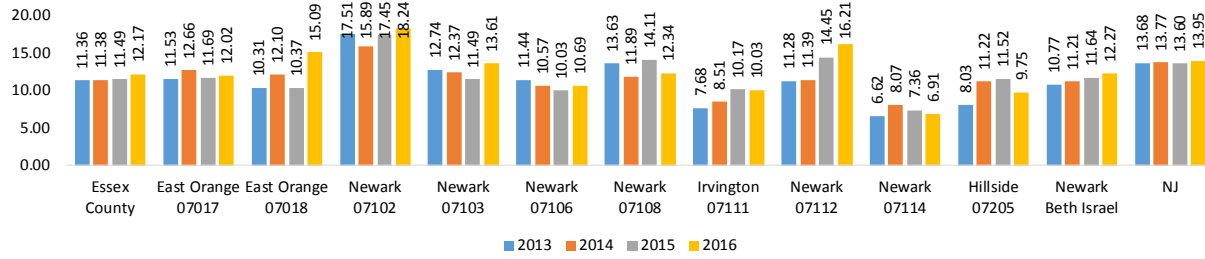
Cancer: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



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

- The 2016 rate of residents using a hospital service that had a history of cancer diagnosis was highest in Newark 07102 (18.24/1,000).
- In 2016, the rate of patients hospitalized with a history of cancer diagnosis/1,000 population was lowest in Newark 07114 (6.91/1,000).

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



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census

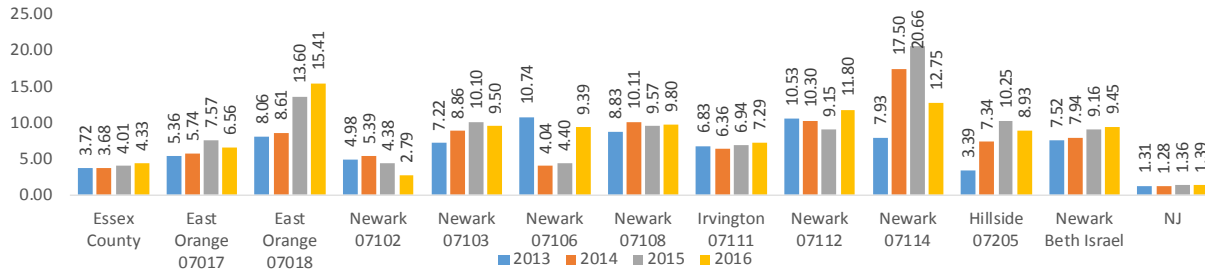
Definition: Inpatient, Same Day Stay and ED Discharges – New Solution’s Inc. Oncology Product Line (History of Cancer Only)

Sickle Cell Anemia

Sickle Cell Anemia is a common genetic hematologic disorder that affects the red blood cells. It is a condition in which there are not enough healthy red blood cells to carry adequate oxygen throughout the body and to all vital organs. The sickled red blood cells are fragile and can rupture easily, hence the amount of healthy red blood cells decrease from a rupture. This is known as hemolysis and results in anemia. Sickle cell predominately affects African-Americans.

- In 2016, East Orange 07018 (15.41/1,000) had the highest use of hospital services for Sickle Cell Anemia.
- The NBIMC Service Area rate (9.45/1,000) is nearly double the County rate.

Sickle Cell Anemia: Acute Care Inpatient, Same Day and ED Discharges; Rate / 1,000 Population

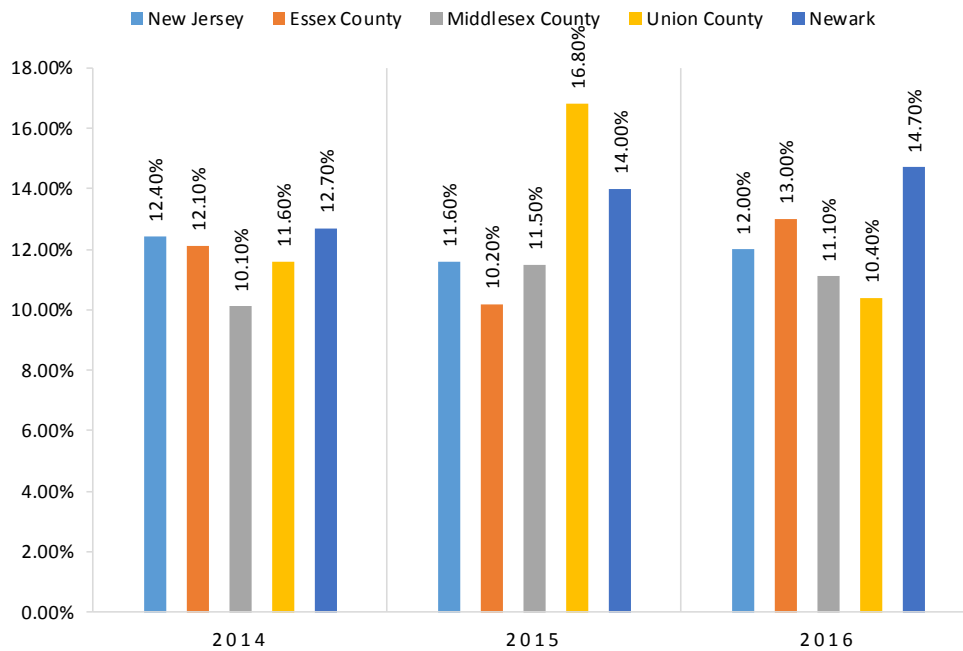


Asthma

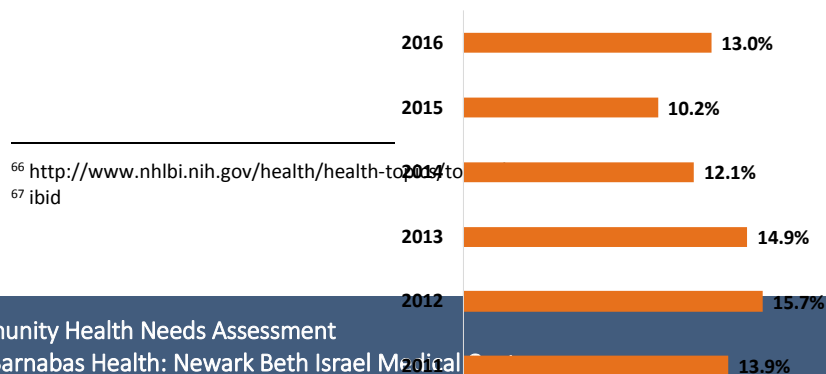
Asthma, a chronic lung disease often with childhood onset, inflames and narrows airways and causes recurring periods of wheezing, chest tightness, shortness of breath and coughing.⁶⁶ The exact cause of asthma is unknown; however, researchers believe genetic and environmental factors are involved. Factors may include: atopy, parents with asthma, certain respiratory infections during childhood and contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing.⁶⁷

- According to the 2016 BRFSS survey, 13% of Essex County adults reported ever being told they have asthma. This was up 0.9 percentage points from 2014.
- The percent of Essex County residents with asthma (13.0%) is higher than the State (12.0%), and the comparative counties, and is exceeded only by Newark (14.7%). Compared to all 21 New Jersey counties, Essex County was in the middle quartile.
- Between 2014 and 2016, the percent of Newark residents reporting asthma increased by 2 percentage points.

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



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



⁶⁶ <http://www.nhlbi.nih.gov/health/health-topics/a/asthma>
⁶⁷ *ibid*

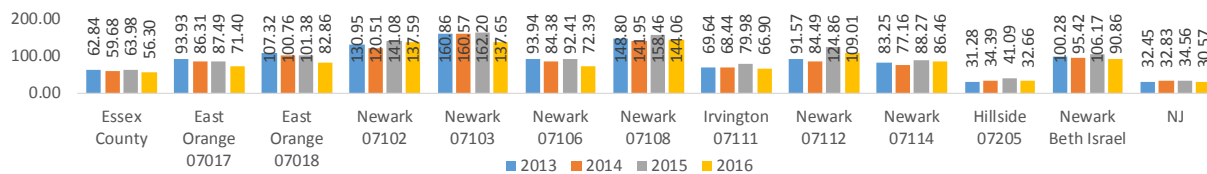
Essex County Trend

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

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

- Rates of residents using a hospital service with a diagnosis of asthma were highest in Newark 07108 in 2016 (148.76/1,000).
- In 2016, the rate of Newark 07108 (144.06/1,000) patients using a hospital service with a diagnosis of asthma exceeded the New Jersey (30.57/1,000) rate by a factor of almost 5. Rates were lowest in Hillside (32.66/1,000).

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



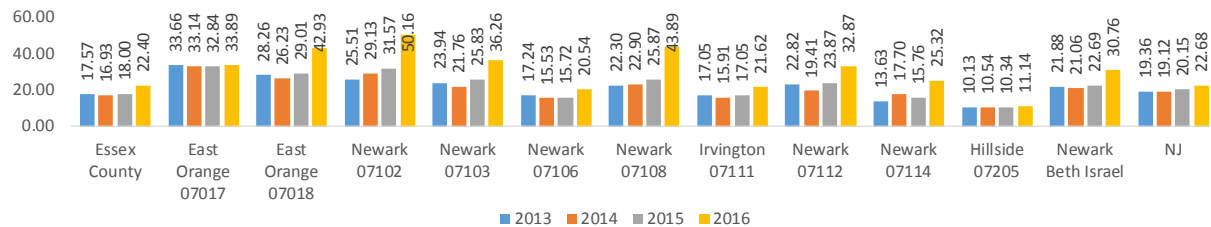
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Range 493-493.9 (Appearing Anywhere In First 13 DX Codes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

COPD (excluding Asthma)

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

- Rates of residents hospitalized with a diagnosis of COPD were highest in Newark 07102 in 2016.
- In 2016, the rate of hospitalization for patients with a diagnosis of COPD was lowest in Hillside (11.14/1,000).

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



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

Diabetes

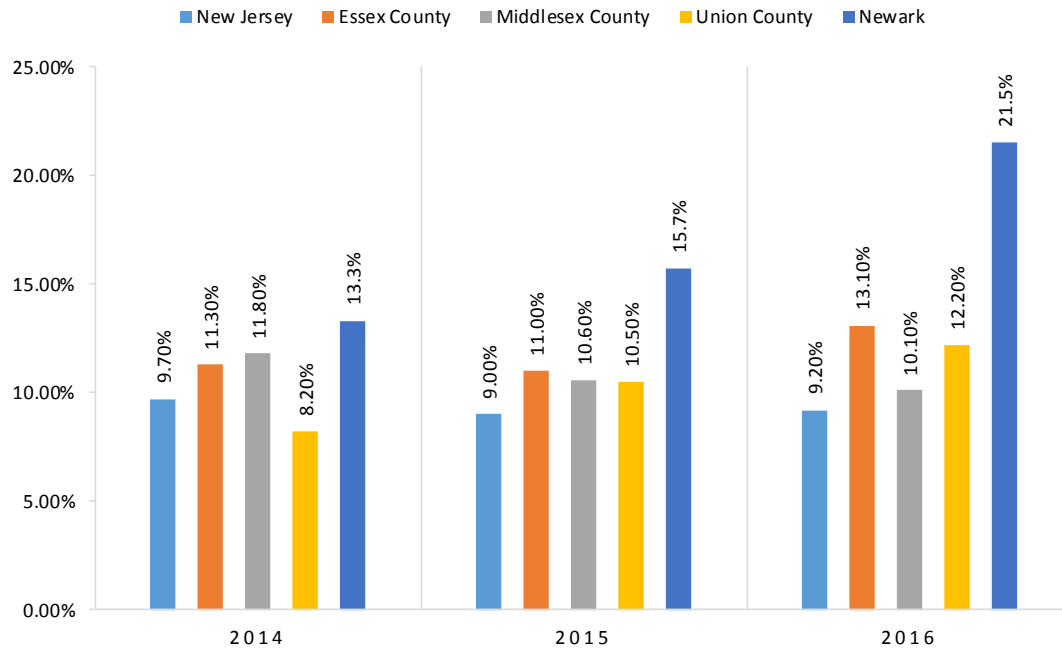
Diabetes is indicated by high levels of blood glucose as a result of problems in insulin production, effectiveness, or a combination of both. The three most common types of diabetes are Type 1, Type 2 and Gestational. Individuals with diabetes may develop serious health complications including heart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

Type 1 develops when insulin producing cells located in the pancreas are destroyed. There is no known way to prevent Type 1 diabetes. In order to survive, Type 1 diabetics must have insulin delivered by injection or pump. Type 2 primarily onsets with insulin resistance disorder in which cells within the muscles, liver, and fat tissue are unable to properly use insulin. Higher risk for developing Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanics/Latinos, American Indians, some Asians, and Native Hawaiians or other Pacific Islanders are at particularly high risk for Type 2. Gestational diabetes is a form of glucose intolerance diagnosed during the second or third trimester of pregnancy. The risk factors for gestational diabetes are similar to those for type 2 diabetes.⁶⁸

- Diabetes is increasing among Essex County residents. Between 2014 (11.3%) and 2016 (13.1%), the rate increased by 1.8 percentage points.
- The percent of Newark residents reporting diabetes increased from 13.3% in 2014 to 21.5% in 2016, a gain of 8.2 percentage points.
- In 2016, more than 20% of Newark residents reported diabetes, the highest rate reported in all the comparative geographies.
- In 2016, Essex County had the highest percentage of patients reporting diabetes among comparison counties. Essex County is in the worst performing quartile for diabetes as compared to all 21 counties statewide.

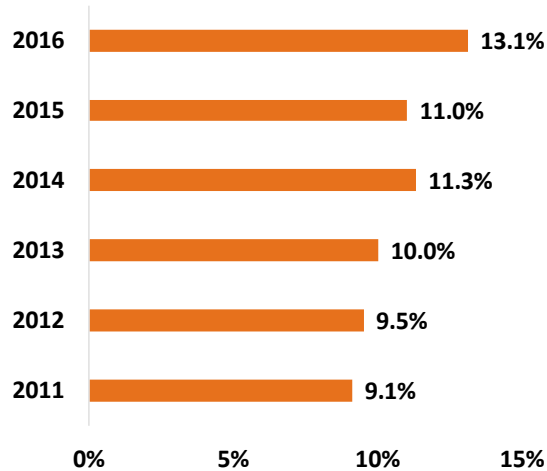
⁶⁸ <http://www.cdc.gov/diabetes/pdfs/data/2014-report-generalinformation.pdf>

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



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

Essex County – Trend



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

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

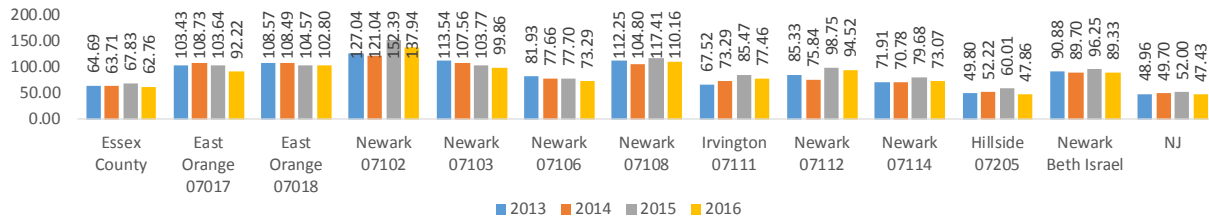
A Robert Wood Johnson Foundation program

National Benchmark: 91.0%

Essex County 2016: 81.9%

- Newark 07102 had the highest rate of residents using a hospital service with a diabetes diagnosis (137.94/1,000) in 2016. Rates in Newark 07108 were second highest in the region (110.16/1,000).
- In 2016, the rate of patients using a hospital service with diabetes diagnosis was higher in the NBIMC Service Area (89.33/1,000) than in the County (62.76/1,000).

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

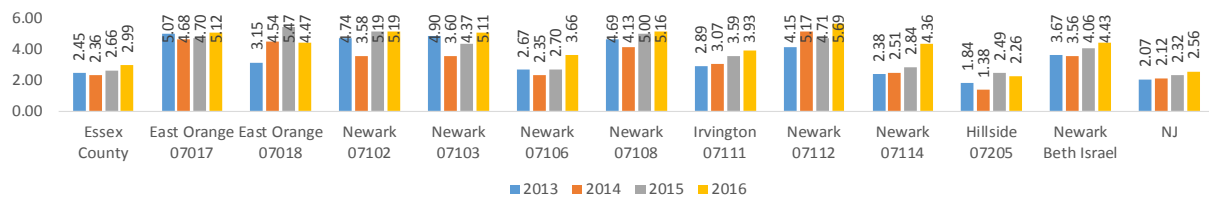


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In The Range 249.00-250.03 (Appearing Anywhere In First 13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

Diabetes is a contributing factor to renal failure. More than 35% of U.S. adults with diabetes have chronic kidney disease. High blood sugar and high blood pressure increase the risk that chronic kidney disease will eventually lead to kidney failure.⁶⁹

- In 2016, the rate of Essex County residents using a hospital service with diagnosis of renal failure was highest in Newark 07112 (5.69/1,000) and lowest in Hillside (2.26/1,000).
- The 2016 rate of Essex County residents using a hospital service with diagnosis of renal failure was higher than for New Jersey residents.

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



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

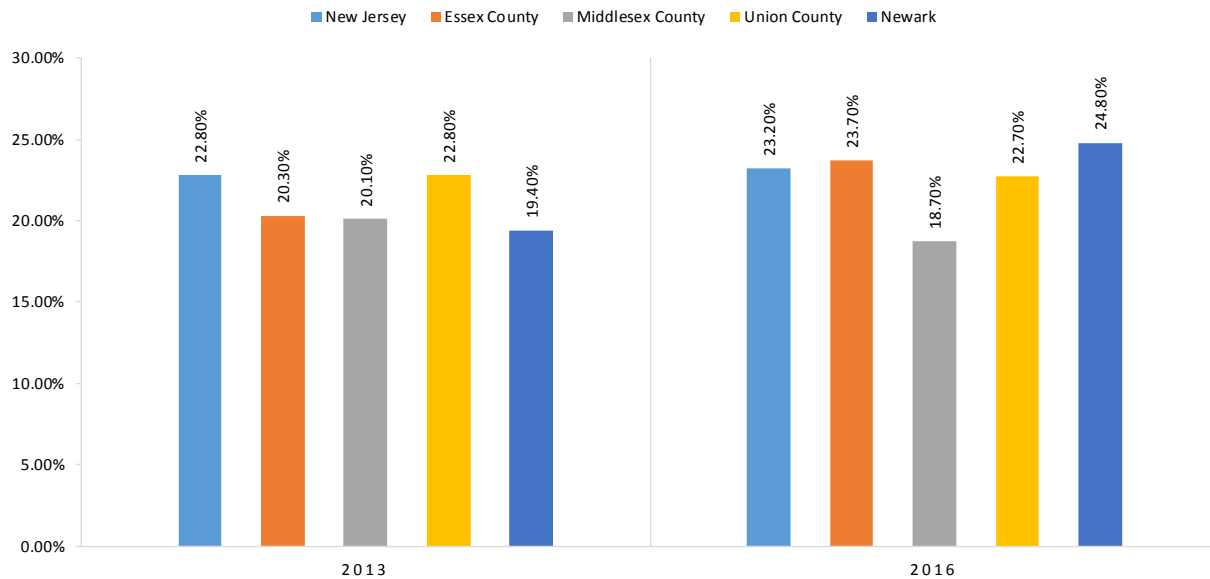
⁶⁹ <http://www.cdc.gov/Features/WorldKidneyDay>

Arthritis

Arthritis affects more than 1 in 5 adults and is the nation's most common cause of disability. *Arthritis* describes more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround the joint and other connective tissue. The pattern, severity and location of symptoms vary depending on the specific form of the disease. Typically, rheumatic conditions are characterized by pain and stiffness in and around one or more joints. The symptoms can develop gradually or suddenly.⁷⁰

- Between 2013 and 2016, the percentage of Essex County residents reporting arthritis increased from 20.3% to 23.7%.
- Between 2013 and 2016, the percent of Newark residents reporting arthritis increased from 19.4% to 24.8%.
- In 2016, Newark adults reported the highest rate of arthritis as compared to all other geographies.
- The percentage of Essex County residents reporting arthritis was slightly higher than the State (23.2%), Union County (22.7%), and Middlesex County (18.70/1,000). As compared to 21 counties statewide, Essex County ranks in the middle quartile.

Arthritis (Percent "Yes"): Adults Who Have Ever Been Told They Have Arthritis State and County Comparison 2013-2016



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

⁷⁰ <http://www.cdc.gov/arthritis/basics.htm>

Indicator	Healthy People 2020 Target	County Health Rankings Benchmark	New Jersey
CARDIOVASCULAR DISEASE			
<i>Were You Ever Told You Had Angina or Coronary Heart Disease?</i> % Yes	N.A.	N.A.	
CARDIOVASCULAR DISEASE			
<i>Were You Ever Told You Had a Heart Attack?</i> % Yes	N.A.	N.A.	
STROKE			
<i>Were You Ever Told You Had a Stroke?</i> % Yes	N.A.	N.A.	
Hypertension Awareness <i>Adults Who Have Been Told They Have High Blood Pressure</i>		N.A.	
Cholesterol Awareness <i>Adults Who Have Had Their Cholesterol Checked and Told it Was High</i>		N.A.	
ASTHMA <i>Adults Who Have Ever Been Told They Have Asthma</i> % Yes	N.A.	N.A.	
DIABETES <i>Have You Ever Been Told by a Doctor That You Have Diabetes</i> % Yes	N.A.		
ARTHRITIS <i>Adults Who Have Ever Been Told They Have Arthritis</i> % Yes	N.A.	N.A.	

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

6. ASSETS AND GAPS ANALYSIS

The Assets and Gaps Analysis summarizes and highlights each component of the CHNA. Assets highlight Essex County or NBIMC's Service Area information indicating improvement over time in comparison to other counties and the State or in comparison to other races and genders. Gaps focus on disparities in Essex County or in the NBIMC Service Area that have a negative trend, in comparison to other counties and the State or in comparison to other races or genders.

A. HEALTH DISPARITIES

Economic Status

ASSETS

- In 2016, the percent of unemployment in Newark 07102 (7.6%) was lower than the County.
- Between 2015 and 2017, the percent of adults and children receiving TANF/WFJ benefits declined by 51% and 43%, respectively.
- In 2016, 13.5% of Newark residents did not complete high school, lower than the 15.3% in Essex County.

GAPS

- In 2016, the median household income in Essex County was \$54,860, more than \$18,000 below the State.
- In 2016, Essex County had a higher percentage of people living below the poverty level than statewide, 17.2% and 10.9%, respectively.
- Between 2014 and 2016, unemployment declined to 8%, but remained higher than New Jersey, 5.2%.
- The percent of families living in poverty in Newark 07114 is more than five times the New Jersey percentage.
- Essex County reported a 7 percentage point increase in the number of students eligible for free lunch between 2012-2013 and 2015-2016.
- In 2016, 15.3% of Essex County residents did not complete high school, 4.2 percentage points higher than New Jersey.
- In 2016, 31.5% of Newark 07114 residents did not complete high school, higher than the State (11.1%) and County (15.3%).

Health and Health Care

ASSETS

- Since 2013, the non-elderly population without health insurance in Essex County decreased from 18.5% to 13.6%.
- Between 2013 and 2016, the population to physician ratio was higher in Essex County than the CHR benchmark.

GAPS

- From 2013 to 2015, Essex County had a higher percentage of non-elderly population without health insurance than statewide.
- Essex County had the third highest ACSC ED visit rate of the 21 counties in the State.
- Zip codes with the highest ED visit rate for children were Newark 07112, Newark 07102 and Newark 07108.
- The adult ED ACSC rate for the NBIMC Service Area was higher than the State and County rates.
- The 2016 inpatient ACSC for the NBIMC Service Area was higher than the State and County rates.

Neighborhood and Built Environment

ASSETS

- Essex County experienced a 9.1% reduction in fine particulate matter between 2011 and 2012.
- Between 2010 and 2015, the percent of Essex County residents with limited access to healthy foods declined.
- Between 2010 and 2016, Essex County's motor vehicle crash deaths were 10.9% lower than New Jersey.

GAPS

- In 2016, 42.2% of Essex County housing units were built before 1952, higher than New Jersey overall at 25.8%.
- In 2015, Essex County ranked in the lowest performing quartile in terms of children with elevated blood lead levels.
- Between 2014 and 2017, the violent crime rate in Essex County was more than double the crime rate in New Jersey.
- In 2016, Essex County (25.8/100,000) had a higher death rate due to accidental poisoning and exposure to noxious substances than statewide (22.5/100,000).

B. HEALTH FACTORS

Clinical Care Measures

ASSETS

- The county-wide percentage of VBACs trended upward from 2013 to 2016, increasing from 10.3% to 11.8% in 2016.

GAPS

- In 2016, NBIMC's Service Area inpatient use rate (192.11/1,000) was higher than the Essex County rate and the State rate.
- NBIMC's Service Area ED visit rate (464.65/1,000) was higher than the State rate (352.2/1,000).
- In 2016, the ED visit rate in Newark 07102 was nearly twice that of the Service Area use rate.
- Essex County's c-section rate (27.5%) was higher than the State rate (25.2%).

Health Behaviors

GAPS

- Only 63.5% of Essex County women entered prenatal care in the first trimester.
- The 2010-2016 Essex County teen birth rate (15-19) was 60.1% higher than the State rate.
- The teen birth rate among NBIMC Service Area residents (30.30/1,000) was higher than the State and County rates.
- In 2016, the County's chlamydia and gonorrhea rates were nearly twice the respective rates in New Jersey.
- In 2015, the HIV prevalence rate in Essex County was more than triple the rate in New Jersey.

Individual Behaviors

ASSETS

- Between 2014 and 2016, smoking rates fluctuated in Essex County with an overall decrease of 1.9 percentage points.
- Alcohol impaired driving deaths decreased from 22.3% in 2008-2012 to 16.4% in 2012-2016.
- In 2016, a lower percentage of Essex County residents were obese (26.8%) than the *Health People 2020* target (30.6%).
- Newark had the lowest percentage of binge drinkers of all the comparative areas.

GAPS

- Binge drinkers increased from 13.9% in 2014 to 15.4% in 2016.
- Essex County had the highest percent of residents reporting heavy drinking relative to the State and surrounding counties.
- From 2014 to 2016, Essex County had a higher percentage of residents reporting no physical activity than residents of the State and comparison counties.

Health Screenings and Immunizations

ASSETS

- In 2016, 82.7% of Essex County women over age 40 had a mammogram in the last two years, up 31 percentage points from 2012.
- In 2016, 76.7% of Essex County women over 18 had a pap smear within the past three years compared to the *Healthy People 2020* target of 66.2%.

- There was an increase in the percent of women in Newark receiving Pap screenings.
- In 2016, 96.9% of first grade students in Essex County received all required immunizations compared to 92.7% statewide.

GAPS

- In 2016, a lower percentage of Essex County adults over 50 (58.4%) participated in colon-rectal screenings than residents statewide (62.4%).
- Newark residents had the lowest percentage of participation in colon – rectal screenings.
- In 2014, almost 82% of Essex County diabetic Medicare enrollees received HbA1c screening, lower than the State and surrounding counties.
- Essex County had the lowest percent of adults receiving flu shots compared to residents of New Jersey and surrounding counties.
- The percent of Essex County adults 65+ who had a pneumonia vaccine decreased from 2011-2016, from 71.3% to 58.8%.
- Residents of Newark had even lower rates of flu and pneumonia shots.

Behavioral Health Utilization

ASSETS

- Inpatient hospitalizations and ED visit rates for substance use in the SBMC Service Area were lower than the County and State rates.
- Inpatient hospitalizations and ED visit rates for mental health condition were lower than for New Jersey or Essex County.

GAPS

- In 2016, Essex County (7.21/1,000) had the highest rate of residents with an inpatient hospitalization for a mental health condition, compared to the State and comparison counties.
- In 2016, Essex County (13.08/1,000) had a higher ED visit rate for mental health conditions than the State.
- In 2016, Essex County had a higher use rate for residents with an inpatient admission for substance abuse than the State and comparison counties.
- In 2016, Essex County (9.56/1,000) had a higher ED visit rate for substance abuse than the State (7.86/1,000).
- Between 2015 and 2016, Naloxone administrations increased from 481 to 1,131.

C. HEALTH OUTCOMES

Mortality

ASSETS

- Between 2013 and 2016, Essex County’s age-adjusted mortality rates improved for homicide, chronic lower respiratory diseases, diseases of the heart, and cancer.

- The 2016 County cancer mortality rate was slightly lower than the State, and better than the *Healthy People 2020* target.
- The 2016 County stroke AAMR (32.6/100,000) was higher than the State mortality rate (30.0/100,000).
- The 2016 suicide mortality rate in Essex County (5.9/100,000) was lower than the State (7.7/100,000).
- The infant mortality rate in Essex County decreased from 7.8/1,000 in 2014, to 6.6/1,000 in 2016.

GAPS

- Between 2013 and 2016, Essex County's mortality rates increased for Alzheimer's disease, unintentional injuries, nephritis, diabetes, septicemia, and stroke.
- Blacks (171.0/100,000) had the highest heart disease mortality rate compared to Whites (163.5/100,000) and Hispanics (165.9/100,000).
- The mortality rate for cancer deaths among Whites in Essex County was higher than the rate for Hispanics.
- The 2016 unintentional injury death rate among Blacks (49.2/100,000) was higher than the rate for Whites (48.9/100,000).
- Blacks (49.2/100,000) had a higher death rate due to stroke than Whites (20.0/100,000) and Hispanics (21.2/100,000).
- The years of potential life lost in Essex County (7,102.75/100,000) was higher than the rate statewide (5,469.35/100,000).
- The rate of drug overdose deaths in Essex County more than doubled between 2014 and 2016.
- The Black infant mortality rate continues to be higher than for Whites.

Maternal and Child Health

GAPS

- In 2016, Essex County had higher rates of low birth weight and very low birth weight babies than the State.
- The percentage of low birth weight babies were higher among Black (13.1%) than for Whites (4.6%) or Hispanics (7.8%).
- The infant mortality rate in Newark (9.1/1,000) was more than double the statewide rate (4.4/1,000).

Health Status and Behavioral Health Status

ASSETS

- A lower percent of Newark residents 9.2% reported 14 or more of the past 30 days as not good mental health days than resident statewide 10.7% or of Essex County 11.6%.

GAPS

- Between 2012 and 2016, there was an increase in the percent of Essex County residents who indicated their health was poor or fair from 18.5% to 24.6%. The rate in Newark was 38.1%.
- County-wide, Essex County adults who reported 14 or more of the past 30 days with “not good” mental health increased from 9.5% in 2014, to 11.6% in 2016.
- The percent of Essex County residents reporting a history of depression increased from 11.1% to 13.3% from 2014 to 2016.

Morbidity

ASSETS

- The percent of Essex County residents told they had a heart attack declined 0.1 percentage points from 2012 to 2016.
- Hillside residents had the lowest rate of patients hospitalized with a heart attack in 2016.
- Newark 07114 had the lowest rate of residents hospitalized with heart failure in 2016.
- From 2013 through 2016, Essex County had a lower rate of patients using a hospital service with a stroke/TIA diagnosis than the State.
- In 2015, 34.4% of Essex County adults were told they had high cholesterol compared to 35.4% statewide.
- The incidence of invasive cancer in Essex County decreased 3.8% between 2013 and 2015.
- Between 2008 and 2015, digestive system (5.0%), prostate (4.1%) and respiratory system (20.0%) cancers all decreased.

GAPS

- The percent of Essex County residents told they had angina or coronary heart disease increased from 3.5% in 2014, to 4.5% in 2016.
- Newark 07102 residents had the highest rate of residents hospitalized with a heart attack or heart failure in 2016.
- In 2016, Essex County (3.0%) reported a higher rate of strokes than the State (2.8%).
- In 2015, 32.6% of Essex County adults were aware they had hypertension, more than the 30.9% of adults statewide.
- Newark 07102 residents had the highest rate of hospital usage for hypertension from 2013 to 2016.
- Newark 07102 residents with high cholesterol had the highest hospital use rate in the Service Area.
- Between 2008 and 2015, breast cancer (3.1%) and male genital cancer (15.5%) increased.
- In 2016, the rate of patients using a hospital with a cancer diagnosis was highest in East Orange.
- The percent of Essex County residents reporting diabetes was higher than the State and all comparison counties from 2014 to 2016.
- Between 2013 and 2016, the percentage of Essex County residents reporting arthritis increased from 20.3% to 23.7%.
- The NBIMC service area use rate for sickle cell anemia was double the county rate in 2016.

APPENDICES

Community Health Needs Assessment



Newark Beth Israel
Medical Center

RWJ Barnabas
HEALTH

Let's be healthy together.



Introduction



In 2016, Newark Beth Israel Medical Center (“NBIMC”) conducted and adopted its Community Health Needs Assessment (“CHNA”) which consisted of a community health needs survey of residents in our service area, a detailed review of secondary source data, a survey and meetings with local health officials and a Public Health Symposium made up of county public health officers and community representatives. The Plan can be accessed at www.rwjbh.org/newark-beth-israel-medical-center/about/community-health-needs-assessment/

Through the CHNA process, health need priorities were chosen based on the Medical Center’s capacity, resources, competencies, and the needs specific to the populations it serves. The Implementation Plan addresses the manner in which NBIMC will address each priority need and the expected outcome for the evaluation of its efforts. The implementation plan which follows is based on the seven selected priority areas*:

- The Impact of Health Disparities on Cardiovascular Disease and Stroke
- Cancer Prevention and Management of Sickle Cell Disease
- Violence and its Health Impacts
- Diabetes Care and Prevention
- Asthma
- Dental
- Infant Mortality

NBIMC participates and works with many local organizations on health issues including: discussing and prioritizing needs, coordinating services, providing education and specialty knowledge, and supporting local health promotions. This includes working with Essex County Health Department, local health departments, the Greater Newark Health Care Coalition and Greater Newark Advisory Board to support health planning and to support community health and wellness events. These community touch points provide the hospital with valuable external insights regarding community need.

**The seven focus areas do not represent the full extent of the Medical Center’s community benefit activities or its support of the community’s health needs. Other needs identified through the CHNA may be better addressed by other agencies/organizations or deferred to another timeframe. Other significant needs identified include mental health and substance abuse, access to care, lead poisoning, teen pregnancy, readmission rates, tobacco use, primary care physician shortages, STDs, limited English proficiency and other socioeconomic challenges.*

Goal #1: Reduce the Impact of Health Disparities on the Care and Treatment of Heart Disease and Stroke Prevention

Key CHNA Findings:

- Heart disease and stroke were among the top health-related concerns identified in a survey of public health officers as well as in a survey of community residents.
- The mortality rate for Blacks in Essex County due to stroke is 78% higher than that of Whites.
- The mortality rate for heart disease in Essex County is higher than in the state and surrounding counties.

Strategy/Initiative 1.1

Conduct a retrospective study (June 1, 2013-May 31, 2016) in two major teaching hospitals (NBI and University Hospital) to determine the risk factors for hypertensive emergency associated end organ damage in the brain, heart, and kidney and urgency (asymptomatic patient with BP equal to or greater than 200/120) among a high risk group of patients.

Data will be analyzed to provide information to clinicians to be utilized to design tailored interventions to reduce the number of patients with end organ damage and premature death.

Indicator/Metric

- Completion of the study with analysis of the results
- Presentation and dissemination and of the findings

Tracking/Outcome

Report shows prevalence of Hypertension Crisis (HTNC) of 11.7 percent, with one in four patients having end [stage] organ damage. This five times the national average of one to two percent, indicating an alarming level of disparity in the African-American population. The risk of hypertensive emergency was strikingly higher in patients with comorbid conditions, particularly diabetes.

Strategy/Initiative 1.2

Establish a committee to ensure successful reduction of the impact of health disparities on vulnerable populations.

- Assess the institutions readiness to care for vulnerable populations
- Identify appropriate team members



Indicator/Metric

- Committee is formed
- Goals and objectives are established
- Regular meetings have taken place

Tracking/Outcome

Plans are being made to attempt similar tactics at the department level

Strategy/Initiative 1.3

Increase number of students attending classes at the Wellness Center for cooking/nutrition education classes

Indicator/Metric

- Increase numbers 10% by 2018

Tracking/Outcome

2016 Baseline

- Number attending wellness classes 865
- Number attending cooking classes 668

2017 Results

- Number attending wellness classes 1,350
- Number attending cooking classes 1,350



Strategy/Initiative 1.4

Increase utilization of lifestyle classes in the Wellness Center.

- Number of participants in the healthy lifestyle classes

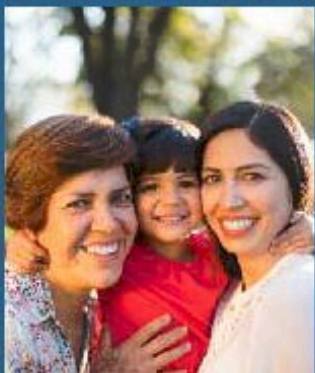
Indicator/Metric

- Increase numbers 10% by 2019

Tracking/Outcome

2016 Baseline: 365

2017 Results: 520





Strategy/Initiative 1.5

Increase the number of adults who are aware of the early warning symptoms and signs of a stroke and the importance of accessing rapid emergency care by calling 9-1-1 or another emergency number.

Indicator/Metric

- Conduct community outreach/education. Hold two education programs annually - 2017, 2018, 2019

Tracking/Outcome

2017 Results: Two outreach programs conducted; 25 attendees per program

Goal #2: Enhance Awareness, Support, Self-Management and Early Diagnosis of Cancer and Sickle Cell Disease (SCD)

Key CHNA Findings:

- Cancer is the second leading cause of death in Essex County, the state, and the nation.
- In a survey of public health officers and community residents, cancer and blood disorders were identified as being among the top health-related concerns.
- Of the sickle cell patients seen at NBIMC (under the age 18), during 2015-16, 59% were not receiving disease management services.

Strategy/Initiative 2.1

Improve access for adults with sickle cell disease to medical services

Indicator/Metric

- Increase the number of adult patients seen and managed with Sickle Cell Disease (SCD) by 10%

Tracking/Outcome

2015 Baseline: Of 625 patients under the age of 18, only 254 received medical management for SCD

2017 Results: 226 adult patients were seen with a total of 1,008 visits; 16 patients transitioned their care from pediatric sickle cell management to management by an adult sickle cell care provider



Strategy/Initiative 2.2

Explore the use of a Colorectal Navigator to identify all patients in the medical clinic that are younger than 50 that have not had a colonoscopy and refer to gastroenterology (GI). If found to be of value, NBIMC will request funding for a position.

Indicator/Metric

- Measure the number of patients seen by the Colorectal Navigator (new initiative, no baseline data).

Tracking/Outcome

2017 Results: Team has attended over 40 events and educated over 1,500 patients;
Scheduled 142 GI visits and performed 115 colonoscopies

Strategy/Initiative 2.3

Increase awareness of lung cancer screening and improve access to services.

Indicator/Metric

- Increase the number of patients that participate in the lung cancer screening program by 10% by 2018. (Data to be tracked by Lung Navigator)

Tracking/Outcome

2016 Baseline: 134 Lung CT scans performed
2017 Results: 150 Lung CT scans performed; 12% increase

Goal #3: Enhance services and referrals for patients identified with a history of violent trauma and/or at risk for domestic violence and other forms of trauma and abuse.

Key CHNA Findings:

- Community resident survey indicates as one of top concerns.
- Increased domestic violence offenses (increased 22% in Newark) and bias offenses (increased 66.7% in Newark) from 2013 to 2014.
- Newark Police Department reports highest incidence of crime in South Ward.

Strategy/Initiative 3.1

Conduct trauma and domestic violence screenings on all new patients presenting to Primary Care.

Indicator/Metric

- Patient Navigators to approach new patients to engage in the screening process as evidenced by completed screening tools (% of new patients completing ACES and HITS) (*New initiative. No baseline data.)

Tracking/Outcome

Screenings are being conducted on patients and expanded to include established as well as new patients.

Strategy/Initiative 3.2

Inform Primary Care Provider of positive screening results for further assessment and discussion.

Indicator/Metric

- Patient Navigators to inform the physician of positive screens on either ACES or HITS prior to the start of the medical exam. CHADIS report provided to LIP prior to visit start. (*New initiative. No baseline data.)

Tracking/Outcome

Positive screens in trauma, violence, substance abuse, anxiety, and depression are forwarded to treatment team members.

Strategy/Initiative 3.3

Physician to offer and engage patient into integration program with joined behavioral health staff as team members for patient's on-going health care needs.

Indicator/Metric

- Patient will accept services with the integration team. A signed consent is required to participate in services. (*New initiative. No baseline data.)

Tracking/Outcome

Ongoing

Strategy/Initiative 3.4

Behavioral Health Provider initiates full assessment, treatment interventions, and/or referrals related to the patient's identified needs.

Indicator/Metric

- Patient will be seen for full assessment of social/psychological status including trauma and abuse with ongoing intervention provided in the primary care setting (conduct bio/psych social) and/or referral to community supports for safety/shelter.

Tracking/Outcome

Ongoing

Strategy/Initiative 3.5

At three-month follow up, patients will have lower scores on domestic violence survey.

Indicator/Metric

- Three month follow up HITS screen lower than prior screen by 20% or negative screen

Tracking/Outcome

Changed time frame to three sessions to show improvement in any/all screens previously positive on program entry.



Goal #4: Improve Diabetes Care and Disease Prevention

Key CHNA Findings:

- Diabetes was among the top health-related concerns identified in a survey of public health officers, as well as in a survey of community residents.
- Diabetes is a risk factor for heart disease and cancer and is the fifth leading cause of death in Essex County.
- Blacks had the highest age-adjusted rate of death from diabetes in Essex County.
- The Emergency Department (ED) ambulatory care sensitive visit rate for children in the County was 50.5% higher than the state.

Strategy/Initiative 4.1

Improve diabetic compliance for patients in primary care clinics (NQF 0059 - Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c greater than 9.0% during the measurement period not to exceed 28%).

Indicator/Metric

- Diabetic patients in primary care services will have quarterly Primary Care visits per year
- Diabetic Patients With 4 visits A1c greater than 9.0% and less than 28.01%
(*New initiative. No baseline data.)

Tracking/Outcome

2017 Results: 1,948 diabetic patients seen; 990 patients with 4+ visits (51%)

Strategy/Initiative 4.2

Increase participation in healthy lifestyle classes at the Wellness Center.

- Number of people utilizing the Wellness Center.
- Number of participants in the healthy lifestyle classes.
- Number of participants in diabetes classes.

Indicator/Metric

- Increase by 10% by 2018

Tracking/Outcome

	2016	2017
Wellness Center	865	1,350
Healthy Lifestyle	365	520
Diabetes classes	433	630



Strategy/Initiative 4.3

Increase number of students attending classes at the Wellness Center for cooking/nutrition education classes.

Indicator/Metric

- + Increase numbers 10% by 2018

Tracking/Outcome

	2016	2017
Number attending classes	668	1,350



Strategy/Initiative 4.4

Expand utilization of Greenhouse/Farmers Market.

Indicator/Metric

- + Increase numbers 10% by 2018

Tracking/Outcome

	2016	2017
Number attending	800	2,600
Number purchasing	640	3,800



Strategy/Initiative 4.5

Demonstrate improvement in healthy lifestyle in children.

Indicator/Metric

- + Percentage improvement of children eating breakfast
- + Percentage improvement of eating less fast food
- + Percentage improvement of eating more fruits and vegetables
- + Percentage improvement of children drinking less juice and soda

Tracking/Outcome

	2016	2017
Eating Breakfast	77%	87%
Eating less fast food	10%	47%
Eating fruits & vegetables	39%	69%
Drinking less juice & soda	20%	30%

Goal #5: Increase Screening and Education for Asthma

Key CHNA Findings:

- The Emergency Department (ED) ambulatory care sensitive visit rate for children in the County was 50.5% higher than the state.
- The incidence and mortality rate for asthma is higher among low and middle income families.
- Asthma is the most common inpatient ambulatory care sensitive condition (ACSC) among children in Essex County.

Strategy/Initiative 5.1

Partner with Federally Qualified Health Centers (FQHC), by offering Pulmonary Screenings by the NBI Respiratory Department and Rutgers (Respiratory Students).

Indicator/Metric

- Conduct two programs annually

Tracking/Outcome

Due to staffing changes at the Director level and the ending of the Rutgers Respiratory Therapy Internship program, the metric for Initiative 5.1 was incomplete

Strategy/Initiative 5.2

Develop partnerships in the community to increase screening and education in the community.

Indicator/Metric

- Conduct two programs annually

Tracking/Outcome

One screening conducted in 2017 (due to staff changes at the director level)

Goal #6: Improve Dental Health awareness and access to preventive care and services

Key CHNA Findings:

- The need for improved access to dental health services was identified by respondents to the community resident survey of health needs. Only 37% of residents in service area felt they had adequate access to sufficient low cost dental care.
- In 2014, dental conditions were the fifth highest Ambulatory Care Sensitive Condition for adults in the Emergency Department in the service area, the county and the state.

Strategy/Initiative 6.1

Develop classes (lectures) to present at the Ronald B. Christian Health and Wellness Center to increase the awareness of the importance of dental health, its connection with systemic health as well as the importance of preventive care; and to provide resources for obtaining access to lower cost dental care.

Indicator/Metric

- Develop program for first quarter of 2017.
- Present one lecture in 2017
- Present two lectures in 2018 and 2019
- Hold two educational sessions annually, 2017, 2018 and 2019

Tracking/Outcome

2017 Results: Lectures and educational sessions were held with a combined total of 42 people in attendance

Strategy/Initiative 6.2

Develop resource listing and referral arrangements for low cost dental services (FQHC, UH).

Indicator/Metric

- Compilation of a resource list by the second quarter of 2017

Tracking/Outcome

Resource list completed



Strategy/Initiative 6.3

Implement cancer screening for patients receiving care in current dental clinic services.

Indicator/Metric

• Number of patients screened/number of patients referred for follow-up by oncology (*New initiative. No baseline data.)

Tracking/Outcome

2017 Results: 9,213 diagnostic visits with screenings for oral cancer/no indications for referral to oncology



Strategy/Initiative 6.4

Enhance dental health awareness and prevention in local schools.

Indicator/Metric

• Outreach to two local middle schools by the end of 2017

Tracking/Outcome

Participated in multiple community health fairs; outreach to middle schools pending



Goal #7: Reduce Infant Mortality by Encouraging Preventative Measures

Key CHNA Findings:

- Black infant mortality rate of 6.4/100,000 was 25% higher than the Essex County overall rate of 4.8/100,000.
 - In 2013, the percent of very low birth weight infants among Blacks in Essex County was three times greater than both Whites and Hispanics.
- Ten percent of infants born in Newark were low birth weight (higher than in the state and in Essex County).

Strategy/Initiative 7.1

Explore the use of a Community Outreach Navigator to screen pregnant women with a history of pre-term delivery (between 16-36 weeks) and ensure that they are offered Makena, a medication administered weekly by injection to postpone delivery.

Indicator/Metric

- Number of women offered Makena to prevent pre-term delivery (*New Initiative. No baseline data.)

Tracking/Outcome

2017 Results: 1,398 women screened for pre-term delivery; 67 found to be at risk and offered Makena

Strategy/Initiative 7.2

Premature Infants under 35 weeks will receive colostrum oral care (COC) within the first 12 hours of life.

- Neonatologists and lactation consultants will be available to provide antepartum teaching to the family.
- The admitting nurse, labor and delivery nurse, and post-partum staff will collaborate in the first six hours of life to teach hand expression and collect first colostrum.
- Visual and/or video educative materials will be provided to the family.

Indicator/Metric

- Increase rate to 15% by 2018

Tracking/Outcome

2016 Baseline: 12.4% received colostrum within first 12 hours of life

2017 Results: 9.5% received colostrum within first 12 hours of life

Strategy/Initiative 7.3

Reduce the Central Line-Associated Bloodstream Infection (CLABSI) rate in premature infants.

- All staff and visitors will maintain proper handwashing technique.
- Central lines will be inserted and changed using sterile technique.
- Central lines will be discontinued as soon as medically appropriate.
- Line dressing will be changed as per Children's Hospital policy.

Indicator/Metric

CLABSI Rate:

Decrease to 0.5 per 1000 line days by 2018

Tracking/Outcome

2016 Baseline: 0.61 per 1,000 line days

2017 Results: 1.09 per 1,000 line days

Strategy/Initiative 7.4

Provide staff training on modeling and parent/caregiver education on proper sleep positioning for infants to reduce SIDS/co-sleeping.

Indicator/Metric

- Staff Training conducted 2017
- Culturally relevant education material developed for parents/caregivers in 2017

Tracking/Outcome

Staff has received SIDS and safe sleep training in 2017

Patient education documented in the medical record

Strategy/Initiative 7.5

Increase the number of patients who exclusively breastfeed during their hospitalization

Indicator/Metric

- 2016 Baseline: Increase to 20% by 2018

Tracking/Outcome

2016 Baseline: 13%

2017 Results: 51% exclusively breast fed until discharge (208 patients)





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6587-12/17MBI

APPENDIX B: SECONDARY DATA SOURCES

Source	
Advocates for Children of New Jersey	http://acnj.org
Agency for Healthcare Research and Quality	http://www.ahrq.gov
Alcohol Retail Density and Demographic Predictors of Health Disparities: A Geographic Analysis	http://www.ncbi.nlm.nih.gov/
American Cancer Society Guidelines for Early Detection of Cancer	http://www.cancer.org
American Nutrition Association	http://americannutritionassociation.org
Annals of Family Medicine, Inc.	http://www.annfammed.org
Asthma and Allergy Foundation of America	www.aafa.org
BRFSS and Youth BRFSS	www.cdc.gov
Bruno and Ridgway Community Health Assessment Study	
Bureau of Labor Statistics	http://data.bls.gov
CDC	http://www.cdc.gov
CDC Community Health Indicators Service	http://wwwn.cdc.gov/CommunityHealth
CDC Division of Nutrition, Physical Activity, and Obesity	http://www.cdc.gov/obesity
CDC National Center for Environmental Health	http://www.cdc.gov/nceh
CDC National Center for Health Statistics	http://www.cdc.gov/nchs/fastats/
CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	https://www.cdc.gov/std
CDC NCIRD	http://www.cdc.gov/vaccines
CDC Preventing Chronic Disease	http://www.cdc.gov/pcd
CDC WONDER	http://wonder.cdc.gov
Centers for Medicare and Medicaid Services (CMS)	https://www.cms.gov
Child Trends	http://www.childtrends.org
County Health Rankings	http://www.countyhealthrankings.org
Department of Numbers	http://www.deptofnumbers.com
Do Something	https://www.dosomething.org
Enroll America	https://www.enrollamerica.org
Free Clinic Directory	http://freeclinicdirectory.org
Gallup	http://www.gallup.com
Health Care Decision Analyst	New Solutions, Inc.
Healthgrades	https://www.healthgrades.com
Health Grove	http://www.healthgrove.com
Health Indicators Warehouse (BRFSS)	www.healthindicators.gov
Health Resources and Services Administration Data Warehouse	https://datawarehouse.hrsa.gov
Healthy People 2020	https://www.healthypeople.gov
Home Facts	http://www.homefacts.com
Institute of Medicine	http://www.nap.edu
Kaiser Family Foundation	http://kff.org
Kaiser Health News	http://khn.org
Kids Count	http://www.datacenter.kidscount.org
March of Dimes	http://www.marchofdimes.org
NJ Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment	http://www.state.nj.us/humanservices/dmhas/home/
NJ Department of Health and Senior Services, Center for Health	http://www.nj.gov/health/chs/
National Association for Convenience and Fuel Retailing	http://www.nacsonline.com
National Center for Biotechnology Information	http://www.ncbi.nlm.nih.gov
National Center for Health Statistics CDC	http://www.cdc.gov/nchs/data
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention	http://www.cdc.gov/hiv
National Highway Traffic Safety Administration	http://www-nrd.nhtsa.dot.gov
National Institute for Mental Illness	http://www.nami.org
National Institute of Diabetes, Digestive & Kidney Diseases	http://www.niddk.nih.gov
National Institutes of Health Medline Plus Health Screening	https://www.nlm.nih.gov/medlineplus
National Poverty Center University of Michigan	http://www.npc.umich.edu

Source	
Neighborhood Scout	http://www.neighborhoodscout.com/nj/crime/
New Jersey Council of Teaching Hospitals	http://njcth.org
New Jersey Death Certificate Database, Office of Vital Statistics and Registry	http://www.nj.gov/health/vital/
New Jersey State Health Assessment Data Complete Indicator Profile of Risk Factor for Childhood Lead Exposure: Pre-1950 Housing	https://www26.state.nj.us/doh-shad
NIH Medline Plus	https://www.nlm.nih.gov/medlineplus
NJ Department of Education	http://www.state.nj.us/education
NJ DOH Family Health	http://www.nj.gov/health/fhs
NJ DOH, Division of Communicable Disease Services	http://www.nj.gov/health/cd/
NJ DOH, New Jersey Cancer Registry	http://www.cancer-rates.info/nj/
NJ DOH Division of HIV, STD, and TB Services	http://www.nj.gov/health/hivstdtb/
NJ Department of Labor and Workforce Development	http://lwd.dol.state.nj.us/labor
NJ Department of Law and Public Safety, Uniform Crime Reporting Unit, US Census Bureau, American Community Survey	http://www.njsp.org/ucr/crime-reports.shtml
NJ State Police Uniform Crime Reporting Unit	http://www.njcedv.org
NJ Substance Abuse Monitoring System	https://njsams.rutgers.edu/njsams
NJ.Com	http://www.nj.com
NJ State Health Assessment Data (SHAD)	https://www26.state.nj.us/doh-shad/home/Welcome.html
Pro Publica	https://propublica.org
Rutgers Center for Health Policy	http://www.cshp.rutgers.edu
Substance Abuse and Mental Health Services Administration	http://www.samhsa.gov
The Annie E. Casey Foundation Kids Count Data Center Children Receiving TANF (Welfare)	http://www.datacenter.kidscount.org
United States Department of Agriculture Economic Research Service	http://www.ers.usda.gov
United States Department of Health and Human Services	http://www.hhs.gov/healthcare
United States Department of Health and Human Services, Agency for Healthcare Research and Quality Understanding Quality Measurement 2016	http://www.ahrq.gov
United Way	http://www.unitedwaynj.org/ourwork/alicenj.php
University of Nevada	https://www.unce.unr.edu
US Department of Education	http://www.ed.gov
US Department of Health and Human Services, Maternal and Child Health Bureau	http://mchb.hrsa.gov
US DHHS Administration for Children and Families	http://www.acf.hhs.gov
Washington Post	https://www.washingtonpost.com
World Health Organization	http://www.who.int

**APPENDIX C1: CANCER INCIDENCE RATE REPORT: CANCER PATIENT ORIGIN
ESSEX COUNTY 2017**

Fifty-six and six tenth percent of NBIMC’s cancer inpatients and 51.9% of cancer outpatients resided in the Primary Service Area. In total, 69.9% of inpatients and 65.1% of outpatients resided in Essex County. Newark (07112) and Irvington (07111) represent the largest segment of NBIMC’s inpatient cancer patients. The same two zips represent the largest segments of NBIMC’s outpatient cancer patients. The health factors and outcomes explored in the CHNA bear relevance to the oncology services and its review of specific cancer needs for the community.

CANCER PATIENT ORIGIN	2017 NBIMC IP VOLUME	%	2017 NBIMC OP VOLUME	%
Essex County	1,615	69.9%	406	65.1%
Primary Service Area	1,308	56.6%	324	51.9%
Secondary Service Area	604	26.1%	182	29.2%
Out of Service Area (NJ)	382	16.5%	116	18.6%
Out of State	16	0.7%	2	0.3%
TOTAL	2,310	100.0%	624	100.0%
Newark (07112)	234	10.1%	70	11.2%
Irvington (07111)	351	15.2%	69	11.1%

Source: Decision Support; IP volume includes cases with ICD10 principal or secondary codes C00 thru D49.9 (Neoplasms); OP volume includes cases with ICD10 principal or secondary codes Z51.0 or Z51.11 (Chemo and Radiation Therapy).

APPENDIX C2: CANCER INCIDENCE RATE REPORT: ESSEX COUNTY 2011-2015

INCIDENCE RATE REPORT FOR ESSEX COUNTY 2011-2015				
Cancer Site	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend
All Cancer Sites	452.1	3717	falling	-1.2
Bladder	19.1	153	stable	-0.4
Brain & ONS	5.1	42	falling	-1.4
Breast	133.5	610	rising	5.7
Cervix	9.5	42	falling	-3.7
Colon & Rectum	43.3	355	stable	0.4
Esophagus	3.9	32	falling	-3.1
Kidney & Renal Pelvis	13	108	rising	0.8
Leukemia	13.1	104	stable	-0.3
Liver & Bile Duct	7.7	67	rising	1.8
Lung & Bronchus	48.7	392	falling	-2.4
Melanoma of the Skin	13.1	106	stable	0.8
Non-Hodgkin Lymphoma	19.4	157	stable	0
Oral Cavity & Pharynx	8.9	75	falling	-2.1
Ovary	12.2	56	falling	-2
Pancreas	14.6	117	stable	0
Prostate	158.8	580	falling	-4.8
Stomach	9.3	75	falling	-2
Thyroid	12.6	103	rising	5.1
Uterus (Corpus & Uterus, NOS)	31.8	151	rising	1.3

The Source for C2 and following tables C3, C4, C5 and C6 is : <https://statecancerprofiles.cancer.gov>

**APPENDIX C3: CANCER INCIDENCE DETAILED RATE REPORT: ESSEX COUNTY 2011-2015
SELECT CANCER SITES: RISING INCIDENCE RATES**

		Breast	Kidney & Renal Pelvis	Liver & Bile Duct	Thyroid	Uterus (Corpus & Uterus, NOS)
INCIDENCE RATE REPORT FOR ESSEX COUNTY 2011-2015 All Races (includes Hispanic), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	133.5	13	7.7	12.6	31.8
	Average Annual Count	610	108	67	103	151
	Recent Trend	rising	rising	rising	rising	rising
	Recent 5-Year Trend in Incidence Rates	5.7	0.8	1.8	5.1	1.3
White Non- Hispanic, All Ages	Age-Adjusted Incidence Rate - cases per 100,000	155.3	13.5	4.9	19.5	35
	Average Annual Count	281	49	18	55	69
	Recent Trend	rising	stable	stable	stable	stable
	Recent 5-Year Trend in Incidence Rates	1.9	0.9	0.4	-5	0.8
Black (includes Hispanic), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	121.7	12.3	9.6	6.4	29.6
	Average Annual Count	229	40	34	21	57
	Recent Trend	rising	stable	rising	rising	rising
	Recent 5-Year Trend in Incidence Rates	7.9	1	2.4	3.7	2.2
Asian or Pacific Islander (includes Hispanic), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	102.1	*	10.5	14	19.7
	Average Annual Count	25	*	4	7	5
	Recent Trend	stable	*	*	*	*
	Recent 5-Year Trend in Incidence Rates	1.2	*	*	*	*
Hispanic (any race), All Ages	Age-Adjusted Incidence Rate - cases per 100,000	104	11.7	11.4	13	26
	Average Annual Count	72	15	14	19	19
	Recent Trend	stable	stable	rising	rising	rising
	Recent 5-Year Trend in Incidence Rates	0	1.6	2.8	5	1.9
MALES	Age-Adjusted Incidence Rate - cases per 100,000	n/a	18.7	12.4	7.4	n/a
	Average Annual Count	n/a	68	48	29	n/a
	Recent Trend	n/a	stable	rising	rising	n/a
	Recent 5-Year Trend in Incidence Rates	n/a	0.7	2	5.8	n/a
FEMALES	Age-Adjusted Incidence Rate - cases per 100,000	133.5	8.6	4	17.2	31.8
	Average Annual Count	610	40	20	74	151
	Recent Trend	rising	stable	stable	rising	rising
	Recent 5-Year Trend in Incidence Rates	5.7	0.7	1	4.8	1.3

* Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

APPENDIX C4: CANCER MORTALITY RATE REPORT: ESSEX COUNTY 2011-2015

MORTALITY RATE REPORT FOR ESSEX COUNTY 2011-2015					
Cancer Site	Met Healthy People Objective	Age-Adjusted Death Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend
All Cancer Sites	Yes	156.1	1262	falling	-2.4
Bladder	***	3.7	30	stable	-0.8
Brain & ONS	***	3	25	falling	-1.2
Breast	No	23.8	110	falling	-2.6
Cervix	No	3.5	16	falling	-2.8
Colon & Rectum	No	15.7	127	falling	-2.8
Esophagus	***	3.2	27	falling	-3
Kidney & Renal Pelvis	***	2.8	23	falling	-1.3
Leukemia	***	5.9	47	falling	-2
Liver & Bile Duct	***	5.5	48	stable	1
Lung & Bronchus	Yes	35.2	282	falling	-2.9
Melanoma of the Skin	Yes	1.4	11	falling	-1.5
Non-Hodgkin Lymphoma	***	5.2	41	falling	-2.7
Oral Cavity & Pharynx	Yes	2.2	19	falling	-3.6
Ovary	***	6.7	31	falling	-2.3
Pancreas	***	11.9	95	stable	-0.5
Prostate	No	24.5	73	falling	-3.4
Stomach	***	4.4	35	falling	-3.5
Thyroid	***	0.4	3	*	*
Uterus (Corpus & Uterus, NOS)	***	6.3	30	stable	0

*** No Healthy People 2020 Objective for this cancer.

* Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

APPENDIX C5: CANCER MORTALITY DETAILED RATE REPORT (Highest Volume): ESSEX COUNTY 2011-2015

		Breast	Colon & Rectum	Lung & Bronchus
MORTALITY RATE REPORT FOR ESSEX COUNTY 2011-2015 All Races (includes Hispanic), All Ages	Met Healthy People Objective	No	No	Yes
	Age-Adjusted Death Rate - cases per 100,000	23.8	15.7	35.2
	Average Annual Count	110	127	282
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-2.6	-2.8	-2.9
White Non-Hispanic, All Ages	Met Healthy People Objective	No	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	20.8	14.3	37
	Average Annual Count	44	57	142
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-3.2	-3.2	-1.6
Black (includes Hispanic), All Ages	Met Healthy People Objective	No	No	Yes
	Age-Adjusted Death Rate - cases per 100,000	28.6	18.7	38.7
	Average Annual Count	54	56	117
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-1.7	-2.4	-2.9
Asian or Pacific Islander (includes Hispanic), All Ages	Met Healthy People Objective	*	*	Yes
	Age-Adjusted Death Rate - cases per 100,000	*	*	16.1
	Average Annual Count	3 or fewer	3 or fewer	5
	Recent Trend	*	*	falling
	Recent 5-Year Trend in Death Rates	*	*	-4.1
Hispanic (any race), All Ages	Met Healthy People Objective	Yes	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	17.1	11.6	17.4
	Average Annual Count	11	12	18
	Recent Trend	*	stable	falling
	Recent 5-Year Trend in Death Rates	*	-0.1	-2.9
MALES	Met Healthy People Objective	n/a	No	Yes
	Age-Adjusted Death Rate - cases per 100,000	n/a	18.3	44.9
	Average Annual Count	n/a	61	145
	Recent Trend	n/a	falling	falling
	Recent 5-Year Trend in Death Rates	n/a	-3	-3.2
FEMALES	Met Healthy People Objective	No	Yes	Yes
	Age-Adjusted Death Rate - cases per 100,000	23.8	13.8	28.9
	Average Annual Count	110	66	136
	Recent Trend	falling	falling	falling
	Recent 5-Year Trend in Death Rates	-2.6	-2.6	-1.9

*** No Healthy People 2020 Objective for this cancer.

* Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

APPENDIX C6: CANCER INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
ALL SITES: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	441.2	1,580,653	falling	-1.4
New Jersey	477.5	49,332	falling	-0.9
Atlantic County	490.9	1,646	falling	-0.6
Bergen County	462	5,311	falling	-1.1
Burlington County	521.7	2,845	stable	-1
Camden County	513.9	2,982	stable	-1.4
Cape May County	557.2	864	stable	-0.1
Cumberland County	502.9	862	stable	0.1
Essex County	452.1	3,717	falling	-1.2
Gloucester County	529.7	1,753	stable	-1.7
Hudson County	391.1	2,429	falling	-1.5
Hunterdon County	481.7	762	stable	-0.2
Mercer County	498.1	2,058	falling	-0.4
Middlesex County	455.8	4,118	falling	-1
Monmouth County	511.5	3,950	falling	-1.6
Morris County	470.4	2,848	falling	-1.7
Ocean County	515.9	4,370	falling	-0.7
Passaic County	441.4	2,378	falling	-0.9
Salem County	534.1	443	stable	0.1
Somerset County	461.1	1,761	falling	-1.4
Sussex County	489.7	863	falling	-0.5
Union County	451.9	2,692	falling	-1.2
Warren County	497.8	665	falling	-0.5
Bladder: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	20.3	72,640	falling	-1.7
New Jersey	23.6	2,449	falling	-1.5
Atlantic County	27.9	94	stable	0.2
Bergen County	23	272	falling	-0.8
Burlington County	26.7	147	stable	0
Camden County	25.3	146	stable	0
Cape May County	35	58	rising	1.3
Cumberland County	26.4	45	stable	1
Essex County	19.1	153	stable	-0.4
Gloucester County	28.4	91	rising	0.7

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	17.5	102	falling	-1.5
Hunterdon County	28.2	44	rising	1.4
Mercer County	22.1	91	stable	-0.5
Middlesex County	23.1	205	stable	-0.3
Monmouth County	25.8	202	stable	-0.2
Morris County	24.3	149	stable	-0.3
Ocean County	24.4	230	falling	-3.5
Passaic County	21.2	113	stable	-0.6
Salem County	29.5	25	stable	0.3
Somerset County	21.3	81	stable	0.3
Sussex County	26.6	45	stable	-0.3
Union County	20.1	119	falling	-3.7
Warren County	27.6	37	stable	-0.6
Brain & ONS: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	6.5	22,226	falling	-0.9
New Jersey	6.9	669	falling	-0.3
Atlantic County	7.3	22	stable	0.3
Bergen County	7.7	81	stable	-0.4
Burlington County	7.2	36	stable	0.5
Camden County	7.2	39	stable	0
Cape May County	7.1	9	stable	0
Cumberland County	7.1	12	stable	-0.8
Essex County	5.1	42	falling	-1.4
Gloucester County	7.3	23	stable	-0.3
Hudson County	5.7	37	falling	-1.2
Hunterdon County	7.8	10	stable	-0.5
Mercer County	7.1	27	stable	-0.5
Middlesex County	6.3	55	falling	-1
Monmouth County	7.3	54	stable	0.5
Morris County	7.9	43	stable	0.1
Ocean County	7.7	54	stable	0.4
Passaic County	6.7	35	falling	-0.9
Salem County(7)	7.3	5	*	*
Somerset County	6.1	22	stable	-0.5
Sussex County	7.7	12	stable	-0.5
Union County	6.2	36	falling	-1

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Warren County	10.4	13	stable	1.6
Breast: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	124.7	234,445	stable	0.2
New Jersey	133.4	7,357	rising	0.4
Atlantic County	132.5	236	stable	-0.1
Bergen County	135.5	822	falling	-0.6
Burlington County	139.6	405	stable	-0.1
Camden County	140.1	440	stable	0.4
Cape May County	129.9	100	falling	-0.7
Cumberland County	113.9	101	falling	-0.8
Essex County	133.5	610	rising	5.7
Gloucester County	142.6	257	stable	0
Hudson County	104.4	356	falling	-0.5
Hunterdon County	155.1	133	stable	-0.1
Mercer County	140	309	stable	-0.4
Middlesex County	129.2	625	falling	-0.5
Monmouth County	144.1	594	stable	-0.1
Morris County	144.4	465	stable	-0.3
Ocean County	130.8	567	falling	-0.6
Passaic County	117	344	falling	-0.5
Salem County	126.1	55	stable	-0.5
Somerset County	140.4	290	stable	0.4
Sussex County	134.3	125	stable	-0.2
Union County	133.4	433	falling	-0.4
Warren County	127.7	91	stable	-0.3
Cervix: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	7.5	12,529	stable	0.2
New Jersey	7.6	380	falling	-2.6
Atlantic County	9.8	15	falling	-3.6
Bergen County	6.7	36	falling	-2
Burlington County	6.1	15	stable	-9.4
Camden County	7.8	22	falling	-2.4
Cape May County	10.2	5	stable	-0.4
Cumberland County	12	9	falling	-3.8
Essex County	9.5	42	falling	-3.7
Gloucester County	6.9	11	falling	-2.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	10.1	35	falling	-2.7
Hunterdon County	5.3	4	falling	-2.3
Mercer County	5.5	11	falling	-3.3
Middlesex County	6.1	28	falling	-2.3
Monmouth County	6.9	26	falling	-2.6
Morris County	5.9	18	falling	-2.2
Ocean County	8.7	28	falling	-2.1
Passaic County	7.9	21	falling	-2.2
Salem County(7)	*	3 or fewer	*	*
Somerset County	8.3	15	stable	-1.3
Sussex County	5.8	5	falling	-3.1
Union County	8.5	26	falling	-1.9
Warren County	7.8	5	falling	-3.1
Colon & Rectum: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	39.2	139,950	falling	-1.7
New Jersey	41.9	4,346	falling	-1.6
Atlantic County	42.1	143	falling	-2.7
Bergen County	38.3	447	stable	0.4
Burlington County	46.8	256	falling	-2.1
Camden County	45.5	263	falling	-2.9
Cape May County	46.2	72	falling	-2.8
Cumberland County	49.3	84	falling	-1.4
Essex County	43.3	355	stable	0.4
Gloucester County	44.1	144	falling	-2.2
Hudson County	41.4	254	falling	-2.5
Hunterdon County	41	65	falling	-2.8
Mercer County	39.5	164	falling	-4.4
Middlesex County	41.6	375	falling	-2.5
Monmouth County	41.9	326	falling	-3.7
Morris County	36.5	224	falling	-3
Ocean County	45.5	406	falling	-3
Passaic County	40	215	falling	-3.6
Salem County	47.4	40	falling	-2.1
Somerset County	35.9	139	falling	-2.4
Sussex County	42.5	71	falling	-2.9
Union County	40.4	241	falling	-2.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Warren County	46.3	62	falling	-2.9
Esophagus: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	4.6	16,795	falling	-0.9
New Jersey	4.4	465	falling	-1
Atlantic County	4.4	15	falling	-2.5
Bergen County	3.3	39	falling	-1.8
Burlington County	5.3	30	stable	-0.1
Camden County	5.2	31	stable	-1
Cape May County	5.5	8	stable	-0.8
Cumberland County	5.6	10	stable	0.6
Essex County	3.9	32	falling	-3.1
Gloucester County	6.3	22	stable	1.1
Hudson County	3	18	falling	-2.9
Hunterdon County	4.6	8	stable	-0.4
Mercer County	4.7	19	stable	-1.3
Middlesex County	4	37	falling	-1.1
Monmouth County	4.6	36	stable	-0.4
Morris County	4.6	29	stable	0.3
Ocean County	5.7	51	stable	5.5
Passaic County	4.4	24	stable	-1.1
Salem County	5.4	5	stable	-2
Somerset County	3.2	12	falling	-1.6
Sussex County	5.5	10	stable	0.2
Union County	3.6	22	falling	-1.7
Warren County	5.8	8	stable	1.4
Kidney & Renal Pelvis.: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	16.4	58,599	rising	0.8
New Jersey	16	1,655	stable	0.2
Atlantic County	17.2	58	rising	1.4
Bergen County	16.1	186	rising	1
Burlington County	19.9	108	rising	2.6
Camden County	19.5	112	rising	2
Cape May County	18.1	29	rising	1.9
Cumberland County	22.6	38	rising	4.2
Essex County	13	108	rising	0.8
Gloucester County	19.2	65	rising	2

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	12.4	79	stable	0.7
Hunterdon County	13.4	22	rising	1.6
Mercer County	16.2	68	rising	2.1
Middlesex County	14.8	135	rising	0.9
Monmouth County	16.7	131	rising	1.3
Morris County	13.7	83	stable	0.9
Ocean County	17.7	144	rising	1.7
Passaic County	15.9	85	rising	1.6
Salem County	18.1	15	stable	1
Somerset County	13.8	54	rising	1.7
Sussex County	14.1	27	stable	0.1
Union County	15.1	90	rising	1
Warren County	16.3	21	rising	1
Leukemia: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	13.6	47,270	falling	-1.6
New Jersey	15.2	1,523	rising	0.6
Atlantic County	14.5	47	stable	0.5
Bergen County	16.1	182	rising	0.8
Burlington County	15.3	80	rising	1.2
Camden County	15.2	86	rising	0.9
Cape May County	15.9	24	rising	1.2
Cumberland County	15.3	26	rising	2
Essex County	13.1	104	stable	-0.3
Gloucester County	17.3	55	rising	1.6
Hudson County	12.1	73	falling	-0.7
Hunterdon County	13.2	20	stable	-0.8
Mercer County	15.8	65	stable	0.6
Middlesex County	15	133	rising	0.6
Monmouth County	15.7	118	rising	1.1
Morris County	16	94	stable	0.6
Ocean County	16	132	stable	0.3
Passaic County	15.1	78	stable	0.1
Salem County	12.9	10	stable	0.8
Somerset County	15.3	56	stable	0.6
Sussex County	16.5	28	stable	1
Union County	16	92	rising	1.2

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Warren County	15.6	20	stable	0.1
Liver & Bile Duct: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	8.1	30,492	rising	2.2
New Jersey	7.5	808	rising	2.2
Atlantic County	8.2	30	rising	2.9
Bergen County	6.8	81	rising	1.6
Burlington County	7.4	42	rising	3.2
Camden County	9.1	55	rising	3.8
Cape May County	8.8	15	rising	5.4
Cumberland County	10.7	19	rising	6.8
Essex County	7.7	67	rising	1.8
Gloucester County	8.6	30	rising	4
Hudson County	7.8	49	rising	2.2
Hunterdon County(7)	5.8	10	*	*
Mercer County	8.4	36	rising	4.1
Middlesex County	7.4	68	rising	3
Monmouth County	6.8	56	rising	1.9
Morris County	5.7	36	rising	1.3
Ocean County	8.1	71	rising	4.3
Passaic County	8.2	46	rising	2.9
Salem County	10.9	9	rising	4.6
Somerset County	6.6	27	rising	3.2
Sussex County	7.2	13	rising	1.9
Union County	6	37	rising	2.4
Warren County	7.4	10	stable	1
Lung & Bronchus: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	60.2	217,545	falling	-2.1
New Jersey	57.3	5,940	falling	-2.2
Atlantic County	68.2	232	falling	-2.8
Bergen County	50.9	596	falling	-1.3
Burlington County	63.1	344	falling	-0.9
Camden County	71.4	415	falling	-0.6
Cape May County	79.3	131	stable	-0.2
Cumberland County	70.9	122	falling	-2.7
Essex County	48.7	392	falling	-2.4
Gloucester County	76	249	falling	-0.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	46.3	274	falling	-2
Hunterdon County	52.1	80	falling	-1.5
Mercer County	58.9	242	falling	-1
Middlesex County	52.3	466	falling	-1.6
Monmouth County	61.6	478	falling	-2.5
Morris County	48	291	falling	-1.5
Ocean County	70.3	647	falling	-1.6
Passaic County	49.6	266	stable	-5.7
Salem County	76.5	66	stable	-0.6
Somerset County	47.1	177	falling	-1.2
Sussex County	62.4	109	falling	-1.1
Union County	47.5	275	falling	-1.6
Warren County	63.4	87	falling	-1
Melanoma of the Skin: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	21.3	74,467	rising	2.1
New Jersey	22.1	2,251	stable	0.2
Atlantic County	25.5	85	stable	-1.5
Bergen County	17.8	203	falling	-2.3
Burlington County	26.6	145	stable	0.8
Camden County	20.7	120	stable	-0.3
Cape May County	45	68	rising	3.9
Cumberland County	16.2	28	rising	1.9
Essex County	13.1	106	stable	0.8
Gloucester County	26.9	86	stable	0.1
Hudson County	7.9	50	stable	-0.6
Hunterdon County	39.1	61	rising	5
Mercer County	23.4	95	stable	-8.1
Middlesex County	17.9	161	rising	1.8
Monmouth County	31.6	237	rising	2
Morris County	26.5	159	stable	-0.4
Ocean County	34.3	277	rising	3.7
Passaic County	14	74	rising	1.8
Salem County	36.8	28	rising	5.3
Somerset County	24.1	91	stable	-1.2
Sussex County	28.7	49	rising	2.7
Union County	15.3	91	rising	1.1

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Warren County	26	33	rising	1.7
Non-Hodgkin Lymphoma: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	18.9	66,509	falling	-1
New Jersey	21.6	2,188	stable	-0.2
Atlantic County	20.9	67	stable	-0.3
Bergen County	22.4	255	stable	-0.1
Burlington County	21.8	116	rising	0.6
Camden County	19.8	114	stable	0.1
Cape May County	20.2	31	stable	-0.2
Cumberland County	21.7	37	stable	0.4
Essex County	19.4	157	stable	0
Gloucester County	22.2	71	stable	0.7
Hudson County	17.7	110	stable	-0.4
Hunterdon County	23.4	36	stable	0.6
Mercer County	21.7	88	stable	0.4
Middlesex County	22.4	199	rising	0.6
Monmouth County	23.4	177	stable	-0.6
Morris County	22.7	134	stable	-0.7
Ocean County	22.6	195	stable	0.6
Passaic County	19.5	101	stable	0.4
Salem County	20.7	17	stable	0.6
Somerset County	21	80	stable	0.8
Sussex County	22.2	38	stable	0.3
Union County	22.4	134	stable	-0.3
Warren County	23.2	30	stable	0.6
Oral Cavity & Pharynx: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	11.6	42,585	stable	0.4
New Jersey	10.6	1,118	stable	0.6
Atlantic County	14.1	49	stable	0.3
Bergen County	9.4	109	stable	0.1
Burlington County	11.4	63	stable	0
Camden County	11.6	69	stable	0.4
Cape May County	13	20	stable	0.4
Cumberland County	13.1	23	stable	0.6
Essex County	8.9	75	falling	-2.1
Gloucester County	11.1	39	stable	0.8

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	7.9	50	falling	-2.4
Hunterdon County	9.4	17	stable	0.6
Mercer County	9.3	40	falling	-1.6
Middlesex County	10.4	95	stable	0.1
Monmouth County	11.9	96	stable	0.2
Morris County	10.5	66	stable	0.3
Ocean County	11.8	100	stable	0.2
Passaic County	9.9	55	falling	-1.1
Salem County	14	11	stable	1.5
Somerset County	10.1	41	rising	1
Sussex County	13.3	24	stable	0.5
Union County	9.5	59	stable	-0.3
Warren County	11.3	16	stable	0.5
Ovary: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	11.3	21,476	falling	-1.6
New Jersey	12.3	692	falling	-1.9
Atlantic County	11.5	20	falling	-1.7
Bergen County	12.1	75	falling	-2.5
Burlington County	14.1	42	falling	-1.2
Camden County	13	41	falling	-1.4
Cape May County	15.2	12	stable	-0.8
Cumberland County	8.4	8	falling	-2.5
Essex County	12.2	56	falling	-2
Gloucester County	13.3	25	stable	-1.2
Hudson County	11.4	39	falling	-2
Hunterdon County	11	10	falling	-3.1
Mercer County	14.3	32	stable	-0.6
Middlesex County	11.8	57	falling	-2
Monmouth County	12.3	53	falling	-1.9
Morris County	12.1	40	falling	-1.9
Ocean County	12.6	57	falling	-1.8
Passaic County	12.1	36	falling	-1.9
Salem County	13.6	6	stable	0
Somerset County	12.3	26	falling	-1.1
Sussex County	13.8	13	stable	-1.4
Union County	10.7	36	falling	-2.6

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Warren County	12.6	9	stable	-1.2
Pancreas: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	12.6	45,703	rising	0.6
New Jersey	14	1,465	rising	1.2
Atlantic County	13.3	45	stable	-0.2
Bergen County	13.8	164	stable	0.2
Burlington County	15.7	87	rising	3
Camden County	13.6	79	stable	0.6
Cape May County	13.9	23	stable	0.9
Cumberland County	14.5	25	rising	1.6
Essex County	14.6	117	stable	0
Gloucester County	13.8	46	rising	1.6
Hudson County	13.1	78	rising	3.8
Hunterdon County	15.1	24	rising	1.4
Mercer County	17.1	70	rising	2.4
Middlesex County	13.3	120	stable	0.2
Monmouth County	14.2	113	stable	0.5
Morris County	13.4	83	rising	1.5
Ocean County	15.2	140	rising	1.1
Passaic County	13.2	72	stable	0.4
Salem County	12.6	11	stable	1.3
Somerset County	12.9	49	rising	1.3
Sussex County	13.1	22	stable	0.2
Union County	12.9	77	stable	0
Warren County	15	21	rising	1.5
Prostate: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	109	190,639	falling	-7.3
New Jersey	134.7	6,575	falling	-6
Atlantic County	120.7	199	falling	-3
Bergen County	131.1	714	falling	-4
Burlington County	147.8	390	falling	-6.3
Camden County	141.7	385	stable	-0.7
Cape May County	161.5	126	falling	-1.5
Cumberland County	127.2	103	falling	-1.2
Essex County	158.8	580	falling	-4.8
Gloucester County	136.8	219	falling	-7.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	111.8	297	falling	-4.4
Hunterdon County	103	83	falling	-2.1
Mercer County	147	285	falling	-1.7
Middlesex County	127.3	542	falling	-3.4
Monmouth County	144.9	544	falling	-1.8
Morris County	135.5	397	falling	-7.8
Ocean County	125.8	506	falling	-2.9
Passaic County	137.1	342	falling	-1.4
Salem County	138.9	57	stable	-1
Somerset County	125.2	228	falling	-2.3
Sussex County	122.5	115	falling	-6.8
Union County	138.4	378	falling	-6
Warren County	125.2	84	falling	-8.3
Stomach: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	6.6	23,501	falling	-1.2
New Jersey	8	827	falling	-1.6
Atlantic County	7.5	25	falling	-1.5
Bergen County	9.1	107	falling	-1.1
Burlington County	6.4	36	falling	-1.6
Camden County	8.9	51	stable	-0.5
Cape May County	5.8	9	stable	-0.4
Cumberland County	7.4	12	falling	-1.7
Essex County	9.3	75	falling	-2
Gloucester County	6.7	22	falling	-1.5
Hudson County	10	61	falling	-0.9
Hunterdon County	5	8	falling	-3.4
Mercer County	8.2	33	falling	-2.2
Middlesex County	7.4	67	falling	-1.8
Monmouth County	6.1	49	falling	-2.3
Morris County	7.1	43	falling	-1.2
Ocean County	7.6	68	falling	-1.6
Passaic County	9.8	53	stable	-0.8
Salem County	6.6	5	stable	-1.3
Somerset County	6.9	26	falling	-1.7
Sussex County	6.8	11	falling	-2.5
Union County	9.4	55	falling	-1.5

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Warren County	6.8	9	falling	-2.6
Thyroid: All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	14.5	47,777	stable	0.6
New Jersey	19.2	1,833	stable	0.8
Atlantic County	14.9	44	stable	-2.3
Bergen County	19.6	201	stable	-2.1
Burlington County	21.4	105	stable	2.1
Camden County	22.2	119	rising	3.2
Cape May County	16.9	18	rising	6
Cumberland County	17.2	28	stable	-7.2
Essex County	12.6	103	rising	5.1
Gloucester County	21.7	67	rising	4.9
Hudson County	14.8	105	stable	-0.3
Hunterdon County	16.5	23	rising	4.5
Mercer County	24.1	96	rising	7.2
Middlesex County	19.1	167	rising	5.8
Monmouth County	24.4	166	stable	0.2
Morris County	20.6	111	stable	-1.9
Ocean County	23.1	142	stable	-2.8
Passaic County	17	87	rising	6.7
Salem County	19.2	13	rising	7.3
Somerset County	22.6	83	stable	-4.5
Sussex County	17.1	28	rising	6.6
Union County	18.1	105	stable	-7.1
Warren County	17.3	21	rising	4.9
Uterus (Corpus & Uterus, NOS): All Races (includes Hispanic), Both Sexes, All Ages				
US (SEER+NPCR)	26.2	51,560	rising	1.2
New Jersey	31.3	1,822	rising	0.7
Atlantic County	30.5	57	stable	0.6
Bergen County	29.8	193	stable	0.4
Burlington County	33.4	102	rising	1.1
Camden County	34.3	113	stable	-0.8
Cape May County	32.5	28	rising	1.3
Cumberland County	36.1	34	stable	1
Essex County	31.8	151	rising	1.3
Gloucester County	33.1	62	rising	1.1

INCIDENCE RATE REPORT: ALL COUNTIES 2011-2015				
County	Age-Adjusted Incidence Rate - cases per 100,000	Average Annual Count	Recent Trend	Recent 5-Year Trend in Incidence Rates
Hudson County	23.9	84	stable	0
Hunterdon County	32.7	30	stable	-0.2
Mercer County	34.5	79	rising	0.8
Middlesex County	31.7	161	rising	0.8
Monmouth County	30	131	stable	-5
Morris County	32.9	111	stable	0.5
Ocean County	31.7	144	stable	0.3
Passaic County	26.8	82	stable	0.3
Salem County	37.4	17	stable	1.2
Somerset County	33.7	73	stable	0.8
Sussex County	35.5	35	stable	-0.1
Union County	32.2	107	stable	0.4
Warren County	35.9	27	stable	-0.5

APPENDIX C7: NEWARK BETH ISRAEL MEDICAL CENTER - TUMOR REGISTRY SUMMARY

In 2016, NBIMC’s tumor registry data showed that 11.5% and 18.6% of overall cases were Stage 3 and Stage 4 respectively. The following primary sites were made up of more than 25% of Stage 4 cases: Oral Cavity and Pharynx (33.3%), Digestive System (29.0%), Respiratory System (54.7%), and Lymphoma (40.9%).

Compared to 2015, there was a decrease of 78 cases (-11.8%) in 2016. The three biggest decreases in overall cases occurred in Male Genital System (-19, -25.3%), followed by Respiratory System (-17, -21.0%), and Digestive System (-13, -11.5%). Please note that case volume counts smaller than 10 are suppressed. Staging percentages are calculated on analytic cases only.

Primary Site	Cases (both analytic and non-analytic)		2015			2016			2015 - 2016			
	2015	2016	% Stage III	% Stage IV	Total % Stage III & IV	% Stage III	% Stage IV	Total % Stage III & IV	Change in Case Volume	Change in % points for Stage III	Change in % points for Stage IV	Change in % points for Stage III & IV
Primary Site												
ORAL CAVITY & PHARYNX	10	3	20.0%	40.0%	60.0%	0.0%	33.3%	33.3%	(7)	(20.0)	(6.7)	(26.7)
DIGESTIVE SYSTEM	113	100	26.5%	34.5%	61.1%	15.0%	29.0%	44.0%	(13)	(11.5)	(5.5)	(17.1)
<i>Select Digestive System:</i>												
Esophagus			50.0%	16.7%	66.7%	0.0%	42.9%	42.9%	1	(50.0)	26.2	(23.8)
Stomach			5.6%	44.4%	50.0%	22.2%	22.2%	44.4%	(9)	16.7	(22.2)	(5.6)
Colon Excluding Rectum	51	40	33.3%	33.3%	66.7%	22.5%	20.0%	42.5%	(11)	(10.8)	(13.3)	(24.2)
Rectum & Rectosigmoid	11	16	27.3%	18.2%	45.5%	6.3%	6.3%	12.5%	5	(21.0)	(11.9)	(33.0)
Anus, Anal Canal & Anorectum			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(1)	0.0	0.0	0.0
Liver & Intrahepatic Bile Duct			33.3%	0.0%	33.3%	0.0%	44.4%	44.4%	3	(33.3)	44.4	11.1
Gallbladder			20.0%	40.0%	60.0%	0.0%	100.0%	100.0%	(4)	(20.0)	60.0	40.0
Pancreas			0.0%	87.5%	87.5%	21.4%	64.3%	85.7%	6	21.4	(23.2)	(1.8)
RESPIRATORY SYSTEM	81	64	11.1%	58.0%	69.1%	18.8%	54.7%	73.4%	(17)	7.6	(3.3)	4.3
<i>Select Respiratory System:</i>												
Lung & Bronchus	69	60	13.0%	58.0%	71.0%	20.0%	55.0%	75.0%	(9)	7.0	(3.0)	4.0
BONES & JOINTS			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0	0.0	0.0	0.0
SOFT TISSUE			0.0%	50.0%	50.0%	66.7%	0.0%	66.7%	(5)	66.7	(50.0)	16.7
SKIN EXCLUDING BASAL & SQUAMOUS			0.0%	0.0%	0.0%	25.0%	25.0%	50.0%	1	25.0	25.0	50.0
Melanoma -- Skin			0.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0	50.0	0.0	50.0
BASAL & SQUAMOUS SKIN			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0	0.0	0.0	0.0
BREAST	125	124	11.2%	4.8%	16.0%	7.3%	7.3%	14.5%	(1)	(3.9)	2.5	(1.5)
Breast	125	124	11.2%	4.8%	16.0%	7.3%	7.3%	14.5%	(1)	(3.9)	2.5	(1.5)
FEMALE GENITAL SYSTEM	88	82	19.3%	15.9%	35.2%	15.9%	12.2%	28.0%	(6)	(3.5)	(3.7)	(7.2)
<i>Select Female Genital System:</i>												
Cervix Uteri	19	22	36.8%	15.8%	52.6%	31.8%	13.6%	45.5%	3	(5.0)	(2.2)	(7.2)
Corpus & Uterus, NOS	52	45	13.5%	15.4%	28.8%	4.4%	4.4%	8.9%	(7)	(9.0)	(10.9)	(20.0)
Ovary	13	10	23.1%	23.1%	46.2%	10.0%	40.0%	50.0%	(3)	(13.1)	16.9	3.8
MALE GENITAL SYSTEM	75	56	9.3%	13.3%	22.7%	12.5%	12.5%	25.0%	(19)	3.2	(0.8)	2.3

Primary Site	Cases (both analytic and non-analytic)		2015			2016			2015 - 2016			
	2015	2016	% Stage III	% Stage IV	Total % Stage III & IV	% Stage III	% Stage IV	Total % Stage III & IV	Change in Case Volume	Change in % points for Stage III	Change in % points for Stage IV	Change in % points for Stage III & IV
Select Male Genital System:												
Prostate	74	54	9.5%	13.5%	23.0%	13.0%	13.0%	25.9%	(20)	3.5	(0.6)	3.0
URINARY SYSTEM	52	50	9.6%	9.6%	19.2%	12.0%	12.0%	24.0%	(2)	2.4	2.4	4.8
Select Urinary System:												
Urinary Bladder	10	12	0.0%	20.0%	20.0%	8.3%	33.3%	41.7%	2	8.3	13.3	21.7
Kidney & Renal Pelvis	40	35	10.0%	7.5%	17.5%	11.4%	2.9%	14.3%	(5)	1.4	(4.6)	(3.2)
EYE & ORBIT			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0	0.0	0.0	0.0
BRAIN & OTHER NERVOUS SYSTEM			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(3)	0.0	0.0	0.0
ENDOCRINE SYSTEM			12.5%	0.0%	12.5%	0.0%	0.0%	0.0%	(8)	(12.5)	0.0	(12.5)
LYMPHOMA	19	22	10.5%	52.6%	63.2%	9.1%	40.9%	50.0%	3	(1.4)	(11.7)	(13.2)
Select Lymphoma:												
Hodgkin Lymphoma			12.5%	50.0%	62.5%	22.2%	44.4%	66.7%	1	9.7	(5.6)	4.2
Non-Hodgkin Lymphoma	11	13	9.1%	54.5%	63.6%	0.0%	38.5%	38.5%	2	(9.1)	(16.1)	(25.2)
MYELOMA	10	17	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7	0.0	0.0	0.0
LEUKEMIA	24	25	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1	0.0	0.0	0.0
MESOTHELIOMA			0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0	0.0	100.0	100.0
KAPOSI SARCOMA			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(1)	0.0	0.0	0.0
MISCELLANEOUS	20	12	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(8)	0.0	0.0	0.0
Total	659	581	13.4%	21.1%	34.4%	11.5%	18.6%	30.1%	(78)	(1.8)	(2.5)	(4.3)

APPENDIX D: RESOURCE INVENTORY

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Adult Day Health Care Services	1st Cerebral Palsy Of New Jersey	7 Sanford Avenue	Belleville	07109	(973) 751-0200
Adult Day Health Care Services	2nd Home East Orange	115 Evergreen Place	East Orange	07018	(973) 676-2600
Adult Day Health Care Services	2nd Home Newark Operations, LLC	717-727 Broadway	Newark	07104	(973) 268-1212
Adult Day Health Care Services	2nd Home Orange Operations, LLC	37 North Day Street	Orange	07050	(973) 395-9800
Adult Day Health Care Services	Belleville Senior Services	518 Washington Avenue	Belleville	07109	(973) 751-6000
Adult Day Health Care Services	Circle Of Life At Belleville Adult Day Center	250 Mill Street	Belleville	07109	(973) 751-7600
Adult Day Health Care Services	Goodlife Adult Day Care	515 North Arlington Avenue	East Orange	07017	(973) 674-5100
Adult Day Health Care Services	Happy Days Adult Day Healthcare Center, L.L.C.	67 So Munn Ave	East Orange	07018	(973) 678-0755
Adult Day Health Care Services	Happy Days II Adult Day Healthcare, L.L.C.	1060 Broad Street	Newark	07102	(973) 643-3500
Adult Day Health Care Services	Home Away From Home Adult Day Care Center Of Nutley	263 Hillside Avenue	Nutley	07110	(973) 662-9191
Adult Day Health Care Services	New Jersey Adult Medical Day Care Center li, Inc	290 Chestnut Street	Newark	07105	(973) 578-2815
Adult Day Health Care Services	Senior Care And Activities Center	110 Greenwood Avenue	Montclair	07042	(973) 783-5589
Adult Day Health Care Services	The North Ward Center	288 298 Mt Prospect Avenue	Newark	07104	(973) 481-6145
Adult Day Health Care Services	The Oasis At Sinai Adult Medical Day Care	65 Jay Street	Newark	07103	(973) 483-6800
Adult Family Care	Care Management 2000	258 Park St	Upper Montclair	07043	(973) 655-0121
Adult Family Care	Clarendon Alternate Family Care	212 Clifton Avenue	Newark	07104	(973) 481-6516
Adult Family Care	Royal Homecare Management	285 Roseville Avenue	Newark	07107	(973) 481-2200
Ambulatory Care Facility	Advanced Imaging Center LLC	400 Delancey Street, Suite 108	Newark	07105	(973) 589-7777
Ambulatory Care Facility	Advanced Practice Imaging	30 Bergen Street	Newark	07103	(973) 972-5188
Ambulatory Care Facility	American Sleep Medicine	5n Regent Street, Suite 512	Livingston	07039	(973) 422-9030
Ambulatory Care Facility	Ap Diagnostic Imaging Inc Ironbound	2 Ferry Street	Newark	07105	(973) 589-0373

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Ambulatory Care Facility	Barnabas Health Ambulatory Care Center	200 South Orange Avenue	Livingston	07039	(973) 322-7700
Ambulatory Care Facility	Canfield Medical Imaging Associate Pa	343 Passaic Avenue, Suite C	Fairfield	07004	(973) 227-2308
Ambulatory Care Facility	Central Imaging Associates, Inc	514 Joyce Street	Orange	07050	(973) 294-9507
Ambulatory Care Facility	Columbus Imaging Center LLC	481 North 13th Street	Newark	07107	(973) 481-7770
Ambulatory Care Facility	Community Health Improvement Centers Inc.	352 West Market Street	Newark	07107	(973) 732-2147
Ambulatory Care Facility	Covenant House New Jersey Medical Services	330w Washington Street	Newark	07102	(973) 286-3427
Ambulatory Care Facility	Ironbound Open MRI	119-137 Clifford	Newark	07102	(973) 508-1400
Ambulatory Care Facility	Irvington Medical Imaging Center	277-285 Coit Street	Irvington	07111	(973) 351-1277
Ambulatory Care Facility	Magnetic Resonance Of NJ	410 Center Street	Nutley	07110	(973) 661-2000
Ambulatory Care Facility	Millburn Medical Imaging, Pa	2130 Millburn Avenue	Maplewood	07040	(973) 912-0404
Ambulatory Care Facility	Montclair Breast Center	37 North Fullerton Avenue	Montclair	07042	(973) 509-1818
Ambulatory Care Facility	Montclair Radiology	1140 Bloomfield Avenue	West Caldwell	07006	(973) 439-9729
Ambulatory Care Facility	Montclair Radiology	20 High Street	Nutley	07110	(973) 284-1881
Ambulatory Care Facility	Montclair Radiology	116 Park Street	Montclair	07042	(973) 746-2525
Ambulatory Care Facility	Mountainside Family Practice Associates At Verona	799 Bloomfield Avenue	Verona	07044	(973) 746-7050
Ambulatory Care Facility	MRI NJ Newark	9-25 Alling Street	Newark	07102	(973) 242-5600
Ambulatory Care Facility	NJN Of Belleville	36 Newark Avenue	Belleville	07109	(973) 844-4170
Ambulatory Care Facility	NJN West Orange	772 Northfield Avenue	West Orange	07052	(973) 325-0002
Ambulatory Care Facility	NJN Cancer Treatment Centers	1515 Broad Street, Suite B120	Bloomfield	07003	(973) 873-7000
Ambulatory Care Facility	ODI Diagnostic Imaging Of Newark, LLC	243 Chestnut Street	Newark	07105	(973) 521-5685
Ambulatory Care Facility	The Peter Ho Memorial Clinic	111 Central Avenue	Newark	07102	(973) 877-5649
Ambulatory Care Facility	Planned Parenthood Of Metropolitan New Jersey	151 Washington Street	Newark	07102	(973) 622-3900
Ambulatory Care Facility	Prospect Primary Care	424 Main Street	East Orange	07018	(973) 674-8067

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Ambulatory Care Facility	Prostate Cancer Center Of New Jersey	375 Mt Pleasant Avenue	West Orange	07052	(973) 323-1300
Ambulatory Care Facility	Saint James Health, Inc	228 Lafayette Street	Newark	07105	(973) 789-8111
Ambulatory Care Facility	Sinus And Dental Imaging Of NJ LLC	111-115 Franklin Avenue	Nutley	07110	(973) 685-9191
Ambulatory Care Facility	South Mountain Imaging Center	120 Millburn Avenue	Millburn	07041	(973) 376-0900
Ambulatory Care Facility	Stone Center Of New Jersey, The	150 Bergen Street	Newark	07103	(973) 564-5642
Ambulatory Care Facility	Summit Medical Group, Pa	75 East Northfield Avenue	Livingston	07039	(908) 273-4300
Ambulatory Care Facility	University Radiology Group, Pc	235 Franklin Avenue	Nutley	07110	(732) 390-0040
Ambulatory Care Facility	West Orange Radiology	61 Main Street	West Orange	07052	(973) 669-1989
Ambulatory Care Facility - Satellite	East Orange Primary Care Center	444 William Street	East Orange	7017	(973) 483-1300
Ambulatory Care Facility - Satellite	Jewish Renaissance Med Center At Central High School	246 18th Avenue	Newark	7108	(973) 679-7709
Ambulatory Care Facility - Satellite	Jewish Renaissance Medical Center	90 Parker Street	Newark	7114	(973) 679-7709
Ambulatory Care Facility - Satellite	Jewish Renaissance Medical Center At 13th Ave School	359 13th Avenue	Newark	7103	(973) 679-7709
Ambulatory Care Facility - Satellite	Newark Community Health Center	751 Broadway	Newark	7104	(973) 483-1300
Ambulatory Care Facility - Satellite	Newark Community Health Centers, Inc.	1148-1150 Springfield Avenue	Irvington	7111	(973) 483-1300
Ambulatory Care Facility - Satellite	North Ward Park Elementary School	120 Manchester Place	Newark	7104	(732) 679-7709
Ambulatory Care Facility - Satellite	Rutgers Nursing Faculty Practice	65 Bergen Street, Suite 845	Newark	7101	(973) 972-1197
Ambulatory Care Facility - Satellite	Shabazz Health Clinic At Malcolm X Shabazz High School	80 Johnson Avenue	Newark	7108	(973) 679-7709
Ambulatory Care Facility - Satellite	The Health Place At Quitman Community School	21 Quitman Street	Newark	7103	(973) 679-7709
Ambulatory Care Facility - Satellite	Newark Department Of Health And Community Wellness	140 Bergen Street, E-1640	Newark	07103	(973) 733-5310
Ambulatory Care Facility - Satellite	Newark Department Of Health &	36 Victoria Street	Newark	07114	(973) 733-5310

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
	Community Wellness - Van				
Ambulatory Care Facility - Satellite	The Health Zone At George Washington Carver/Bruce Street School	333 Clinton Place	Newark	07112	(973) 679-7709
Ambulatory Care Facility - Satellite	Planned Parenthood Of Metropolitan New Jersey	29 North Fullerton Avenue	Montclair	07042	(973) 746-7116
Ambulatory Care Facility - Satellite	Planned Parenthood Of Metropolitan New Jersey	66-88 Adams Street	Ironbound	07105	(973) 465-7707
Ambulatory Care Facility - Satellite	Planned Parenthood Of	560 Martin Luther King Boulevard	East Orange	07018	(973) 674-4343
Ambulatory Care Facility - Satellite	Rutgers Nursing Faculty Practice	65 Bergen Street, Suite 835	Newark	07101	(973) 972-9620
Ambulatory Care Facility - Satellite	Zufall Health Center Inc	95 Northfield Avenue, Suite 2	West Orange	07052	(973) 325-2266
Ambulatory Surgical Center	Ambulatory Center For Excellence In Surgery	1255 Broad Street	Bloomfield	07003	(973) 842-2150
Ambulatory Surgical Center	Center For Special Surgery Of Middlesex County	556 Eagle Rock Ave	Roseland	07068	(973) 226-3500
Ambulatory Surgical Center	Essex Endoscopy Center, LLC	275 Chestnut Street	Newark	07105	(973) 589-5545
Ambulatory Surgical Center	Essex Specialized Surgical Institute	475 Prospect Avenue	West Orange	07052	(973) 325-6716
Ambulatory Surgical Center	Gregori Surgery Center, The	101 Old Short Hills Road	West Orange	07052	(973) 322-5000
Ambulatory Surgical Center	Livingston Surgery Center, The	200 South Orange Avenue	Livingston	07039	(973) 322-7700
Ambulatory Surgical Center	Mountain Surgery Center LLC	375 Mt Pleasant Avenue, Suite 210	West Orange	07052	(973) 736-3390
Ambulatory Surgical Center	Mulberry Ambulatory Surgical Center, LLC	393-397 Mulberry Street	Newark	07102	(973) 559-5009
Ambulatory Surgical Center	Pilgrim Medical Center, Inc	393 Bloomfield Avenue	Montclair	07042	(973) 746-1500
Ambulatory Surgical Center	Pleasantdale Ambulatory Care LLC	61 Main Street, Suite D	West Orange	07052	(973) 324-2280
Ambulatory Surgical Center	Premier Surgical Pavilion, LLC	145 Roseville Ave	Newark	07107	(201) 488-2101
Ambulatory Surgical Center	Short Hills Surgery Center LLC	187 Millburn Avenue	Millburn	07041	(973) 671-0555
Ambulatory Surgical Center	Suburban Endoscopy Center, LLC	799 Bloomfield Avenue	Verona	07044	(973) 571-1600
Ambulatory Surgical Center	Surgical Center At Millburn, LLC	37 East Willow Street	Millburn	07041	(973) 912-8111

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Assisted Living Residence	Arden Courts Of West Orange	510 Prospect Avenue	West Orange	07052	(973) 736-3100
Assisted Living Residence	Atria Roseland	345 Eagle Rock Avenue	Roseland	07068	(973) 618-1888
Assisted Living Residence	Brighton Gardens Of West Orange	220 Pleasant Valley Way	West Orange	07052	(973) 731-9840
Assisted Living Residence	Brookdale West Orange	520 Prospect Avenue	West Orange	07052	(973) 325-5700
Assisted Living Residence	Care One At Livingston Assisted Living	68 Passaic Avenue	Livingston	07039	(973) 758-9000
Assisted Living Residence	Care One At Livingston Assisted Living	76 Passaic Avenue	Livingston	07039	(973) 758-4100
Assisted Living Residence	The Cliffs At Eagle Rock	707 Eagle Rock Avenue	West Orange	07052	(973) 69-0011
Assisted Living Residence	Job Haines Home For Aged People/Hearthside Commons	250 Bloomfield Avenue	Bloomfield	07003	(973) 743-0792
Assisted Living Residence	Lutheran Social Ministries At Crane's Mill	459 Passaic Avenue	West Caldwell	07006	(973) 276-3018
Assisted Living Residence	Sunrise Assisted Living At West Essex	47 Greenbrook Road	Fairfield	07004	(973) 228-7890
Assisted Living Residence	The Cliffs At Eagle Rock	707 Eagle Rock Avenue	West Orange	07052	(973) 669-0011
Assisted Living Residence	The Solana Roseland	345 Eagle Rock Avenue	Roseland	07068	(973) 618-1888
Assisted Living Residence	Winchester Gardens	333 Elmwood Avenue	Maplewood	07040	(973) 762-5050
Behavioral Health - Outpatient	Family Service Bureau Of Newark	379 Kearny Avenue	Kearney	07032	(201) 246-8077
Behavioral Health - Outpatient	Mental Health Association Of Essex County	33 South Fullerton Avenue	Montclair	07042	(973) 509-9777
Behavioral Health - Outpatient	Family Connections	395 South Center Street	Orange	07050	(973) 675-3817
Behavioral Health - Outpatient	Mt. Carmel Guild Behavioral Healthcare	58 Freeman Street	Newark	07102	(973) 596-4190
Behavioral Health - Outpatient	Newark Beth Israel Medical Center CMHC	210 Lehigh Avenue	Newark	07112	(973) 926-7026
Behavioral Health - Outpatient	Northwest Essex Community Network	570 Belleville Avenue	Belleville	07109	(973) 450-3100
Behavioral Health - Outpatient	Rutger's University Behavioral Health Care	183 South Orange Avenue	Newark	07103	(973) 912-6100
Behavioral Health - Outpatient	Irvington Counseling Center	21-29 Wagner Place	Irvington	07111	(973) 399-3132

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Behavioral Health - Short Term Care	St. Michael's Medical Center	111 Central Avenue	Newark	07109	(973) 465-2861
Behavioral Health - Short Term Care	Newark Beth Israel Medical Center/St. Barnabas	201 Lyons Avenue	Newark	07112	(973) 926-3183
Behavioral Health - Short Term Care	Mountainside Hospital	1 Bay Avenue	Montclair	07042	(973) 429-6000
Behavioral Health - Short Term Care	East Orange General Hospital	300 Central Avenue	East Orange	07018	(973) 266-4456
Behavioral Health - Short Term Care	University Hospital/UMDNJ	150 Bergen Street	Newark	07103	(973) 972-7722
Behavioral Health - Residential	Easter Seals Of NJ - Essex County	414 Eagle Rock Avenue - Suite 206	West Orange	07052	(973) 324-2712
Behavioral Health - Residential	Project Live, Inc.	465-475 Broadway	Newark	07107	(973) 481-1211
Cancer Treatment Centers	Frederick B. Cohen Comprehensive Cancer And Blood Disorders	201 Lyons Avenue	Newark	07103	(201) 926-7230
Cancer Treatment Centers	Prostate Cancer Center Of N.J.	375 Mt Pleasant Ave Ste 251	West Orange	07052	(973) 323-1300
Cancer Treatment Centers	University Hospital	150 Bergen Street	Newark	07103	(973) 972-5658
Essex County Cancer Coalition	Attn Dan Rosenblum ADMC 16 Ste 1614	ADMC 16 Ste 1614	Newark	07107	(973) 972-6556
Essex County Cancer Coalition	Clara Maass Medical Center	One Clara Maas Drive	Bellville	07109	(973) 450-2002
Clinical Care Provider Location: Dental	13th Avenue School	359 13th Avenue	Newark	07108	(973) 399-3400
Clinical Care Provider Location: Dental	East Orange Health and Human Services Department	143 New St	East Orange	07017	(973) 266-5490
Clinical Care Provider Location: Dental	Jewish Renaissance Medical Center - Barringer High School	90 Parker St	Newark	07104	(973) 679-7709
Clinical Care Provider Location: Dental	Jewish Renaissance Medical Center - Central High School	436 18th Ave	Newark	07103	(973) 679-7709
Clinical Care Provider Location: Dental	Jewish Renaissance Medical Center - George Washington Carver	333 Clinton Pl	Newark	07112	(973) 679-7709
Clinical Care Provider Location: Dental	Jewish Renaissance Medical Center - Malcolm X Shabazz High School	80 Johnson Ave	Newark	07108	(973) 679-7709
Clinical Care Provider Location: Dental	Jewish Renaissance Medical Center - Park Elementary School	120 Manchester Place	Newark	07104	(973) 679-7709

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Clinical Care Provider Location: Dental	Jewish Renaissance Medical Center	21 Quitman St	Newark	07103	(973) 679-7709
Clinical Care Provider Location: Dental	Mountainside Hospital Dental Clinic	1 Bay Avenue	Montclair	07042	(973) 429-6887
Clinical Care Provider Location: Dental	Newark Beth Israel Medical Center	201 Lyons Ave	Newark	07112	(973) 926-7338
Clinical Care Provider Location: Dental	Newark Community Health Centers, Inc.	444 William Street	East Orange	07107	(973) 483-1300
Clinical Care Provider Location: Dental	Newark Community Health Centers, Inc.	1150 Springfield Avenue	Irvington	07111	(973) 399-6292
Clinical Care Provider Location: Dental	Newark Community Health Centers, Inc.	741 Broadway	Newark	07104	(973) 483-1300
Clinical Care Provider Location: Dental	Newark Community Health Centers, Inc.	101 Ludlow Street	Newark	07104	(973) 565-0355
Clinical Care Provider Location: Dental	Newark Department Of Health & Human Services	110 Williams Street, Rm 111	Newark	07102	(973) 733-7613
Clinical Care Provider Location: Dental	Rutgers - New Jersey Dental School	110 Bergen Street	Newark	07103	(973) 972-3418
Clinical Care Provider Location: Dental	Rutgers - University Hospital	150 Bergen Street	Newark	07103	(973) 972-5026
Clinical Care Provider Location: Dental	UMDNJ - New Jersey Dental School	110 Bergen St	Newark	07103	(973) 972-4621
Clinical Care Provider Location: Dental	UMDNJ - University Hospital	150 Bergen St	Newark	07104	(973) 972-3418
Communicable Disease Services: TB Testing Center	Bloomfield Dept Of Health & Human Services	One Municipal Plaza - Rm 111	Bloomfield	07003	(973) 680-4024
Communicable Disease Services: TB Testing Center	City Of Orange Township	29 North Day Street	Orange	70850	(973) 266-4071
Communicable Disease Services: TB Testing Center	East Orange Health Department	143 New Street	East Orange	07017	(973) 266-5480
Communicable Disease Services: TB Testing Center	Essex County Health Dept	115 Clifton Avenue-3rd Floor	Newark	07104	(973) 497-9401
Communicable Disease Services: TB Testing Center	Essex Regional Health Commission	204 Hillside Avenue	Livingston	07039	(973) 251-2059
Communicable Disease Services: TB Testing Center	Irvington Health Department	Municipal Building 1 Civic Square	Irvington	07111	(973) 399-6634

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Communicable Disease Services: TB Testing Center	Livingston Health Dept/Millburn Health Dept	204 Hillside Avenue	Livingston	07039	(973) 535-7961
Communicable Disease Services: TB Testing Center	Maplewood Health Department	574 Valley Street	Maplewood	07040	(973) 762-8120
Communicable Disease Services: TB Testing Center	Montclair Health Department	205 Claremont Avenue - 3rd Floor	Montclair	07042	(973) 509-4970
Communicable Disease Services: TB Testing Center	Newark Department Of Health & Community Wellness	110 William Street - Suite 200	Newark	07102	(973) 733-7592
Communicable Disease Services: TB Testing Center	Twp Of So Orange / Twp Of So Orange Village	Village Hall - 101 South Orange Ave	South Orange	07079	(973) 378-7715
Communicable Disease Services: TB Testing Center	West Caldwell Health Department	Boro Hall - 30 Clinton Road	West Caldwell	07006	(973) 226-2303
Communicable Disease Services: TB Testing Center	West Orange Health Department	Municipal Building - 66 Main Street	West Orange	07052	(973) 325-4124
Comprehensive Personal Care Home	Green Hill	103 Pleasant Valley Way	West Orange	07052	(973) 731-2300
Comprehensive Personal Care Home	House Of The Holy Comforter Canterbury Village	33 Mount Pleasant Avenue	West Orange	07052	(973) 736-1194
Comprehensive Personal Care Home	Roseville Manor	285 Roseville Avenue	Newark	07107	(973) 481-2200
Comprehensive Rehabilitation Hospital	Kessler Institute For Rehabilitation - West Fac	1199 Pleasant Valley Way	West Orange	07052	(973) 731-3600
End Stage Renal Dialysis	Bio-Medical Applications Of Irvington	10 Camptown Road	Irvington	07111	(973) 399-1111
End Stage Renal Dialysis	Bio-Medical Applications Of New Jersey, Inc	91-101 Hartford Street	Newark	07103	(973) 624-7100
End Stage Renal Dialysis	Dialysis Center Of West Orange	101 Old Short Hills Road, Suite	West Orange	07052	(973) 736-8300
End Stage Renal Dialysis	East Orange Dialysis	14-20 Prospect Street	East Orange	07017	(973) 672-2025
End Stage Renal Dialysis	Fresenius Medical Care Ironbound	248 South Street	Newark	07114	(973) 344-0655
End Stage Renal Dialysis	Fresenius Medical Care LLC	348 East Northfield Road	Livingston	07039	(973) 535-0667
End Stage Renal Dialysis	Fresenius Medical Care North Montclair	114 Valley Road	Montclair	07042	(973) 744-2058
End Stage Renal Dialysis	Fresenius Medical Center North Newark	155 Berkley Avenue	Newark	07107	(908) 241-0453

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
End Stage Renal Dialysis	Kidney Life, LLC	571 Central Avenue	Newark	07107	(973) 484-4994
End Stage Renal Dialysis	Millburn Dialysis Center	25 East Willow Street, Suite 2	Millburn	07041	(973) 379-7309
End Stage Renal Dialysis	Parkside Dialysis	580 Frelinghuysen Avenue	Newark	07114	(973) 624-2226
End Stage Renal Dialysis	Renal Care Group Maplewood	2130 Milburn Avenue	Maplewood	07040	(973) 275-5499
End Stage Renal Dialysis	Renex Dialysis Clinic Of Bloomfield, Inc	206 Belleville Avenue	Bloomfield	07003	(973) 680-8100
End Stage Renal Dialysis	Renex Dialysis Clinic Of East Orange	110 South Grove Street	East Orange	07018	(973) 414-6100
End Stage Renal Dialysis	Renex Dialysis Clinic Of Orange	151 Central Avenue	Orange	07050	(973) 675-3400
End Stage Renal Dialysis	Saint Barnabas RCG Dialysis Center-Livingston	200 South Orange Avenue, Suite 117	Livingston	07039	(973) 322-7150
End Stage Renal Dialysis	West Orange Dialysis	375 Mt Pleasant Avenue, Suite 340	West Orange	07052	(973) 243-7069
Federally Qualified Health Centers	East Orange Primary Care Center	444 William Street	East Orange	07017	(973) 483-1300
Federally Qualified Health Centers	The Health Zone At George Washington Carver/Bruce	333 Clinton Place	Newark	07112	(973) 679-7709
Federally Qualified Health Centers	Jewish Renaissance Med Ctr At Central Hs	246 18th Avenue	Newark	07108	(973) 679-7709
Federally Qualified Health Centers	Jewish Renaissance Mc At 13th Avenue School	359 13th Avenue	Newark	07103	(973) 679-7709
Federally Qualified Health Centers	Jewish Renaissance Med Ctr Barringer School Based	90 Parker Street	Newark	07114	(973) 679-7709
Federally Qualified Health Centers	Jewish Renaissance Med Ctr Shabazz Health Clinic	80 Johnson Avenue	Newark	07108	(973) 679-7709
Federally Qualified Health Centers	Jewish Renaissance Med Ctr The Health Place	21 Quitman Street	Newark	07103	(973) 679-7709
Federally Qualified Health Centers	Newark Community Health Center - Orange Community	37 North Day Street	Orange	07050	(973) 483-1300
Federally Qualified Health Centers	Newark Community Health Center Inc	101 Ludlow Street	Newark	07114	(973) 483-1300
Federally Qualified Health Centers	Newark Community Health Centers, Inc	155 Jefferson Street	Newark	07105	(973) 483-1300

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Federally Qualified Health Centers	Newark Community Health Centers, Inc	741 Broadway	Newark	07104	(973) 483-1300
Federally Qualified Health Centers	Newark Community Health Centers, Inc	751 Broadway	Newark	07104	(973) 483-1300
Federally Qualified Health Centers	Newark Community Health Centers, Inc	1148-1150 Springfield Avenue	Irvington	07111	(973) 483-1300
Federally Qualified Health Centers	Newark Department Of Health & Community Wellness	110 William Street, Room 208	Newark	07102	(973) 733-5310
Federally Qualified Health Centers	Newark Department Of Health & Community Wellness	140 Bergen Street, E-1640	Newark	07103	(973) 733-5310
Federally Qualified Health Centers	Newark Department Of Health & Community Wellness	394 University Avenue	Newark	07102	(973) 733-5310
Federally Qualified Health Centers	North Ward Park Elementary School	120 Manchester Place	Newark	07104	(732) 679-7709
Federally Qualified Health Centers	Rutgers Nursing Faculty Practice	449 Broad Street	Newark	07102	(973) 732-6040
Federally Qualified Health Centers	Zufall Health Center Inc	95 Northfield Avenue	West Orange	07052	(973) 325-2266
General Acute Care Hospital	Clara Maass Medical Center	One Clara Maas Drive	Belleville	07109	(973) 450-2002
General Acute Care Hospital	East Orange General Hospital	300 Central Ave	East Orange	07018	(973) 266-4401
General Acute Care Hospital	Hackensack-UMC Mountainside	Bay And Highland Ave	Montclair	07042	(973) 429-6000
General Acute Care Hospital	Newark Beth Israel Medical Center	201 Lyons Ave	Newark	07112	(973) 926-7850
General Acute Care Hospital	Saint Barnabas Medical Center	94 Old Short Hills Road	Livingston	07039	(973) 322-5000
General Acute Care Hospital	Saint Michael's Medical Center	111 Central Avenue	Newark	07102	(973) 877-5350
General Acute Care Hospital	University Hospital	150 Bergen St	Newark	07103	(973) 972-5658
Home Health Agency	Barnabas Health Home Care And Hospice	80 Main Street, Suite 210	West Orange	07052	(973) 243-9666
Home Health Agency	C	201 Bloomfield Avenue Second Floor	Verona	07044	(973) 509-9870
Home Health Agency	Patient Care Medical Services, Inc	300 Executive Drive, Suite 175	West Orange	07052	(973) 243-6299

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Hospice Care Program	Barnabas Health Home Care & Hospice	80 Main Street, 2nd Floor, Suite 300	West Orange	07052	(855) 619-4448
Hospice Care Branch	Barnabas Health Home Care & Hospice	80 Main Street	West Orange	07052	(973) 412-2000
Hospice Care Program	Hospice Of New Jersey	400 Broadacres Drive, 1st Floor	Bloomfield	07003	(973) 893-0818
Hospice Care Program	Vitas Healthcare Corporation Atlantic	70 South Orange Avenue, Suite 210	Livingston	07039	(973) 994-4738
Hospital-Based, Off-Site Ambulatory Care Facility	Center For Wound Science & Healing At Columbus	495 North 13th Street	Newark	07107	(973) 479-2140
Hospital-Based, Off-Site Ambulatory Care Facility	CSH Outpatient Center Newark	182 Lyons Avenue	Newark	07112	(908) 233-3720
Hospital-Based, Off-Site Ambulatory Care Facility	East Orange Primary Care Center	444 William Street	East Orange	07017	(973) 483-1300
Hospital-Based, Off-Site Ambulatory Care Facility	East Orange Gen Hosp Hyperbaric Wound Care Center	310 Central Avenue	East Orange	07018	(973) 266-4401
Hospital-Based, Off-Site Ambulatory Care Facility	East Orange General Hosp	240 Central Avenue	East Orange	07018	(973) 266-4401
Hospital-Based, Off-Site Ambulatory Care Facility	East Orange General Hospital Family Health Center	240 Central Avenue	East Orange	07018	(973) 414-1871
Hospital-Based, Off-Site Ambulatory Care Facility	East Orange General Hospital Laboratory	310 Central Avenue	East Orange	07018	(973) 266-4401
Hospital-Based, Off-Site Ambulatory Care Facility	East Orange General Hospital-Hemodialysis	310 Central Avenue	East Orange	07018	(973) 266-4401
Hospital-Based, Off-Site Ambulatory Care Facility	Magnus Imaging Of Englewood Hospital & Med Ctr	946 N. Bloomfield Avenue	Glen Ridge	07028	(973) 743-9001
Hospital-Based, Off-Site Ambulatory Care Facility	Saint Barnabas Ambulatory Care Center	200 South Orange Avenue	Livingston	07039	(973) 322-7700
Hospital-Based, Off-Site Ambulatory Care Facility	Senior Health & Wellness Center James White Manor	516 Bergen Street	Newark	07108	(973) 622-2703

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Hospital-Based, Off-Site Ambulatory Care Facility	Sleep Center At Millburn	96 Millburn Avenue	Millburn	07041	(973) 322-5000
Hospital-Based, Off-Site Ambulatory Care Facility	St Joseph's Cardiovascular Center-Nutley	181 Franklin Avenue - Ste 301	Nutley	07110	(973) 667-5511
Hospital-Based, Off-Site Ambulatory Care Facility	University Hospital Ambulatory Care Center	140 Bergen Street	Newark	07102	(973) 972-5658
Hospital-Based, Off-Site Ambulatory Care Facility	Waymon C Lattimore Clinic	225 Warren Street	Newark	07103	(973) 972-5658
Hospitals Cancer Centers	Clara Maass Medical Center	1 Clara Maas Drive	Belleville	07109	(973) 450-2000
Hospitals Cancer Centers	East Orange Campus Of The NJ VA Health Care System (Veterans Only)	385 Tremont Avenue	East Orange	07018	(973) 676-1000
Hospitals Cancer Centers	East Orange General Hospital	300 Central Avenue	East Orange	07018	(973) 266-4401
Hospitals Cancer Centers	Newark Beth Israel Med Ctr	201 Lyons Avenue	Newark	07112	(973) 926-7850
Hospitals Cancer Centers	Saint Barnabas Medical Center	94 Old Short Hills Road	Livingston	07039	(973) 322-5000
Hospitals Cancer Centers	St Michaels Med Ctr	111 Central Avenue	Newark	07102	(973) 877-5350
Hospitals Cancer Centers	University Hospital	150 Bergen Street	Newark	07103	(973) 972-5658
Long Term Care Facility	Alaris Health At Cedar Grove	110 Grove Ave	Cedar Grove	07009	(973) 571-6600
Long Term Care Facility	Alaris Health At Essex	155 Fortieth Street	Irvington	07111	(973) 232-3100
Long Term Care Facility	Alaris Health At St. Mary's	135 South Center Street	Orange	07050	(973) 266-3000
Long Term Care Facility	Alaris Health At West Orange	5 Brook End Drive	West Orange	07052	(973) 324-3000
Long Term Care Facility	Arbor Glen Center	25 E Lindsley Road	Cedar Grove	07009	(973) 256-7220
Long Term Care Facility	Broadway House For Continuing Care	298 Broadway	Newark	07104	(973) 268-9797
Long Term Care Facility	Brookhaven Health Care Center	120 Park End Place	East Orange	07018	(973) 676-6221
Long Term Care Facility	Care One At Livingston	68 Passaic Avenue	Livingston	07039	(973) 758-9000
Long Term Care Facility	Clara Maass Transitional Care Unit	One Clara Maass Drive	Belleville	07109	(973) 450-2963

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Long Term Care Facility	Daughters Of Israel Pleasant Valley Home	1155 Pleasant Valley Way	West Orange	07052	(973) 731-5100
Long Term Care Facility	Forest Hill Healthcare Center	497 Mt Prospect Ave	Newark	07104	(973) 482-5000
Long Term Care Facility	Gates Manor	111-115 Gates Avenue	Montclair	07042	(973) 746-4616
Long Term Care Facility	Green Hill	103 Pleasant Valley Way	West Orange	07052	(973) 731-2300
Long Term Care Facility	Hackensack-UMC Mountainside	One Bay Ave	Montclair	07042	(973) 429-6949
Long Term Care Facility	Inglemoor Rehabilitation And Care Center Of Livingston	311 S Livingston Ave	Livingston	07039	(973) 994-0221
Long Term Care Facility	Job Haines Home For Aged People	250 Bloomfield Ave	Bloomfield	07003	(973) 743-0792
Long Term Care Facility	Little Nursing Home	71 Christopher Street	Montclair	07042	(973) 744-5518
Long Term Care Facility	Lutheran Social Ministries At Crane's Mill	459 Passaic Avenue	West Caldwell	07006	(973) 276-3018
Long Term Care Facility	New Community Extended Care Facility	266 S Orange Ave	Newark	07103	(973) 624-2020
Long Term Care Facility	New Grove Manor	101 North Grove Street	East Orange	07017	(973) 672-1700
Long Term Care Facility	New Vista Nursing And Rehabilitation Center	300 Broadway	Newark	07104	(973) 484-4222
Long Term Care Facility	Park Crescent Healthcare & Rehabilitation Center	480 Parkway Drive	East Orange	07017	(973) 674-2700
Long Term Care Facility	Sinai Post-Acute Nursing And Rehab Center	65 Jay Street	Newark	07103	(973) 483-6800
Long Term Care Facility	St. Catherine Of Siena	7 Ryerson Avenue	Caldwell	07006	(973) 226-1577
Long Term Care Facility	St. Joseph's Healthcare And Rehab Center	315 East Lindsley Road	Cedar Grove	07009	(973) 754-4800
Long Term Care Facility	Stratford Manor Rehabilitation And Care Center	787 Northfield Ave	West Orange	07052	(973) 731-4500
Long Term Care Facility	Summit Ridge Center		West Orange	07052	(973) 736-2000
Long Term Care Facility	The Canterbury At Cedar Grove Care And Rehabilitation	398 Pompton Avenue	Cedar Grove	07009	(973) 239-7600
Long Term Care Facility	Van Dyke Manor Of Montclair	42 North Mountain Ave	Montclair	07042	(973) 783-9400
Long Term Care Facility	Waterview Center	536 Ridge Road	Cedar Grove	07009	(973) 239-9300

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
Long Term Care Facility	West Caldwell Care Center	165 Fairfield Ave	West Caldwell	07006	(973) 226-1100
Long Term Care Facility	White House Healthcare & Rehabilitation Center	560 Berkeley Avenue	Orange	07050	(973) 672-6500
Long Term Care Facility	Windsor Gardens Care Center	140 Park Ave	East Orange	07017	(973) 677-1500
Mammography Centers	Barnabas Health Ambulatory Care Center	94 Old Short Hills Road	Livingston	07039	(973) 322-7807
Mammography Centers	Clara Maass Medical Center	1 Clara Maass Drive	Belleville	07109	(973) 450-2031
Mammography Centers	Diagnostic Imaging Of Northfield	772 Northfield Avenue	West Orange	07052	(973) 325-0002
Mammography Centers	East Orange General Hospital	300 Central Avenue	East Orange	07019	(973) 266-4418
Mammography Centers	Frank Aguirre, Md	195 Lafayette Street	Newark	07105	(973) 465-3044
Mammography Centers	Hackensack UMC - Mountainside	One Bay Avenue - Radiology Dept	Montclair	07042	(973) 429-6105
Mammography Centers	Magnetic Resonance Of New Jersey	410 Centre Street	Nutley	07110	(973) 661-2000
Mammography Centers	Millburn Medical Imaging, Pa	2130 Millburn Avenue, Ste A8	Maplewood	07040	(973) 912-0404
Mammography Centers	Montclair Breast Center	37 North Fullerton Ave	Montclair	07042	(973) 509-1818
Mammography Centers	Montclair Radiological Associates	1140 Bloomfield Avenue	West Caldwell	07006	(973) 439-9729
Mammography Centers	Montclair Radiology Associates, PA	116 Park Street	Montclair	07042	(973) 746-2525
Mammography Centers	Montclair Radiology Associates, PA	271 Grove Avenue - Building A	Verona	07044	(973) 439-9729
Mammography Centers	Montclair Radiology Associates, Pa	20 High Street	Nutley	07110	(973) 284-1881
Mammography Centers	Newark Beth Israel Med Ctr	201 Lyons Avenue	Essex	07112	(973) 926-7695
Mammography Centers	Progressive Imaging Center	36 Newark Avenue Ste, 100	Belleville	07109	(973) 844-4169
Mammography Centers	St Michaels Inc Sub Cath Health E	111 Central Avenue	Newark	07102	(973) 877-5000
Mammography Centers	University Hospital-Ctr For Breast Imaging	205 So Orange Avenue, Ste 1200	Newark	07103	(973) 972-5193
Mammography Centers	Woman's Healthcare Imaging Group	1896 Morris Avenue	Union	07083	(908) 964-0004
Maternal And Child Health Consortium	Partnership For Maternal & Child	50 Park Place, Suite 700	Newark	07102	(973) 268-2280

Provider Type	Provider Name	Street Address	Town	Zip Code	Phone
	Health Of Northern New Jersey				
Psychiatric Hospital	Essex County Hospital Center	204 Grove Avenue	Cedar Grove	07009	(973) 571-2801
Residential Dementia Care Home	Montclair Manor	403 Claremont Avenue	Montclair	07042	(973) 509-7363
Residential Health Care	Green Hill	103 Pleasant Valley Way	West Orange	07052	(973) 731-2300
Special Hospital	Columbus Hospital LTACH	495 North 13th Street	Newark	07107	(973) 587-7712
Surgical Practice	Diamond Institute Of Infertility & Menopause	89 Millburn Avenue	Millburn	07041	(973) 761-5600
Surgical Practice	Essex Surgical Arts Surgery Center	727 Joralemon Street	Belleville	07109	(973) 450-1600
Surgical Practice	Essex Surgical, LLC	776 Northfield Avenue	West Orange	07052	(973) 324-2300
Surgical Practice	Garden State Surgery Center	29 Park Street	Montclair	07042	(973) 509-2000
Surgical Practice	Glen Ridge Surgi Center	230 Sherman Avenue	Glen Ridge	07028	(973) 783-2626
Surgical Practice	Ironbound Endo-Surgical Center	24-28 Merchant Street	Newark	07105	(973) 344-5883
Surgical Practice	James F Mc Guckin Md Of NJ Pa	347 Mount Pleasant Avenue, Suite 100	West Orange	07052	(973) 325-0042
Surgical Practice	New Jersey Urology	1515 Broad Street, Suite 8140	Bloomfield	07003	(973) 873-7000
Surgical Practice	New Jersey Vein & Cosmetic Sur	741 Northfield Ave, Suite 105	West Orange	07052	(732) 243-9729
Surgical Practice	North Fullerton Surgery Center	37 North Fullerton Avenue	Montclair	07042	(973) 233-0433
Surgical Practice	Northern NJ Eye Institute	71 Second Street	South Orange	07079	(973) 763-2203
Surgical Practice	Northfield Surgical Center	741 Northfield Avenue	West Orange	07052	(201) 243-0990
Surgical Practice	Paul J Lo Verme, Md	825 Bloomfield Avenue	Verona	07044	(973) 857-9499
Surgical Practice	Urology Group Of New Jersey	375 Mt Pleasant Avenue, Suite	West Orange	07052	(973) 323-1320

APPENDIX E: DISCHARGES AND POPULATION 18-64 FOR AMBULATORY CARE SENSITIVE CONDITIONS

ACSC Discharges from NJ Hospitals	Total ACS Discharges	ANGINA	ASTHMA	BACTERIAL PNEUMONIA	CELLULITIS	CONGESTIVE HEART FAILURE	CONVULSION	COPD	DEHYDRATION	DENTAL CONDITIONS	DIABETES	ENT
ALL RACES												
Statewide	55,565	603	3,780	6,170	6,230	5,260	963	6,355	2,923	761	7,624	533
NBI PSA	4,020	48	358	383	233	585	65	507	172	36	581	31
WHITE												
Statewide	27,668	276	1,289	3,316	4,150	2,014	528	3,729	1,469	379	3,271	237
NBI PSA	182	2	5	17	22	20	5	43	6	2	23	
BLACK												
Statewide	15,535	160	1,363	1,578	892	2,180	242	1,792	740	186	2,603	134
NBI PSA	3,401	39	310	329	168	522	48	440	139	31	492	29

ACSC Discharges from NJ Hospitals	Total ACS Discharges	GASTRO-INTESTINAL OBSTRUCTION	GRAND MAL STATUS/OTHER EPILEPTIC CONVULSION	HYPERTENSION	HYPOGLYCEMIA	IMMUNIZATION RELATED PREVENTABLE	KIDNEY/URINARY INFECTION	NUTRITION DEFICIENCIES (tl 12/14 DSCHG)	OTHER TUBERCULOSIS	PELVIC INFLAMMATORY DISEASE	PULMONARY TUBERCULOSIS	SKIN GRAFTS W CELLULITIS
ALL RACES												
Statewide	55,565	1,936	4,534	994	60	8	4,164	2,068	33	359	73	134
NBI PSA	4,020	105	362	104	6		193	183	5	41	7	15
WHITE												
Statewide	27,668	969	2,226	346	25	3	2,051	1,203	4	110	6	67
NBI PSA	182	4	13	2			6	8		3		1
BLACK												
Statewide	15,535	437	1,293	427	26	2	841	462	10	118	16	33
NBI PSA	3,401	91	307	98	6		157	148	4	30	4	9

Population Source: Claritas Inc via New Solutions

ACSC 2016 Discharge Rate per 1,000 population	Est 2016 Population 18-64	Total ACS Discharges	ANGINA	ASTHMA	BACTERIAL PNEUMONIA	CELLULITIS	CONGESTIVE HEART FAILURE	CONVULSION	COPD	DEHYDRATION	DENTAL CONDITIONS	DIABETES	ENT
ALL RACES													
Statewide	5,610,651	9,903	0.107	0.674	1.100	1.110	0.938	0.172	1.133	0.521	0.136	1.359	0.095
NBI PSA	183,015	21,965	0.262	1.956	2.093	1.273	3.196	0.355	2.770	0.940	0.197	3.175	0.169
Variance from Statewide		12,062	0.155	1.282	0.993	0.163	2.259	0.184	1.638	0.419	0.061	1.816	0.074
WHITE													
Statewide	3,657,780	7,564	0.075	0.352	0.907	1.135	0.551	0.144	1.019	0.402	0.104	0.894	0.065
NBI PSA	20,338	8,949	0.098	0.246	0.836	1.082	0.983	0.246	2.114	0.295	0.098	1.131	0.000
Variance from Statewide		1,385	0.023	(0.107)	(0.071)	(0.053)	0.433	0.101	1.095	(0.107)	(0.005)	0.237	(0.065)
BLACK													
Statewide	783,378	19,831	0.204	1.740	2.014	1.139	2.783	0.309	2.288	0.945	0.237	3.323	0.171
NBI PSA	140,399	24,224	0.278	2.208	2.343	1.197	3.718	0.342	3.134	0.990	0.221	3.504	0.207
Variance from Statewide		4,393	0.074	0.468	0.329	0.058	0.935	0.033	0.846	0.045	(0.017)	0.182	0.036
Variance Black from White													
Statewide		12.27	0.13	1.39	1.11	0.00	2.23	0.16	1.27	0.54	0.13	2.43	0.11
PSA		15.28	0.18	1.96	1.51	0.11	2.73	0.10	1.02	0.70	0.12	2.37	0.21
Est Admissions Statewide		9609.41	100.89	1086.94	867.82	3.20	1748.67	128.92	993.37	425.39	104.83	1902.46	83.24
Est Admissions PSA		2144.60	25.19	275.48	211.64	16.13	383.93	13.48	143.16	97.58	17.19	333.22	29.00

ACSC 2016 Discharge Rate per 1,000 population	Est 2016 Population 18-64	Total ACS Discharges	GASTRO-INTESTINAL OBSTRUCTION	GRAND MAL STATUS/OTHER EPILEPTIC CONVULSION	HYPERTENSION	HYPOGLYCEMIA	IMMUNIZATION RELATED PREVENTABLE	KIDNEY/URINARY INFECTION	NUTRITION DEFICIENCIES (tl 12/14 DSCHG)	OTHER TUBERCULOSIS	PELVIC INFLAMMATORY DISEASE	PULMONARY TUBERCULOSIS	SKIN GRAFTS W CELLULITIS
ALL RACES													
Statewide	5,610,651	9,903	0.345	0.808	0.177	0.011	0.001	0.742	0.369	0.006	0.064	0.013	0.024
NBI PSA	183,015	21,965	0.574	1.978	0.568	0.033	0.000	1.055	1.000	0.027	0.224	0.038	0.082
Variance from Statewide		12,062	0.229	1.170	0.391	0.022	(0.001)	0.312	0.631	0.021	0.160	0.025	0.058
WHITE													
Statewide	3,657,780	7,564	0.265	0.609	0.095	0.007	0.001	0.561	0.329	0.001	0.030	0.002	0.018
NBI PSA	20,338	8,949	0.197	0.639	0.098	0.000	0.000	0.295	0.393	0.000	0.148	0.000	0.049
Variance from Statewide		1,385	(0.068)	0.031	0.004	(0.007)	(0.001)	(0.266)	0.064	(0.001)	0.117	(0.002)	0.031
BLACK													
Statewide	783,378	19,831	0.558	1.651	0.545	0.033	0.003	1.074	0.590	0.013	0.151	0.020	0.042
NBI PSA	140,399	24,224	0.648	2.187	0.698	0.043	0.000	1.118	1.054	0.028	0.214	0.028	0.064
Variance from Statewide		4,393	0.090	0.536	0.153	0.010	(0.003)	0.045	0.464	0.016	0.063	0.008	0.022
Variance Black from White													
Statewide		12.27	0.29	1.04	0.45	0.03	0.00	0.51	0.26	0.01	0.12	0.02	0.02
PSA		15.28	0.45	1.55	0.60	0.04	0.00	0.82	0.66	0.03	0.07	0.03	0.01
Est Admissions Statewide		9609.41	229.47	816.26	352.90	20.65	1.36	401.74	204.36	9.14	94.44	14.71	18.65
Est Admissions PSA		2144.60	63.39	217.26	84.19	6.00	0.00	115.58	92.77	4.00	9.29	4.00	2.10

Population Source: Claritas Inc via New Solutions