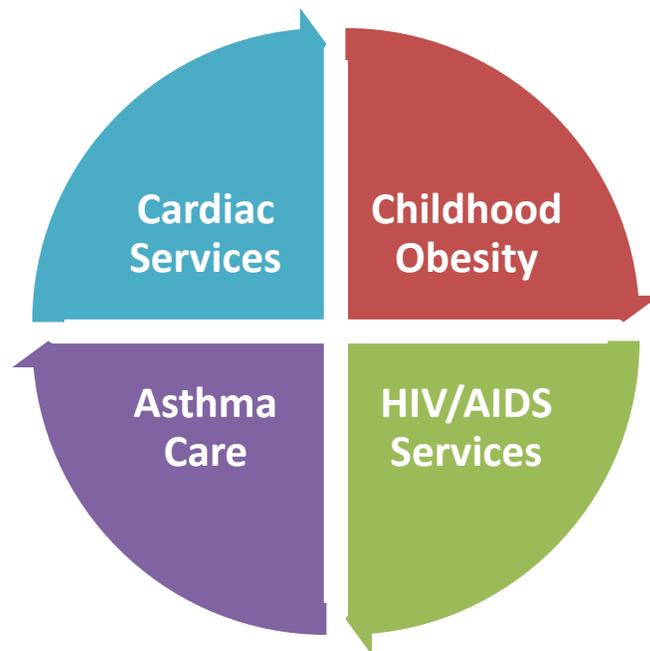


## St. Joseph's Healthcare System 2013 Community Health Needs Assessment Implementation Strategy Evaluation 2016

In 2013, St. Joseph's Healthcare System (System) conducted a Community Health Needs Assessment (CHNA) and created an implementation strategy plan. The System includes St. Joseph's Regional Medical Center (SJRMC), a 651-licensed bed acute tertiary care hospital, St. Joseph's Wayne Hospital (SJWH), a 229-licensed bed community hospital, St. Vincent's Nursing Home (SVNH) and eleven ambulatory care centers located throughout the community. For purposes of this evaluation, only SJRMC and SJWH are included in this implementation strategy assessment. The System CHNA process identified four priority areas outlined in **Figure 1** as the most important priority issues for SJWH to work on over the next three-years.

**Figure 1. SJWH Four Priority Areas**



With the assistance of Strategy Solutions, Inc., the Erie, PA-based consulting group engaged by PRC to assist with the System CHNA, an evaluation of the implementation strategies undertaken since the completion of the 2013 CHNA was conducted. Although the measurable population health outcomes for most county level indicators did not move substantially over the three year period, the partners are working individually and collaboratively to improve the health of the community. Overall population health improvements are expected over time.

## Childhood Obesity

Obesity amongst children and adolescents is an issue that must be addressed. There are serious adverse long-term health consequences associated with being overweight and obese in childhood including asthma, depression, diabetes, heart disease as well as psychosocial issues and concerns. Childhood obesity is an alarming disease that has reached epidemic proportions in today's America. Nearly 55% of elementary school children are overweight or obese. Obesity does not discriminate and is a rampant problem in children of all racial and ethnic groups.

According to New Jersey's October 2015 Physical Activity, Nutrition and Obesity Fact Sheet:

- 14.2% of New Jersey low-income children under the age of five are obese. Among the 44 states reporting on low-income childhood obesity, New Jersey has the highest prevalence.<sup>1</sup>
- Nearly one out of four (24.7%) New Jersey children aged 10-17 is overweight or obese.<sup>2</sup>
- 9% of New Jersey high school students are obese and 14% are overweight.<sup>3</sup>
- 19% of New Jersey high school students eat five or more servings of fruits and vegetables per day.<sup>4</sup>
- 12% of New Jersey high school students drink a can, bottle, or glass of soda at least once a day.<sup>5</sup>
- 49% of New Jersey high school students are physically active for at least 60 minutes per day, five times per week.<sup>6</sup>
- Just under one-third (28.5%) of New Jersey high school students watch television for three or more hours on an average school day.<sup>7</sup>
- More than one out of three (36.6%) high school students use a computer for non-school related purposes or play video/computer games for three or more hours on an average school day.<sup>8</sup>

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<sup>1</sup> Pediatric Nutrition Surveillance System (PedNSS) 2011 Pediatric Data Tables. Centers for Disease Control and Prevention. 1973-2012. Table 6: Comparison of Growth and Anemia Indicators. [http://www.cdc.gov/pednss/pednss\\_tables/pdf/national\\_table6.pdf](http://www.cdc.gov/pednss/pednss_tables/pdf/national_table6.pdf)

<sup>2</sup> National Survey of Children's Health. NSCH 2011-2012. Child and Adolescent Health measurement Initiative, Data Resource Center for Child and Adolescent Health. Available at: <http://www.nschdata.org>

<sup>3</sup> 2013 New Jersey Student Health Survey. New Jersey Department of Education. Available at <http://www.state.nj.us/education/students/yrbs/2013/full.pdf>

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

For the two years ending 2015, SJWH conducted annual evaluations of its CHNA implementation strategies. SJWH reported that they formed the Paterson Childhood Obesity Prevention Program Consortium, provided children's weight management education to school personnel and other healthcare professionals, developed a school-based wellness program, offered nutrition education/counseling to the community, and made available one-on-one sessions on a wide range of medical issues to children ages birth to 21 years of age. The medical issues ranged from obesity, failure to thrive, food allergies, hypertension, hyperlipidemia, eating disorders, and all GI disorders.

SJWH reported the following community outreach highlights:

- In conjunction with the System, SJWH formalized the formation of the Paterson Childhood Obesity Prevention Program Consortium ("Consortium") consisting of William Paterson University, New Jersey Community Development Corporation, and the Paterson Public Schools.
- Presented, "Parental perceptions as a risk factor of children's weight management concerns," to school educators and administrators, nurses, guidance counselors and other healthcare professionals during William Paterson University's Children's Health Issues Workshops.
- SJWH developed the Reaching Ultimate Student Health (R.U.S.H.) School-Based Wellness Program. In the 2014-2015 school year, 650 students were enrolled in school-based wellness program. Since program started in 2013, 1,000 students have been enrolled.
- St. Joseph's Outpatient Pediatric Nutrition Department conducted multiple clinics and programs throughout the System, as well as individual nutrition counseling for children and their parents. One-on-one sessions are specific for children birth to 21 years of age with medical conditions ranging from obesity, failure to thrive, food allergies, hypertension, hyperlipidemia, eating disorders, all GI disorders, etc.
- Nutrition services were expanded to the Pediatric Subspecialty Clinic in Wayne. In an interdisciplinary approach to care, a clinical dietitian is available to counsel patients and their parents during their appointment with the gastroenterologist.
- SJWH coordinated and acted as a liaison for Paterson Childhood Obesity Prevention Consortium. The group is composed of representatives from William Paterson University, NJ Community Development Corporation, Paterson Public Schools, Outreach Clinical Services, LLC, LIPOID, LLC, Easter Seals New Jersey, National Center on Health, Physical Activity and Disability, Passaic County Food Policy Council and United Way of Passaic.
- Michael Lamacchia, MD, Mary Ann Hozak, RN, MSN, Pamela Schaefer, RN, MSN and Tracy Amato, RN presented "Obesity: Innovative School-Based Strategies To Combat A Critical Epidemic" at St. Joseph's/William Paterson University Children's Health Series, "It's All About The Kids" on October 20, 2015. The seminar was attended by 45 school

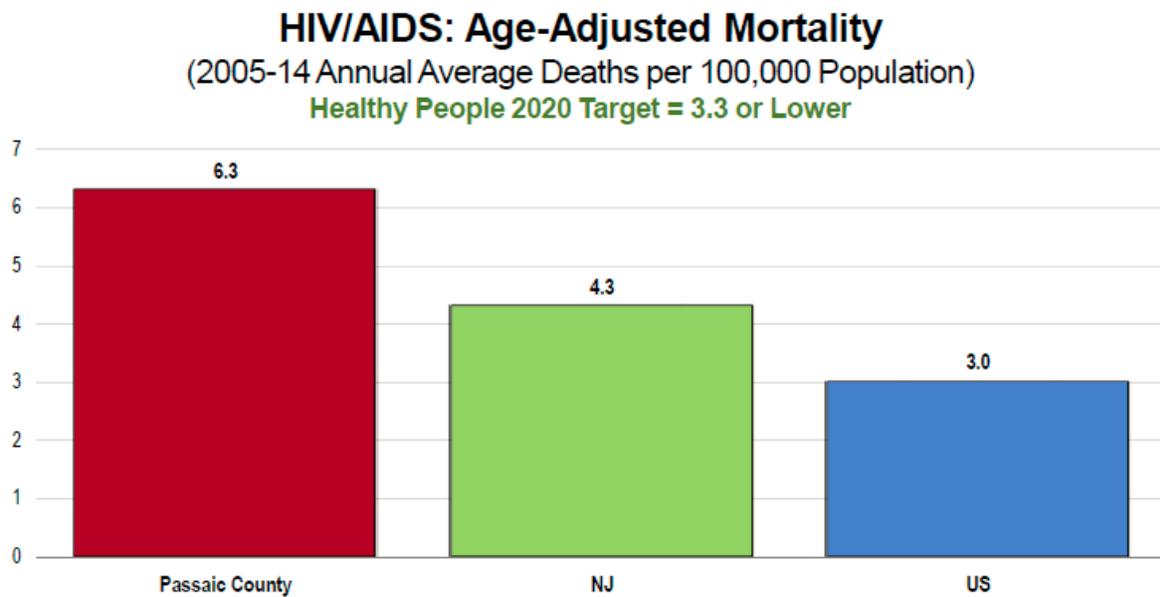
nurses, guidance counselors, teachers and other school staff from throughout Passaic, Bergen and Essex counties. Dr. Lamacchia discussed the definition of obesity and overweight in children, described the short and long-term implications for children's health and their life span and briefly outlined strategies for engaging both parents and children in healthy eating and exercise lifestyle.

### HIV/AIDS Services

As of 2013, Passaic County has 2,546 people living with HIV/AIDS and Bergen County has 1,562. Paterson has 41% (1,692) of the living cases of HIV/AIDS. The HIV epidemic in the United States continues to be a major public health crisis. An estimated 1.1 million Americans are living with HIV, and 1 in 5 people with HIV do not know they have it. HIV continues to spread, leading to about 56,000 new HIV infections each year. HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drug-using partners. More than 50% of new HIV infections occur as a result of the 21% of people who have HIV but do not know it. In the era of increasingly effective treatments for HIV, people with HIV are living longer, healthier, and more productive lives. Deaths from HIV infection have greatly declined in the United States since the 1990s. As the number of people living with HIV grows, it will be more important than ever to increase national HIV prevention and healthcare programs.

**Figure 2** shows the age-adjusted HIV/AIDS deaths between 2012 and 2014 for Passaic County, as reported in the System CHNA. The mortality rate of 6.3 deaths per 100,000 population for Passaic County is worse than the state (4.3) and the US (3.0) and fails to satisfy the Healthy People 2020 target (3.3 or lower).

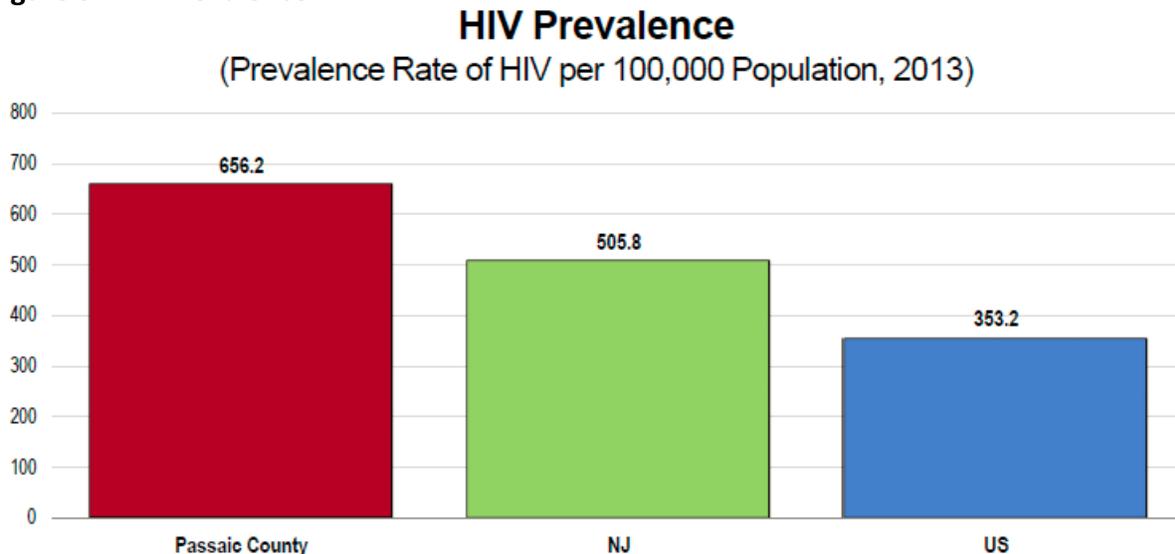
**Figure 2. HIV/AIDS: Age Adjusted Mortality**



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2016.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HIV-12]  
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

**Figure 3** shows the 2013 prevalence of HIV cases in Passaic County, as reported in the System CHNA. The Passaic County prevalence of HIC cases is 656.2 per 100,000 population, which is much higher than the state (505.8) and the nation (353.2).

**Figure 3. HIV Prevalence**



Sources: • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
• Retrieved June 2016 from Community Commons at <http://www.chna.org>.

Notes: • This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

Both SJRMC and SJWH reported for the two years ending 2015, the hospitals offered comprehensive care management services, including rapid testing and screenings. SJRMC also conducted two grand rounds conferences covering topics associated with HIV/AIDS.

SJRMC and SJWH jointly reported the following community outreach highlights:

- Both SJRMC and SJWH address this community need by offering comprehensive care management services, which includes medical, psychosocial and case management services to individuals diagnosed with HIV. Additionally, rapid testing to target those individuals who identify with at-risk profiles.
  - 1,204 patients were treated over 8,260 visits in 2014 and 1,225 unduplicated patients were treated over 6,104 visits in 2015
  - St. Joseph's conducted 4,123 screenings in 2014 and 3,456 screenings for HIV in 2015
- In 2015, the System conducted two grand rounds conferences covering topics associated with HIV and AIDS. Grand Rounds are educational sessions geared toward medical professionals.
- May 12, 2015, Karin Nielsen-Saines, MD, Attending Physician at UCLA Mattel Children's Hospital presented, "Treatment as Prevention Works for Babies Too: Advances in the Management of Perinatal HIV" to 63 physicians, with total audience of 81 individuals.
- June 10, 2015, Surya Seshan, MD, Chief of Renal Pathology, New York Presbyterian Hospital Cornell Center, NY, NY presented, "Monthly Renal Biopsy Conference: 59 year

old male with HIV Nephrotic Syndrome” to 24 physicians, with a total audience of 31 individuals.

## Asthma Care

To address the significant health need of asthma care, St. Joseph's has developed a robust asthma education and outreach program.

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives.

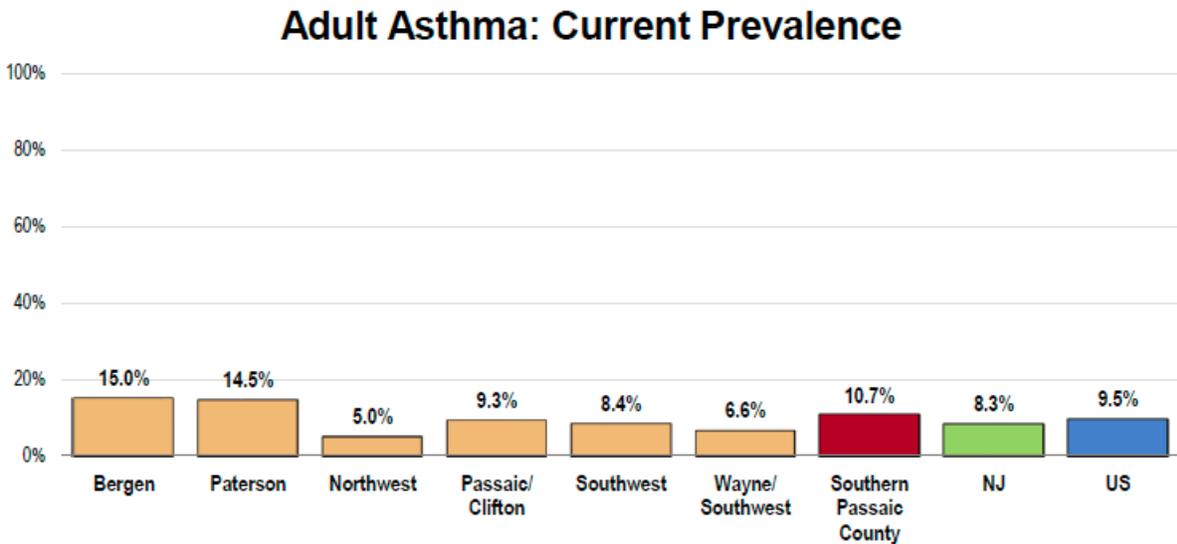
The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s. The causes of asthma are an active area of research and involve both genetic and environmental factors. Risk factors for asthma currently being investigated include:

- Having a parent with asthma
- Sensitization to irritants and allergens
- Respiratory infections in childhood
- Overweight Asthma affects people of every race, sex, and age.

However, significant disparities in asthma morbidity and mortality exist, in particular for low-income and minority populations. Populations with higher rates of asthma include: children; women (among adults) and boys (among children); African Americans; Puerto Ricans; people living in the Northeast United States; people living below the Federal poverty level; and employees with certain exposures in the workplace.

**Figure 4** from the 2016 PRC Community Health Survey shows that 10.7% of Southern Passaic County adults currently suffer from asthma. This percentage is higher than the state prevalence (8.3%) and comparable to the nation (9.5%). Asthma is unfavorably high in Paterson and Bergen communities.

**Figure 4. Adult Asthma: Current Prevalence**

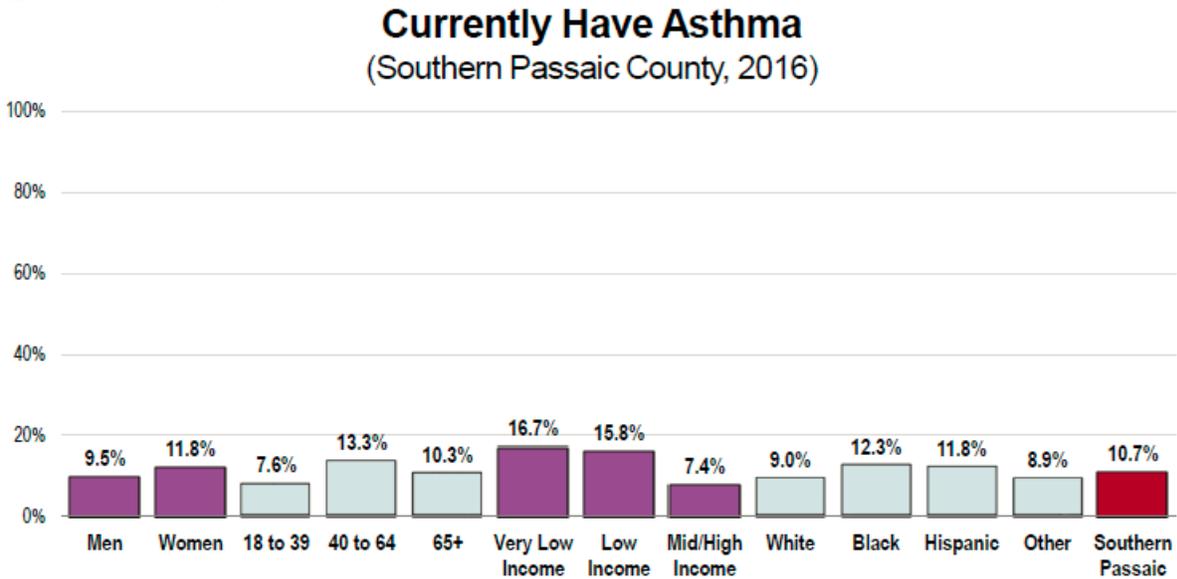


- Sources:
- 2016 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 156]
  - 2015 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2014 NJ data.

- Notes:
- Asked of all respondents.
  - Includes those who have ever been diagnosed with asthma, and who report that they still have asthma.

Per the 2016 PRC Community Health Survey, **Figure 5** below shows adults age 40 to 64 and those at lower incomes are more likely to suffer from asthma.

**Figure 5. Currently Have Asthma**



Sources: • 2016 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 156]

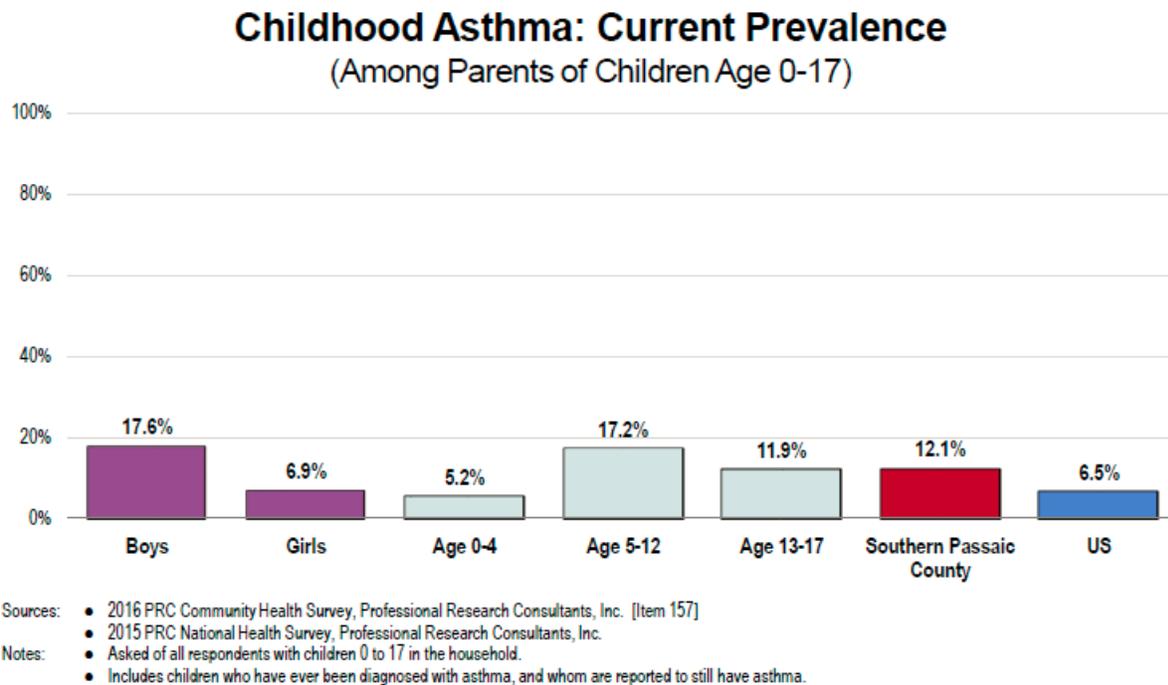
Notes: • Asked of all respondents.

• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes those households with incomes below 100% of the federal poverty level; "Low Income" includes those households with incomes at 100–199% of the federal poverty level; and "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

As seen in **Figure 6** below from the 2016 PRC Community Health Survey, Southern Passaic County children under the age of 18, 12.1% currently have asthma, which is higher than the nation (6.5%). When looking at age and gender, the current prevalence of asthma is higher among boys (17.6%) and children age 5-12 (17.2%).

**Figure 6. Childhood Asthma: Current Prevalence**



Both SJRMC and SJWH jointly reported the following community outreach regarding asthma care:

- SJRMC and SJWH offered ongoing provider, patient, and community education sessions. Partnering with the Paterson School District, System practitioners conducted asthma education during the Paterson School 13 Health Fair.
- To optimize SJRMC and SJWH's asthma program, an asthma navigator and a pulmonary Advanced Practice Nurse were hired to focus on the care coordination of asthma patients and to implement programs within the community.
- In December 2015, the interdisciplinary asthma staff participated in an educational course to support the community in the Asthma Friendly School Program.
- Both SJRMC and SJWH initiated a smoking cessation program that was open to all members of the community.

SJWH reported the following community outreach regarding asthma care:

- Neil Nakra, MD, attending Pediatric Pulmonologist at SJWH presented on “Children and Asthma” to 40 school staff, mostly nurses, during a seminar entitled, “It’s All About the Kids,” held at William Peterson University in Wayne, NJ. Dr. Nakra described the presentation and symptoms of asthma, the management – both in school and at home – the treatment approach and management in the hospital and the various medications.
- Working with the System, SJWH supported the asthma education for some of the largest employers in Wayne. In 2014, SJWH staff provided asthma education during the health fairs conducted at BP and BAE Systems.
- To optimize St. Joseph’s asthma program, an asthma navigator and a pulmonary Advanced Practice Nurse were hired to focus on the care coordination of asthma patients and to implement programs within the community.
- The interdisciplinary asthma team participated in numerous health fairs throughout the year including:
  - The hospital’s asthma team provided information to 70 individuals at the annual BAE Corporate Health Fair in Wayne on May 20, 2015. Information provided included: information on asthma, including risks, triggers, and managing the disease.
  - St. Joseph's asthma team provided a wide range of information at the first corporate Health Fair, hosted by Haier America on June 10, 2015. 100 participants attended.
  - On October 17, 2015, Lavana Baldasare provided information on asthma, including risks, triggers, managing asthma at the Totowa Health Fair, hosted by the Totowa Health Department and the Library. The event was attended by 100 children, adults and older adults.
  - On November 5, 2015 staff from the hospital participated in the annual employee health Fair at BP in Wayne. Asthma information provided included disease management, triggers, and medication.

## Cardiac Services

Cardiac Services Heart Failure (HF) is the number one Medicare Diagnosis Related Group (DRG) across the United States. The disease is the primary reason for over 6.5 million hospital days per year. At St. Joseph’s, inpatient volume has increased incrementally from 773 cases in 2005, to approximately one thousand cases annually.

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today, accounting for more than \$500 billion in healthcare expenditures and related expenses in 2010 alone. Fortunately, they are also among

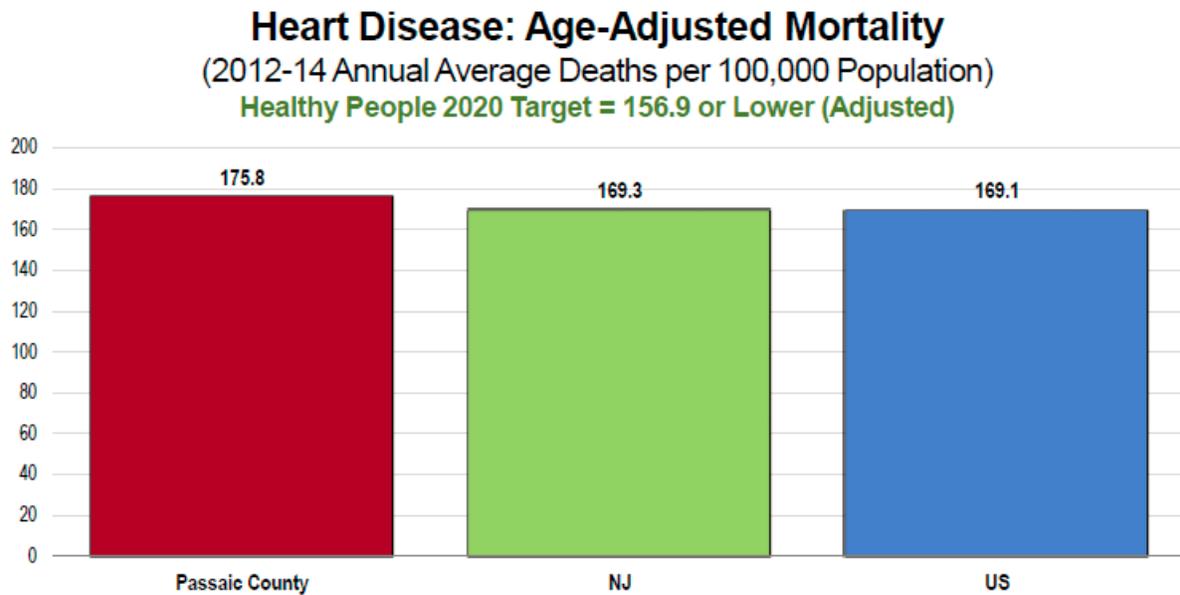
the most preventable. The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- Poor diet and physical inactivity
- Overweight and obesity

Disease does not occur in isolation, and cardiovascular disease is no exception. Cardiovascular health is significantly influenced by the physical, social, and political environment, including: maternal and child health; access to educational opportunities; availability of healthy foods, physical education, and extracurricular activities in schools; opportunities for physical activity, including access to safe and walkable communities; access to healthy foods; quality of working conditions and worksite health; availability of community support and resources; and access to affordable, quality healthcare.

**Figure 7** shows that between 2012 and 2014, there was an annual average age-adjusted heart disease mortality rate of 175.8 deaths per 100,000 in Passaic County, which is similar to the state (169.3) and nation (169.1) rates. The county rate fails to satisfy the Healthy People 2020 target of 156.9 or lower.

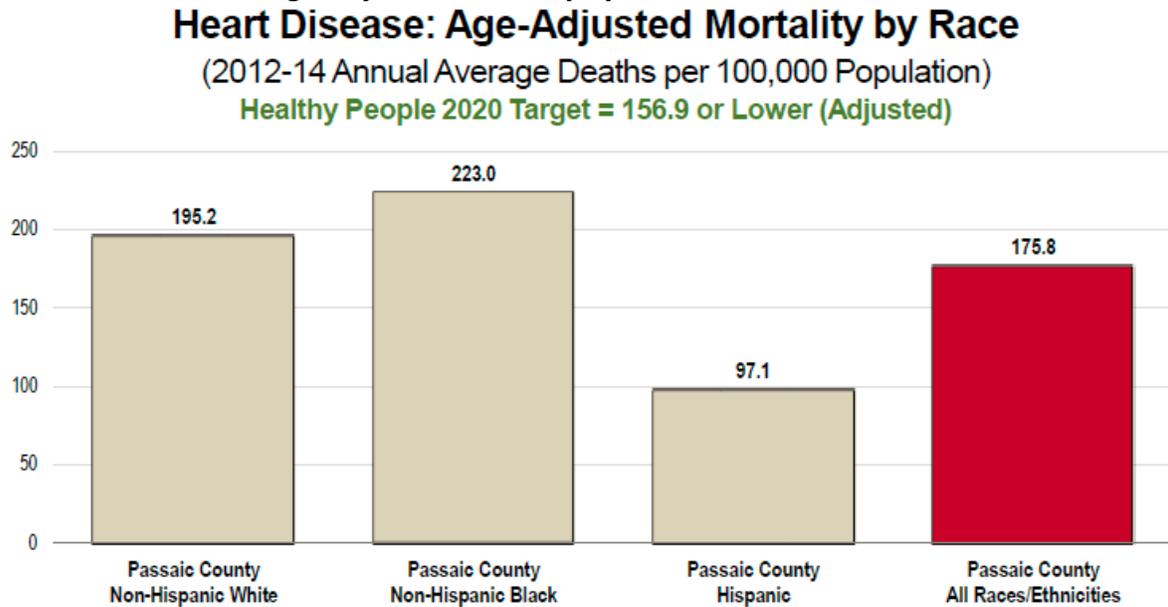
Figure 7. Heart Disease: Age-Adjusted Mortality



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2016.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

As seen in **Figure 8**, when looking at age-adjusted heart disease mortality rate by race, the mortality rate is higher among Whites and Blacks when compared with Hispanics in Passaic County.

**Figure 8. Heart Disease: Age-Adjusted Mortality by Race**



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted June 2016.

Notes: • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]

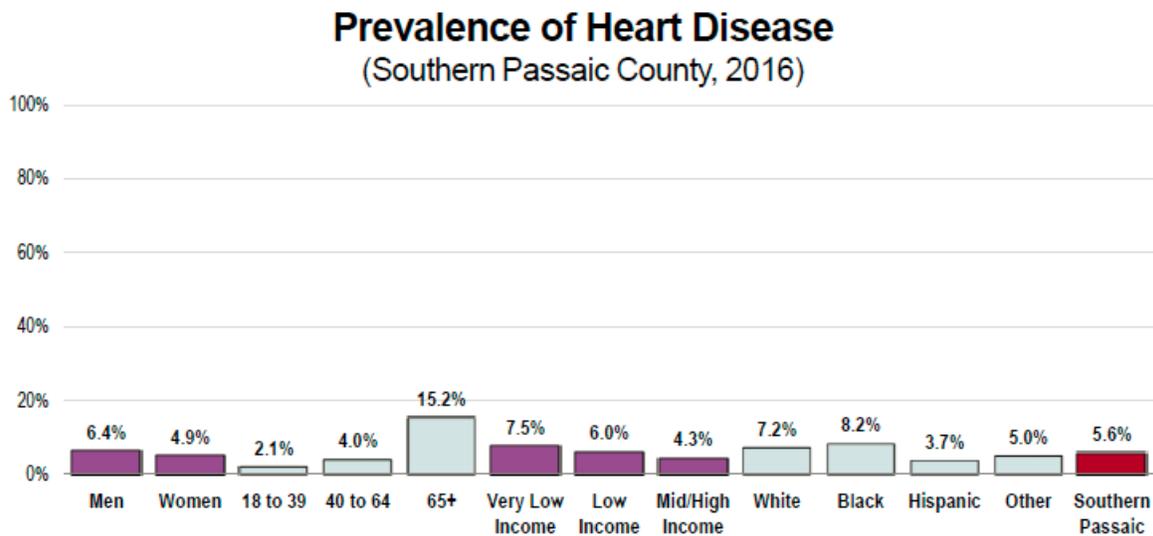
• Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

• The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

Per the 2016 PRC Community Health Survey, **Figure 9** shows the prevalence of heart Disease for Southern Passaic County. Seniors are much more likely to have been diagnosed with chronic heart disease, as are Whites and Blacks.

**Figure 9. Prevalence of Heart Disease**



Sources: • 2016 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]

Notes: • Asked of all respondents.  
• Includes diagnoses of heart attack, angina or coronary heart disease.  
• Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Very Low Income" includes those households with incomes below 100% of the federal poverty level; "Low Income" includes those households with incomes at 100–199% of the federal poverty level; and "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Both SJRMC and SJWH reported the following community outreach regarding cardiac services:

- SJRMC and SJWH identified and partnered with sub-acute facilities that maintain a standard of excellence in post-acute cardiac care with the goal of providing expert cardiology care and preventing hospital readmissions, while improving standardized heart failure care and health-related quality of life in patients with this diagnosis.
- Care maps for patients with CHF were established on medical units at SJRMC and SJWH. After staff education, these maps were implemented on units throughout the hospital.
- Clinical interdisciplinary groups were established to set goals and establish processes to decrease readmissions and improve quality measures.

SJWH reported the following regarding community outreach for cardiac services:

- Working collaboratively with our Visiting Nurse Association, SJWH offered care via telemedicine to our cardiac patients at home.
- Dr. Chirag Badami, attending cardiothoracic surgeon, and Ruthanne Braddock, Director of Nursing at SJWH, educated the community at the North Haledon Community Health Fair. Educational materials were distributed and participants had their blood pressure measured.

- Working collaboratively with our Visiting Nurse Association, St. Joseph's offers care via telemedicine to our cardiac patients at home.
- Chirag Badami, MD, Cardiothoracic Surgeon at SJRMC, presented to various community groups on 4/8/2015 and 11/18/15 on the topic of Heart Health. Dr. Badami described the incidence of heart disease mortality and the number of heart attacks that occur annually in the U.S. He discussed the modifiable and non-modifiable risk factors for heart disease and stressed the importance of reducing risk. He outlined various treatment approach and the diagnostic tests used to determine the amount and severity of heart disease. He showed pictures of the various surgical approaches and talked about the robotic and minimally invasive approaches available at the System.