



**North Jersey Health Collaborative**

health matters

# Community Health Needs Assessment

## Warren County



Warren County Health Department



Oxford, NJ 07863

(908) 475-7960

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2019

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## EXECUTIVE SUMMARY

Established in November 2013, the North Jersey Health Collaborative (NJHC) is an independent, self-governed 501(c)(3) organization with a diverse set of partners in five counties of New Jersey (Morris, Passaic, Sussex, Union & Warren) representing healthcare, public health, social services, education, local government, business and other community-based organizations.



Working together across sectors, the NJHC and its partners seek to establish a more coordinated, collective approach to community health improvement. Core functions of the NJHC include a shared process of community health needs assessment and health improvement planning to target factors that drive poor health, and the development of collaborative strategies and action plans designed to create communities where opportunities for health and well-being are available for all residents. This report is part of our continued commitment to collect, analyze, and share data to inform and modify the collective health improvement efforts of more than 100 partner organizations.

### **Key Objectives of this Report:**

- Describe the county landscape and socio-demographic characteristics, health status and disparities.
- Engage community partners and residents to identify gaps or unmet needs related to health and well-being.
- Assist the NJHC and community partners to identify needs and develop effective shared strategies and solutions with the greatest impact.

### **Warren County Highlights: Combining Community Perspective and Qualitative Data**

Building on our first shared 2015 community health needs assessment and the data available on our data portal ([www.njhealthmatters.org](http://www.njhealthmatters.org)), the 2019 assessment represents a shift from a focus on primarily individual health related issues and outcomes to one that includes the larger social determinants of health. Overall, Warren County has significant strengths and assets, but the rural landscape of the county poses its challenges to the health and wellbeing of residents. Despite the strengths and assets throughout the county, there are significant disparities from one community, or zip code, to another.



In 2018, the NJHC launched its first Community Voice Survey. With 604 participants from Warren County, this survey placed a larger emphasis on having our residents' perspectives shape our work. Some of the top issues identified by Warren County survey respondents include mental health care, employment, transit access, housing, and health insurance. The results of the Community Voice Survey can be found on the NJHC website.

Through our secondary data analysis, it was identified that some of Warren County's worst performing health indicators were age-adjusted death rate due to colorectal cancer, mothers who received early prenatal care, atrial fibrillation, depression, and chronic kidney disease in the Medicare population, pancreatic cancer incidence rates, and very preterm births. Several of the worst performing health indicators impact our senior population, making it essential to monitor these health issues as the county population continues to age, and the Medicare population continues to grow. Maternal and child health, particularly in Warren County, as well as mental health and substance use, continue to be of concern to public health professionals.

In addition to the aforementioned data sources, the Warren County Community Health Needs Assessment also incorporates hospital emergency room data. This data, from 2017, was initially compiled by the New Jersey Department of Health, and with the help of Atlantic Hospital System, Warren County specific data was provided for the Warren County Health Department. The emergency room data includes all visits to New Jersey emergency rooms by New Jersey residents. The hospital data is helpful to further identify general trends and areas of unmet need.

After discussion at the Warren County Community Health Improvement Coalition Planning & Strategy Session, NJHC partners prioritized the following health-related needs for the 2019 Community Health Improvement Plan:

- Access to Care
- Safe Communities
- Chronic Disease
- Substance Use
- Mental Health
- Economic Stability
- Transportation
- Nutrition & Physical Activity



## ACKNOWLEDGEMENTS

This edition of the NJHC Warren County Community Health Needs Assessment was developed in partnership with the Warren County Community Health Improvement Coalition partners (see appendix). The Committee includes public health and local government agencies, hospitals and health care providers, community-based organizations, in addition to other community stakeholders. The assessment process and facilitation of the Community Health Needs Assessment was led by the NJHC Regional Data Committee, under the shared governance of the NJHC Executive Committee and Board of Trustees (see appendix). We extend our thanks and appreciation to the numerous organizations that participated in this process.

### Members of the North Jersey Health Collaborative Data Committee:

Catherine Connelly, North Jersey Health Collaborative  
Don Dykstra, Atlantic Health System  
Shanice Johnson, Morris County Office of Health Management  
William Kernan, William Paterson University  
Lisa Lieberman, Montclair State University  
Annie McNair, Union County Office of Health Management  
Jodi Miciak, United Way of Northern New Jersey  
Sarah Perramant, Warren County Health Department  
Rajika Reed, St. Luke's University Health Network  
Courtney Sartain, Warren County Health Department  
Arlene Stoller, Morris County Office of Health Management  
John Volturo, Atlantic Health System  
Leigh Ann Von Hagen, Rutgers University/Voorhees Transportation  
Trevor Weigle, Mt. Olive Township Health Department

The Community Health Improvement Plan (CHIP) was developed from this assessment, and serves as our roadmap to improving the health of residents who live in northern New Jersey. The NJHC would like to thank everyone who participated in the development of the Community Health Needs Assessment and the Community Health Improvement Plan.



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## Chapter 1: ABOUT WARREN COUNTY

Nestled in the Northwest corner of New Jersey, Warren County is a predominately-rural county with beautiful outdoor spaces and farmland, charming small towns, and growing industry. The Board of Chosen Freeholders governs the county. Interstate routes 80 and 78 both cross the county, connecting citizens to neighboring counties including Morris and Hunterdon, as well as Pennsylvania and New York.

### Population Demographics

With a population of 105,779 residents and an area of about 357 square miles, the population density is markedly lower than the overall state population density.<sup>1</sup> The county’s three most populated towns include Phillipsburg (population 14,950), Hackettstown (population 9,724), and Washington Borough (population 6,461).<sup>2</sup> The rest of Warren County’s residents live in more suburban and rural communities.

While most Warren County residents are white, minority and ethnic populations continue to grow. The Hispanic population more than doubled, from 3.7% in 2000 to 9.5% in 2018.<sup>1</sup> Additionally, roughly 12% of Warren County households speak a language other than English at home.<sup>1</sup> Although cultural and language barriers continue to persist, Warren County service providers are trying to mitigate these barriers by hiring bilingual staff, translating their resource materials, and adding culturally relevant services.

As shown in the table, over 90% of Warren County residents over the age of 25 have at least a high school diploma, with almost 32% of residents having a bachelor’s degree or higher. While Warren County has a slightly higher percentage of people who have obtained a high school diploma or further education than New Jersey, the state has a higher percentage of people who have received a bachelor’s degree or higher than Warren County. According to the secondary data analysis, Warren County ranked highly as a health indicator

Educational Quick-Facts (2013-2017) <sup>1</sup>	Warren County	New Jersey
High School Graduate or Higher	90.8%	89.2%
Bachelor’s Degree or Higher	31.7%	38.1%
Number of Colleges or Universities	2	44

for people 25+ with a high school degree or higher, when compared to other New Jersey counties, as well as the state and nation overall. According to the Community Voice Survey, 92% of respondents indicated that there are good opportunities for people to get good education in Warren County.

<sup>1</sup> U.S. Census Bureau. (2018). *American Community Survey: State and County QuickFacts, New Jersey*. Retrieved from <https://www.census.gov/quickfacts/fact/table/warrencountynewjersey.ni,US/PST045217>

<sup>2</sup> U.S. Census Bureau. (2018). *American Community Survey: State and County QuickFacts, New Jersey*. Retrieved from <https://www.census.gov/quickfacts/fact/table/warrencountynewjersey.ni,US/PST045217>





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Socio-economic status and educational attainment are closely tied to individual-level health outcomes, but can also greatly impact the health of neighborhoods and larger communities. Research shows that socioeconomically disadvantaged individuals typically suffer from poorer health outcomes than their wealthier, more educated peers (Edwards, R. D. & Tuljapurkar, S., 2005<sup>3</sup>; Backlund, E. et al., 2007<sup>4</sup>). Recent data, from United Way, shows that about 7% of Warren County households are at the poverty level.<sup>4</sup> Additionally, the data shows that about 28% of Warren County households meet the United Way ALICE (Asset Limited, Income Constrained, Employed) criteria.<sup>4</sup> Parts of the county, which include Phillipsburg, Alpha, Belvidere, White Township and Mansfield Township, have a higher ALICE percentage.<sup>4</sup> The United Way ALICE Project is a nationwide effort to quantify and describe the number of households who are struggling financially.<sup>4</sup> Although individuals in these families are employed, they are still having trouble with financial independence and self-sufficiency. This phenomena is often

demonstrated by the “welfare cliff”.

When families are receiving enough assistance, often through SNAP (Supplemental Nutrition Assistance Program), also

Economic Quick-Facts (2013-2017) <sup>1</sup>		
	Warren County	New Jersey
<b>Employment Status</b>		
Employed	67.3%	65.5%
Unemployed	4.2%	4.2%
<b>Income &amp; Benefits</b>		
Median household income	\$75,500	\$76,475
Per Capita Income in Past 12 Months	\$37,001	\$39,069
Persons in Poverty	7.4%	10%
<i>Phillipsburg</i>	18.2%	
<i>Hackettstown</i>	14.2%	

formerly known as Food Stamps, and cash assistance from TANF (Temporary Assistance for Needy Families), families are barely receiving enough assistance to survive. When individuals in the family begin to work, and the public assistance benefits are cut due to the family no longer being eligible, typically due to their increased income, we see families’ financial situations decline. Each financial decision is made as a trade-off, perhaps paying for childcare so the adults can continue to work, instead of paying the electric or gas bill.

According to results from the Community Voice Survey, only 63% of respondents indicated that people made enough money to afford basic needs, like food, housing and transportation. In addition, only 50% of Community Voice Survey respondents declared that there are enough jobs, and that people who want a job can get one. As economic opportunity and industry continue to find their way to Warren County, growth does not come without a trade-off. Many residents of the county appreciate the open space and small communities, and do not want more industry, noises, or traffic in their town. That mentality, coupled with the Highlands Preservation Act, makes bolstering the economy difficult.

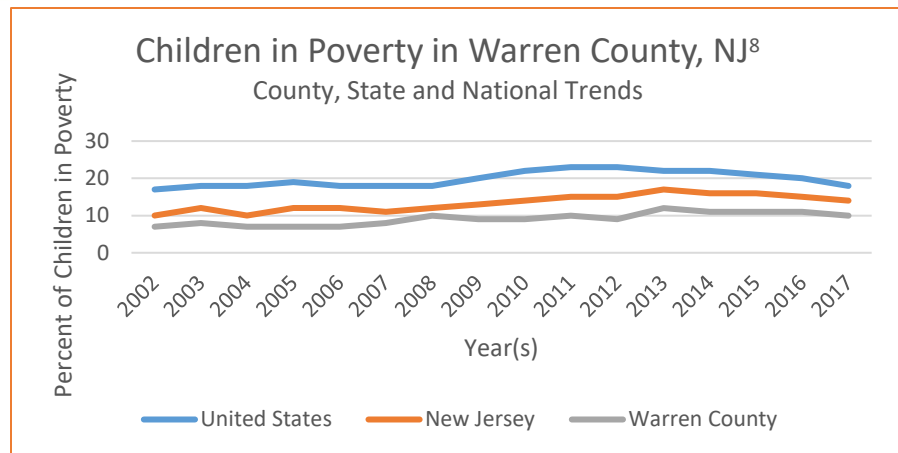
<sup>3</sup> Edwards, R. D., & Tuljapurkar, S. (2005). Inequality in life spans and a new perspective on mortality convergence across industrialized countries. *Population and Development Review*, 31, 645-675.

<sup>4</sup> Backlund, E, Rowe, G., Lynch, J., Wolfson, M. C., Kaplan, G. A., & Sorlie, P. D. (2007). Income inequality and mortality: A multilevel prospective study of 521,248 individuals in 50 US states. *International Journal of Epidemiology*, 36, 590-596.

<sup>4</sup> ALICE Project – New Jersey. (2019). Retrieved April 29, 2019, from <https://www.unitedforalice.org/new-jersey>



Economic development and financial stability are key determinants of overall wellbeing and health outcomes. As of early 2019, the unemployment rate in Warren County was 4.5%, which is slightly higher than the unemployment rate in New Jersey at 4.1%.<sup>5</sup> In 2017, the median



household income in Warren County was \$75,500, which is only slightly lower than the New Jersey median household income of \$76,475<sup>1</sup>. According to the secondary data analysis, Warren County ranks among the highest of New Jersey counties for per capita income, but negative disparities exist among American Indian/Alaskan Native, Asian, Black Non-Hispanic and other racial minorities. There are also more individuals living below the poverty level in two of the more urban sprawls of Warren County. In Phillipsburg the poverty rate is 18.2%, while in Hackettstown the poverty rate is 14.2%<sup>1</sup>. Both of those poverty rates are higher than the overall poverty rate of Warren County, which is 7.4% and exceed the poverty rate in New Jersey at 10%<sup>1</sup>. According to the secondary data analysis, Warren County ranks better than other New Jersey counties, as well as the state and nation overall in terms of families living below the poverty level, but negative disparities exist for families that identify as Black Non-Hispanic, Hispanic, in addition to other racial minorities.

Safe and affordable housing is a concern for Warren County residents. Warren County is home to low-income housing, but there is still a greater need. According to The Eviction Lab at Princeton University, Warren County experienced 1,331 eviction filings in 2016, while our neighboring counties, Sussex and Hunterdon, experienced 718 and 277 eviction filings, respectively.<sup>6</sup> Most low-income renting families spend more than half of their income on rent, while about 25% of families spend over 70% of their income on housing and utilities.<sup>6</sup> Only about 25% of families who qualify for affordable or low-income housing actually receive the services that they need.<sup>6</sup> With already limited income, it can be hard for families to remain up to date on bills.

Evictions in a Tri-County Area <sup>6</sup>	
County	Eviction Filings
Hunterdon County	277
Sussex County	718
Warren County	1,331

<sup>5</sup> Local Area Unemployment Statistics Map. (2019). Retrieved April 29, 2019, from <https://data.bls.gov/map/MapToolServlet>

<sup>6</sup> Eviction Lab. (2018). Eviction Map & Data. Retrieved April 29, 2019, from <https://evictionlab.org/map/#/2016?geography=counties&bounds=-76.29,40.379,-73.622,41.672&locations=34041,-74.986,40.81,34019,-74.912,40.567,34037,-74.69,41.14>

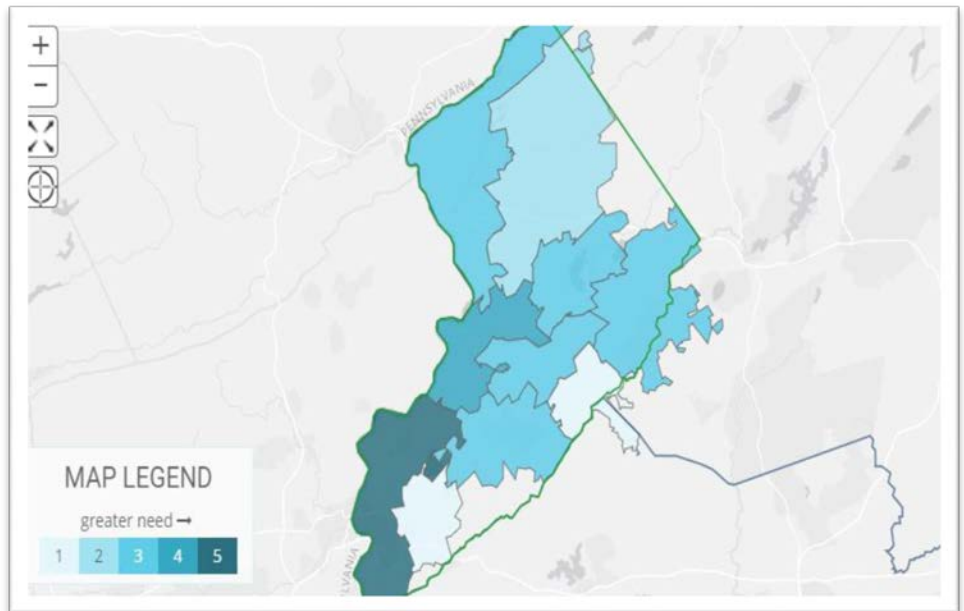




### Socio-Economic Profile

The SocioNeeds Index, created by Conduent Community Health Solutions, is a measure of socioeconomic need that is correlated with poor health outcomes. Factors that are included in the calculation of the SocioNeeds index score include education, employment and income. All zip codes, counties, and county equivalents in the United States are given an Index Value from 0 (low need)

to 100 (high need). According to the map legend, Port Murray and Stewartsville are ranked 1<sup>st</sup>, meaning the lowest need exists there, while Phillipsburg has the highest need within Warren County.





## Chapter 2:

# OUR ASSESSMENT PROCESS

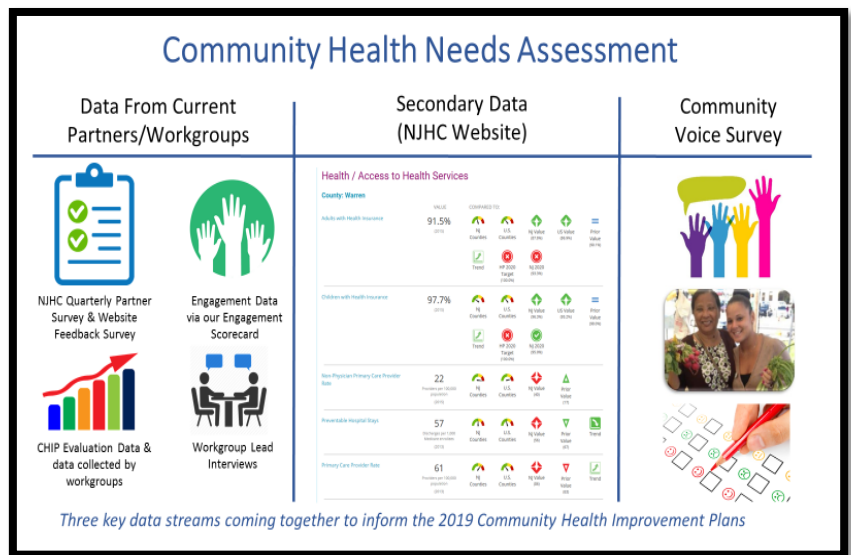
In this section, we describe our methods, collaborative process and data sources used to identify and prioritize the health-related needs of communities in Warren County. Our approach is founded on the principles of active partner participation and accountability, and community engagement.

## Warren County Community Health Improvement Coalition

This edition of the Warren County Community Health Improvement Plan was developed in partnership with the Warren County Community Health Improvement Coalition (WCCHIC). The Coalition includes a group of government agencies, local non-profit partners, hospitals and health care providers, and additional community stakeholders. Our collaborative process includes quarterly county committee meetings, countywide workgroups, and collective strategic planning efforts to ensure the health and wellbeing of all Warren County residents. In this second shared assessment of the North Jersey Health Collaborative, the Community Health Needs Assessment process brings together data from our first 2015 Community Health Improvement Plan, workgroups, secondary data from our NJ Health Matters website ([www.njhealthmatters.org](http://www.njhealthmatters.org)); and results of our first Community Voice Survey.

## Building on our First Assessment - Warren County Committee Work Groups

In addition to the standing WCCHIC quarterly meetings, other county-wide workgroups were established. These workgroups met regularly to work on specific health topics that were prioritized by the WCCHIC partners. The five workgroups include the Coalition for Healthy & Safe Communities, Interpersonal Violence Prevention Coalition, Sussex-Warren Chronic Disease Coalition, Obesity and Nutrition Workgroup, and the Access to Care Workgroup. The Coalition for Healthy & Safe Communities is focused on prevention, treatment, and recovery from substance use disorder in Warren County. The Interpersonal Violence Prevention Coalition has continued to work to mobilize community partners to collaborate on the prevention and intervention of domestic and sexual violence. The Sussex-Warren Chronic Disease Coalition is dedicated to the implementation of evidence and practice based policy, environment and system change interventions for chronic disease prevention





and control, with a focus on cancer. The Obesity and Nutrition Workgroup has worked to reduce obesity and chronic disease by improving the environment, systems and policies in Warren County to increase physical activity and the ability of residents to eat healthily. Finally, the Access to Care Workgroup has continued to improve access to care for populations in need by connecting residents with insurance coverage, as well as addressing barriers to primary care utilization throughout Warren County. These county-wide workgroups have continued to identify, prioritize and collaborate to address the health issues that are of concern to Warren County residents. The 2015 Community Health Needs Assessment, in addition to the Community Health Improvement Plan can be found on Warren County's website. Many of the community partner efforts that began with the 2015 assessment will continue on and will help fuel future collaborative initiatives.

### Secondary Data Analysis

As part of the community health needs assessment process, a secondary data analysis was conducted by the NJHC Regional Data Committee. This analysis ranked and scored more than 150 health indicators from our [www.njhealthmatters.org](http://www.njhealthmatters.org) website, which includes measurements of illness or disease, as well as behaviors and actions related to health. Scores were assigned to each indicator based on a comparison of the county to other New Jersey counties, whether state and national health targets have been met, and the directional trend of the indicator value over time. You can download the secondary data analysis spreadsheet from the NJHC website. Additionally, the secondary data analysis for Warren County is included in this report as an appendices.

This information was shared with the county partners at the April 2018 County Committee meetings to help inform the proposal of community health improvement strategies at the October Planning & Strategies meeting. Data was presented in four ways, worst performing indicators overall, worst health-performing indicators, worst traditional non-health related indicators (i.e., social, economic, environmental factors, etc.), presence of statistically significant negative disparities, and finally indicators that are trending in a negative direction from the overall value for each indicator.

Through our secondary data analysis, it was identified that some of Warren County's worst performing health indicators were age-adjusted death rate due to Colorectal Cancer, mothers who received early prenatal care, atrial fibrillation, depression, and chronic kidney disease in the Medicare population, pancreatic cancer incidence rates, and very preterm births. A significant portion of the worst performing health indicators impact our senior population. The data analysis spreadsheet also includes a column to identify whether or not any statistically significant disparities were found for specific races and ethnicities, gender, and age.

The NJHC partners are well aware that secondary data, especially at the county level, tells just one part of the story of health. To gain a better perspective, NJHC partners set out to combine both secondary and more localized primary data collection efforts in order to more effectively identify, analyze and strategize about issues important to the community and its stakeholders.



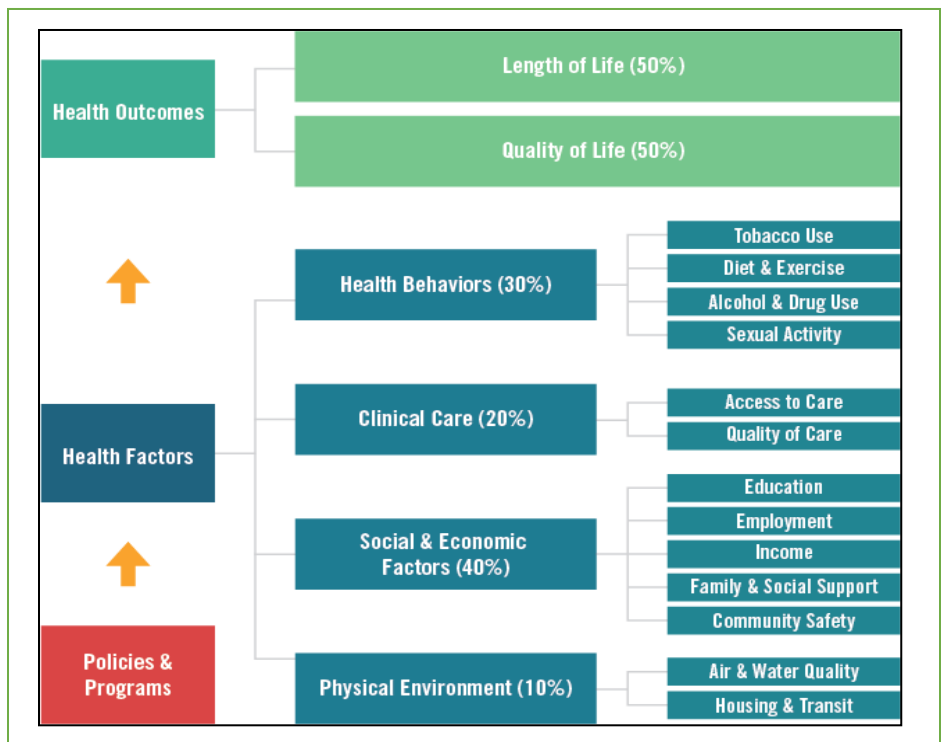
### Community Perspective: The Community Voice Survey

The *Community Voice Survey* was developed based on requests from NJHC partners who wanted more direct input from people who live and work in our communities. Allowing community members to share their perspective would help NJHC partners gain a better understanding of the strengths and health-related needs of our communities, and help to identify the facilitators and barriers to health and wellbeing.

### Community Voice Survey Data Collection Process

The *Community Voice Survey* was developed by the NJHC Data Committee based on the County Health Rankings and Roadmaps Model, which shows the wide range of factors that influence how long and how well individuals live. The measures are categorized into four factors: physical environment, social and economic factors, clinical care, and health behaviors. For more information visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org). The main objective of the survey was to capture whether or not community members felt that these elements, which are considered essential for health, are available in their communities. The survey instrument was piloted in Vauxhall (Union County) in the fall of 2017; feedback from the pilot helped to refine the survey instrument.

The survey was available in English, Spanish, Arabic, and French Creole and it was distributed both online via website and social media and on paper at community events throughout the county by the NJHC and more than 50 public health and community-based organizations. Prior to distribution of the survey, participating organizations participated in a webinar training that addressed guidelines for administration and collection with specific attention to issues of confidentiality.



County Health Rankings Roadmaps and Model  
University of Wisconsin Population Health Institute

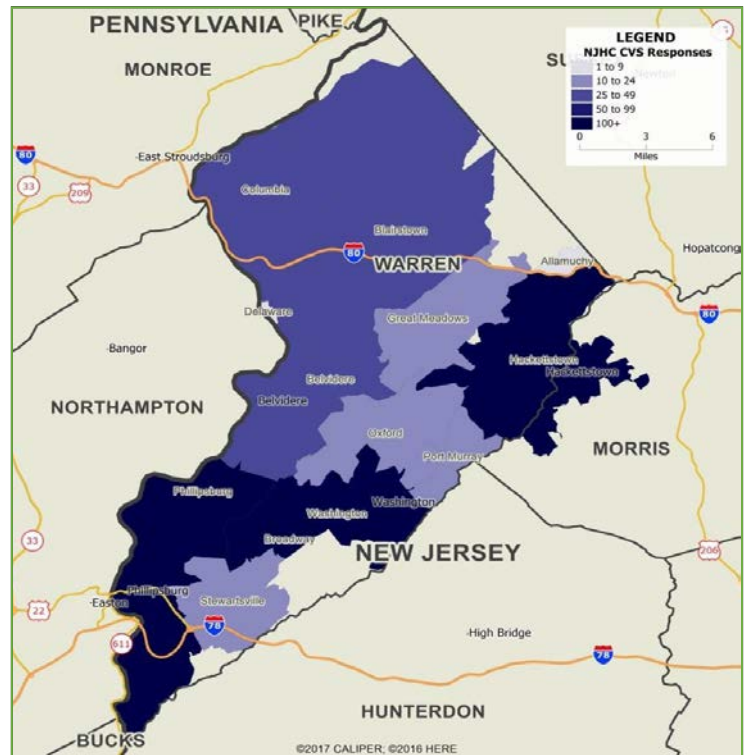


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Sampling targets were identified based on gender, age, race and ethnicity, as well as for low-income communities to capture a diverse range of perspectives. It is important to note; the results of the *Community Voice Survey* only represent the views of individuals who chose to participate in the survey and are not representative of all individuals living in the county. Therefore, results from the survey must be viewed within the context of other statistically representative data.

After data was collected, initial survey findings were compiled and presented to WCCHIC partners in July 2018, and final reports were made available in October 2018, both on the NJHC website and at the Warren County Committee meeting.



A total of 604 individuals living in Warren County completed the *Community Voice Survey*. The map of Warren County shows the distribution of survey responses by municipalities in the county. Respondents are mostly female (73%), 45-64 years-old (42%), and identify as non-Hispanic white (83%). A quarter (25%) of respondents have a Bachelor's degree, with an additional 22% having a graduate or professional degree.

Most respondents described their household finances as being "somewhat stable" (35%), meaning that they are either able to handle most bills as well as some unexpected expenses. Nearly all respondents (94%) say they are covered by health insurance and 19% said they are providing unpaid care to a family member or friend who is disabled, has a chronic illness, or has issues with aging. When asked to rate their overall well-being between 0 and 10, respondents gave an average score of 7.4 (range = 0-10).



## Chapter 3:

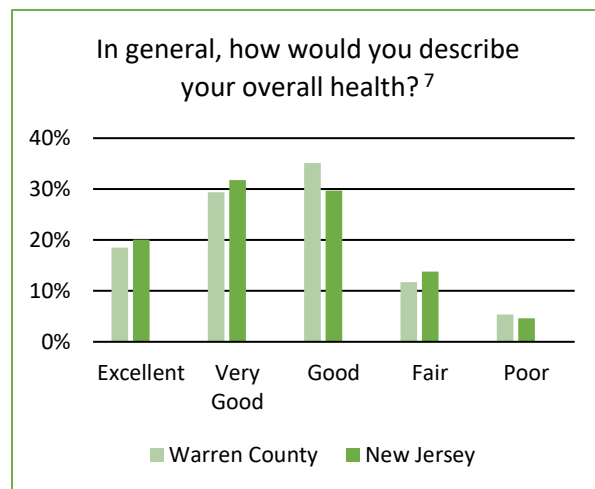
# BRINGING IT ALL TOGETHER

A summary of the data streams included in this assessment are provided in this section in the following broad categories:

- Access to Care
- Chronic Disease
- Maternal & Child Health
- Environmental Health
- Mental Health
- Substance Use
- Communicable Disease
- Health Behaviors

### Access to Care

The Centers for Disease Control and Prevention, CDC, collect data from states and counties, including Warren County. Each year this data is compiled into the Behavioral Risk Factor Surveillance System (BRFSS) Survey.<sup>7</sup> This survey collects information on a variety of health-related topics, from smoking and stress to



injuries and immunizations.

In the BRFSS Survey, respondents are asked to rate their overall health. As shown in the graph, over 80% of Warren County residents rated their own overall health between “excellent” and “good”, which is a slightly higher majority than New Jersey overall.

Quality of Life is an important measure when determining the health status of both individuals and communities. According to the County Health Rankings,<sup>8</sup> Warren County residents reported having slightly more poor physical and mental health days each year than New Jersey residents overall. It is

important to understand the difference between what is reported in Warren County, versus other counties in New Jersey and even the state overall.

<sup>7</sup> Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2017].

<sup>8</sup> University of Wisconsin Population Health Institute. *County Health Rankings 2019*.





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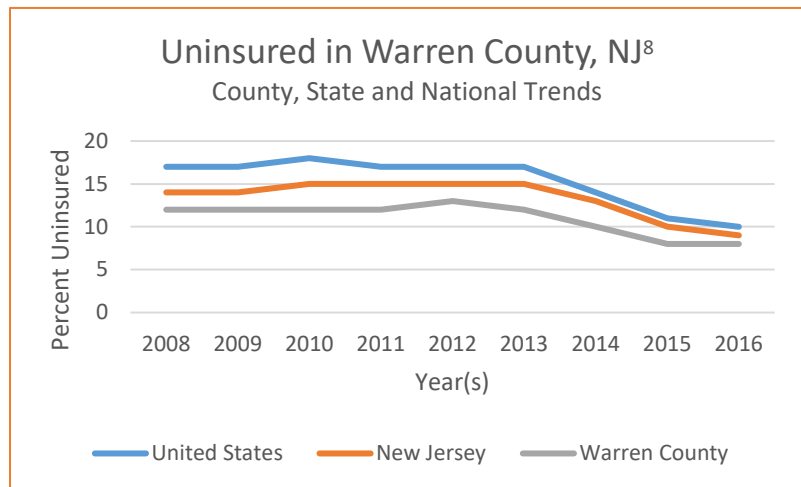
Parts of Warren County are quite rural, which can create barriers for Warren County residents to seek and obtain care. Additionally, transportation, is a perceived issue by community members. While there are shuttle services from Phillipsburg to Washington, and Washington to Hackettstown, as well as other “on demand” transportation services provided by the county, there seem to be barriers to using those resources. Additionally, disabilities and other physical limitations, can often impact residents, especially those over the age of 65.

Although self-reported health is an important measure that is used to assess the health of individuals and the community, it is also important to understand and assess what healthcare resources exist within Warren County. The county is home to two hospitals – St. Luke’s Warren Hospital and Atlantic Health Hackettstown Medical Center.

County Health Rankings-Warren County <sup>8</sup>	
Indicator	Ranking
Health Outcomes	14
Length of Life	15
Quality of Life	12
Health Factors	10
Health Behaviors	13
Clinical Care	13

In the 2019 County Health Rankings, Warren County ranked 14<sup>th</sup> in health outcomes, 15<sup>th</sup> in length of life, 12<sup>th</sup> in quality of life, 10<sup>th</sup> in health factors, 13<sup>th</sup> in health behaviors, and 13<sup>th</sup> in clinical care. <sup>8</sup> Despite the rural landscape of the county, which has proved to be challenging for public health, Warren County ranked 8<sup>th</sup> out of 21 in social and economic factors, as well as physical environment. <sup>8</sup>

Overall, the residents of Warren County are better insured than the average New Jersey resident. The continuously decreasing number of uninsured adults and children are likely due to policy changes in the Affordable Care Act (ACA). Part of the ACA included an expansion of public insurance coverage through Medicaid. Although insurance coverage in the county is quite high, almost 4% of children under the age of 18 are still not covered. <sup>8</sup> According to secondary data



analysis, Warren County ranks highly for children with health insurance, when compared to other New Jersey counties, as well as New Jersey and the nation overall. According to the County Health Rankings, about 9% of adults in the county are uninsured, slightly below the State of New Jersey, which is at 11%. <sup>8</sup> According to the results from the Community Voice Survey, 85% of respondents agreed that the healthcare residents in Warren County receive is of good quality. Additionally, 83% of respondents indicated that people can get health information in a language they understand and healthcare decisions fit with the culture of the person getting the care.



When asked “Do you have one person you think of as your personal doctor or health care provider?” in the BRFSS Survey, 71% of New Jersey residents indicated yes, while 79% indicated yes in Warren County.<sup>7</sup> Similarly, in the Community Voice Survey, 90% of residents who completed the survey indicated that most people have a doctor they consider their personal doctor.

According to statewide emergency room data, from 2017, there are clear disparities surrounding Warren County residents’ ability to access care. Residents who are receiving charity care, or are covered under Medicaid, are generally utilizing the emergency room more than their commercially or privately covered peers.<sup>9</sup> More specifically, there is a rising trend in younger, minority residents, who are also receiving charity care or Medicaid, who are utilizing the emergency room.<sup>9</sup> In the county overall, many residents are going to the emergency room for diseases of the circulatory and respiratory system, as well as injury and poisoning, which includes drug overdose.<sup>9</sup>

### Chronic Disease

Chronic disease, including the prevention, management and treatment of these conditions, continues to be a public health priority. Chronic diseases are complex conditions that are influenced by a variety of environmental, genetic, and lifestyle factors.

According to the New Jersey Cancer Incidence and Mortality Report in New Jersey, between 2011 and 2015, the three most common types of cancer incidence among females were breast, lung and bronchus, and colon and rectum, while for men the top three included prostate,

Most Common Types of Cancer Incidence <sup>10</sup>	
Female	Male
1. Breast	1. Prostate
2. Lung and Bronchus	2. Lung and Bronchus
3. Colon and Rectum	3. Colon and Rectum

lung and bronchus, as well as colon and rectum. In total, over 251,000 cases of invasive cancer were diagnosed among New Jersey residents between the years 2011 and 2015.<sup>10</sup> During the same time period, from 2011 to 2015, there were 82,366 deaths due to cancer among New Jersey residents.<sup>10</sup> In New Jersey, overall cancer mortality rates declined from 2011 to 2013, with a slight increase in 2014, and then declined again, for women.<sup>10</sup> For men, the cancer mortality rates have been steadily declining, which is similar to what is happening nationally with cancer mortality in men.<sup>10</sup> According to the secondary data analysis by the NJHC, Warren County ranks poorly for age-adjusted death rate due to colorectal cancer when compared to other New Jersey counties, as well as the state and nation overall. Additionally, when compared to values in the United States, Warren County ranks poorly regarding all cancer incidence rates, where a specific negative disparity was identified for males.

Heart disease is the leading cause of death for men and women in New Jersey, while stroke is the third leading cause of death. Several lifestyle factors, including physical inactivity, diet, tobacco use, and obesity can influence different unhealthy conditions including diabetes, obesity, high blood pressure, and high cholesterol. These conditions are all considered risk factors for heart disease, which include heart attacks, coronary heart disease, and heart failure, and stroke.

<sup>9</sup> New Jersey Department of Health Discharge Data Collection. 2017 New Jersey Uniform bill data and New Jersey ED Data

<sup>10</sup> New Jersey State Cancer Registry-Cancer Incidence and Mortality in New Jersey 2011-2015



In 2017, according to the CDC, 33% of New Jersey adults have been told they have high blood pressure.<sup>7</sup> Similarly, in Warren County, 32.7% of adults have been told that they have high blood pressure.<sup>7</sup> Furthermore, over 65% of New Jersey adults have had their blood cholesterol checked and have been told it was high, while in Warren County that number is slightly higher, at nearly 69%.<sup>7</sup> It is estimated that these lifestyle and risk factors contribute to at least 200,000 preventable deaths nationally.<sup>11</sup>

Heart Disease <sup>7</sup>		
Indicator	Warren County	New Jersey
High Blood Pressure	32.7%	33%
High Cholesterol	39%	65%
Coronary Heart Disease	4%	4%
Heart Attack	5%	4%

According to CDC BRFSS data, approximately 4% of New Jersey residents were ever told that they had coronary heart disease, while approximately the same amount of residents were told that they ever had a heart attack.<sup>7</sup> In Warren County, those rates are slightly higher at over 4% for coronary heart disease, and about 5% for ever being told that you experienced a heart attack.<sup>7</sup>

Health Factors that Influence Chronic Disease <sup>8</sup>		
Indicator	Warren County	New Jersey
Diabetes Prevalence	9%	9%
Adult Obesity	29%	26%
Poor or Fair Health	15%	17%
Frequent Physical Distress	11%	11%
Adult Smoking	16%	14%
Physical Inactivity	26%	24%

Cancer, heart disease, stroke, and diabetes are only a few of the many chronic conditions that affect Warren County residents. Residents also suffer from asthma, arthritis, high blood pressure, and obesity. Fortunately, (while the following are not a one-size-fits-all cure for chronic diseases,) while there is no one-size-fits-all cure for these and other chronic illnesses, abstaining from tobacco, maintaining a healthy weight, remaining physically active, and eating healthy food all have a positive impact on health and help reduce the incidence and severity of many of these diseases.

In Warren County, according to statewide emergency room data, almost 15% of visits to the emergency room by Warren County residents was due to endocrine; nutritional; metabolic disorders and immunity disorders.<sup>9</sup> A significant portion of the patients who are going to the emergency room for these illnesses and symptoms are men and women 45 and over.<sup>9</sup>

<sup>11</sup> CDC-Preventable Deaths from Heart Disease & Stroke | VitalSigns | CDC. (2013, September). Retrieved April 29, 2019, from <https://www.cdc.gov/vitalsigns/heartdisease-stroke/index.html>



### Maternal & Child Health

In Warren County, the birth rate is 8.5 births per 1,000 residents, while in New Jersey the birth rate is 11.2 births per 1,000 residents.<sup>12</sup> Data from the County Health Rankings shows that the infant mortality rate for Warren County was 6 per 1,000 live births, which is slightly higher than for New Jersey overall at 5 per 1,000 live births.<sup>8</sup> In 2017, 9.9% of Warren County births were classified as “preterm” or before 37 weeks, compared to 10% of New Jersey births.<sup>12</sup> According to the

Maternal and Child Health <sup>8</sup>		
Indicator	Warren County	New Jersey
Birth Rate	8.8 per 1,000	11.5 per 1,000
Preterm Births	29%	26%
Low Birthweight	8%	8%
Infant Mortality	6 per 1,000 live births	5 per 1,000 live births
Child Mortality	11%	9.9%

secondary data analysis, Warren County ranks negatively for mothers who received early prenatal care, specifically among Hispanic women between the ages of 20 and 24, when compared to NJ 2020 objectives.

Although Warren County residents have generally been able to receive prenatal care, there are no longer any maternity wards located within the county. If you live in the southern end of the county, you most likely will travel to Bethlehem or Flemington to deliver your baby, while if you are in the northern part of the county, you may choose to travel to Newton or Morristown. In addition to removing the maternity wards, prenatal care, specifically for women who are underinsured or uninsured, is also difficult to obtain. Although there are federal and state programs available to pregnant women in Warren County, it is unclear whether residents are aware of the programs, and whether these programs are able to adequately serve pregnant women in the county. Additionally, many of the responsible agencies for maternal and child health services in Warren County have their main office outside of the county.

Childhood exposure to lead is another important measure of children’s health. Lead can disrupt the normal growth and development of a child's brain and central nervous system. All New Jersey children are required to be screened for lead exposure. The New Jersey Department of Health recommends that all children should be screened for lead poisoning at 12 and 24 months of age. Additionally, any child between three and six years of age who has never previously been screened, as well as any child who is six months of age or older, and is exposed to a known or suspected lead hazard, should be screened. Additional triggers for testing include international travel and home renovations.

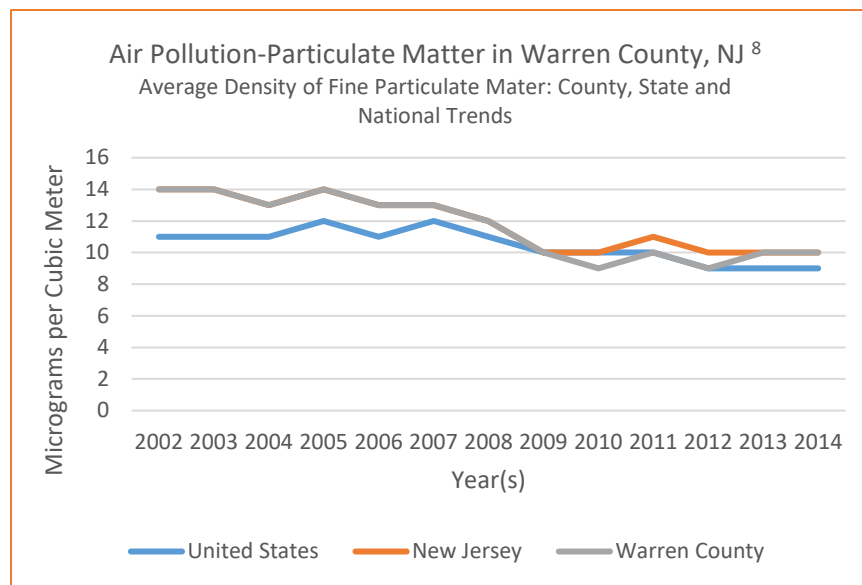
The Warren County Health Department works directly with the issue of lead exposure, and provides services including lead testing for children, as well as home inspections. According to the New Jersey State Health Assessment Data, approximately 34% of children six to 26 months, about 800 children total, were tested for lead.<sup>12</sup> There have been 3 cases of elevated blood lead levels (EBLL), in the same age group, in Warren County in 2017.<sup>12</sup> Screening numbers are going up with the new blood lead level measure, requiring intervention by the Warren County Health Department.

<sup>12</sup> New Jersey Department of Health (2017). New Jersey State Health Assessment Data. Retrieved from: <https://www-doh.state.nj.us/doh-shad/>



## Environmental Health

Our physical environment also has a great impact on our general health. Warren County is home to great natural beauty, much of which is easily accessible to residents through parks and trails. Our indoor environments also influence our health. From safe food preparation in restaurants to lead exposure through paint in older homes, the places where we live, work, and play all have a part in our health.



While Warren County is predominately rural, industries within the county and in neighboring counties, as well as motor vehicles and other sources, contribute to air pollution. In 2019, according to the County Health Rankings, Warren County ranked 8<sup>th</sup> out of 21 counties for the physical environment.<sup>8</sup> According to these rankings, average daily density of fine particulate matter in Warren County was

10 µg/m<sup>3</sup>, which is slightly higher than New Jersey, which is 9.9 µg/m<sup>3</sup>.<sup>8</sup> Unsurprisingly, about 81% of the Warren County workforce drives to work alone, while only 71% drives alone in the State of New Jersey.<sup>8</sup> Additionally, 55% of Warren County residents have a long commute and drive to work alone, while the same is true for 42% of New Jersey residents.<sup>8</sup> According to secondary data analysis, Warren County ranked poorly for workers commuting by public transportation, when compared to other New Jersey Counties, as well as the state and nation overall.

Other environmental issues include housing and contaminated water supply. According to the County Health Rankings, 17% of households have at least 1 of the 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities.<sup>8</sup> The severe housing problem is even worse for New Jersey as a whole, at 22%.<sup>8</sup> Although there are housing subsidies that are given out throughout the county, it is clear that sufficient, affordable housing is still an issue for many residents in Warren County. Ultimately, issues with housing, including overcrowding or insufficient utilities can contribute to nuisances, which include bed bugs and other vermin. Additionally, in Warren County, there were health-related drinking water violations.<sup>8</sup>

Homeownership in Warren County is at about 70%, while in New Jersey that percentage is a little lower at 64%.<sup>8</sup> Additionally, the severe housing cost burden, which is the percentage of households that spend 50% or more on their household income on housing is at 15% in Warren County, slightly lower than the State of New Jersey at 19%.<sup>8</sup>



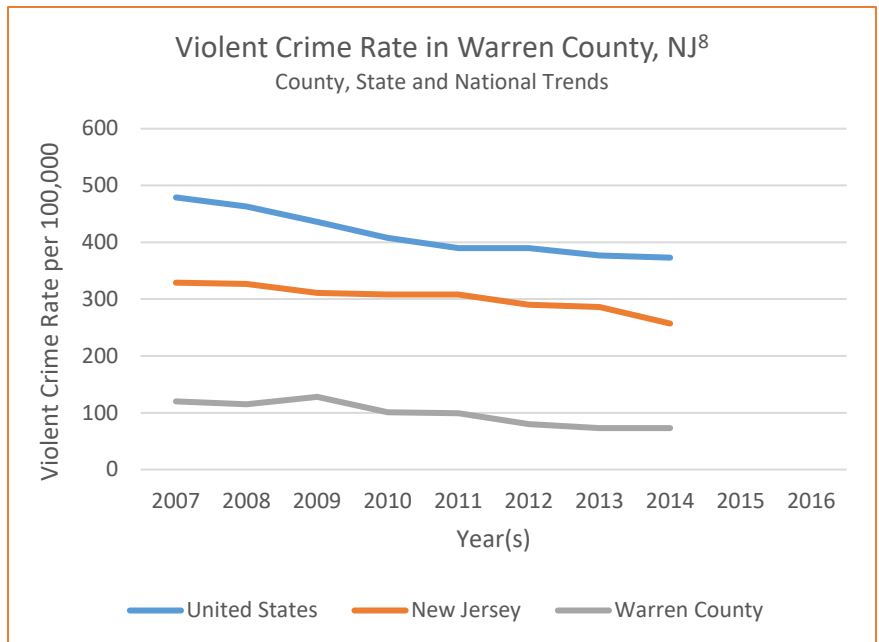
### Mental Health

Many millions of Americans suffer from mental illness; both diagnosed and undiagnosed. Social connectedness, individual and collective trauma, as well as exposure to community violence can contribute to the overall mental health of an individual, and in turn, greatly affect the community. In light of the domestic terrorist attacks, including the school shootings and other mass casualty incidents, mental health reform has been the focus for many local, state and federal agencies and policymakers across the country. Mental health background checks are now required when purchasing a firearm, and access to mental health providers has been at the forefront of advocacy work nationwide. In accordance with improving mental health, legislatures are leading the way for prison reform in an effort to end mass incarceration and increase judicial discretion when sentencing nonviolent offenders with minimal criminal history.

According to a report prepared by the State of New Jersey Department of Law and Public Safety in 2016, there was a 3% increase in domestic violence offenses across the State of New Jersey.<sup>13</sup> Of those reported offenses, approximately 75% of the victims were female.<sup>13</sup> Despite the crime rate in the county, 87% of respondents of the Community Voice Survey claimed that people in the community feel safe from crime and violence.

According to the Community Voice Survey, 54% of respondents stated that people have access to good quality mental health care. The 2017

BRFSS Survey showed that 19.2% of Warren County residents report ever being told that they have a form of depression, versus 14.8% of New Jersey residents.<sup>7</sup> According to the New Jersey State Health Assessment Data, Warren County's suicide rate is 11.7 per 100,000 residents, while New Jersey's rate is 8 per 100,000 residents.<sup>11</sup> According to the secondary data analysis, Warren County ranks poorly for age-adjusted rate due to suicide, when compared to the other New Jersey counties and New Jersey overall.



<sup>13</sup> State of New Jersey Department of Law & Public Safety (2016). Domestic Violence Report. Retrieved from: <http://www.njsp.org/ucr/domestic-violence-reports.shtml>





Social connectedness, which measures how people come together and interact, can often help to mitigate poor mental health and isolation. When people feel connected to one another and their communities, they often feel empowered to ask questions and to access resources and information that is vital to their own health. For example, 76% of the respondents of the Community Voice Survey reported that people look out for each other and take care of one another. Similarly, 75% of respondents indicated that neighbors know one another, and about 70% of respondents reported that if there is a problem, community members can get it solved. It is essential for individuals and communities to be cohesive and resilient during times of adversity.

According to the County Health Rankings, about 5% of the youth in Warren County is considered “disconnected youth”, which is the percentage of teens and young adults between the ages of 16-24 who are neither working nor in school.<sup>8</sup> School and work are two places where social interaction and engagement take place, primarily in the younger years. When teens and young adults are not going to school or work, there is greater risk for isolation, which can greatly impact mental health.

According to emergency room data, from 2017, mental illness diagnoses accounted for over 20% of Warren County residents visits to the emergency room. The highest prevalence of mental illness diagnoses from Warren County residents include anxiety disorders, mood disorders, and suicide and intentional self-inflicted injury.<sup>9</sup>

The Warren County Department of Human Services Mental Health Board maintains a Mental Health Plan to serve as a guide for the delivery of mental health services in the county. Warren County’s Department of Human Services Division of Administration is responsible for overseeing community-based services in the areas of human and social services, mental health, substance abuse, juvenile services and paratransit services.

## Substance Use

In addition to mental health, substance use is of serious concern in Warren County. As families and communities have watched their loved ones switch from prescription drugs to heroin, we have seen an increase in overdoses and mortality due to the rising strength of street-level opiates. Prescribing habits of doctors have been strictly monitored through the New Jersey Prescription Monitoring Program, NJPMP, an initiative started by the New Jersey Division of Consumer Affairs’ in an effort to halt the abuse and diversion of prescription drugs. Fentanyl, which is a controlled substance that is used in clinical settings like hospitals to manage pain, has been actively mixed into street-level heroin, making consumption of illicit drugs fatal for some.

In Warren County, the drug overdose death rate is 29 per 100,000 residents, which is higher than the state overall at 23 per 100,000.<sup>8</sup> Naloxone, also known as Narcan, the opiate reversal antidote, has been widely distributed in the county, region, and state, as well as nationwide. As of mid-September, there were over 1,330 admissions for substance use disorder in Warren County.<sup>14</sup> Over 615 of those admissions were for heroin and other opiates, while 320 admissions were for alcohol (NJSAMS). Over 500 of these admissions were for intravenous drug users.<sup>14</sup> About 85% of those admitted were white



(non-Hispanic).<sup>14</sup> Almost 90% of those admitted for substance use disorder were discharged, but only 45% were discharged because their treatment plan was completed.<sup>14</sup>

According to emergency room data, about 5% of emergency room visits by Warren County residents were related to substance abuse, excluding nicotine. The highest prevalence of substance abuse related visits to the emergency room by Warren County residents were from male and females aged 25-64 years older.<sup>9</sup> The highest prevalence of diagnoses for substance abuse from Warren County residents include alcohol abuse with intoxication, alcohol abuse (uncomplicated), and opioid dependence (uncomplicated).<sup>9</sup>

Although substance use is clearly a documented problem in Warren County, community perceptions captured by the Community Voice Survey, tell a different story. Of the respondents, 98% reported that they did not take more medication than what their doctor instructed, or used medicine that was not prescribed to them. Additionally, about 97% agreed that they did not use drugs to excess, and that drugs did not cause problems in their lives. Similarly, 96% indicated that they did not drink alcohol to excess, and alcohol did not cause problems in their lives. Perhaps, more surprisingly, only 81% of respondents indicated that they knew where to find information on substance use prevention for themselves or someone they know.

Tobacco, in addition to marijuana, are also substances that are of concern to the public's health. The adult smoking rate in Warren County is 16%, which is slightly higher than the New Jersey rate, which is 14%.<sup>8</sup> According to the Community Voice Survey, 87% of respondents reported that they did not use cigarettes, vaporizers, or smokeless tobacco. As youth move away from traditional cigarettes, to sleeker, less easily detected vaping devices, the Surgeon General has declared an e-cigarette epidemic among youth. Popular e-cigarettes, including the Juul, are unregulated by the FDA, and contain 5% nicotine by volume, which is more than double the concentration of nicotine in similar e-cigarette devices. This high concentration of nicotine can increase the risk of addiction. E-cigarette "juice" comes in kid-friendly flavors, including mango, fruity pebbles, and crème brûlée, and these devices can also be used to deliver other drugs, including marijuana. As marijuana legislation is likely to be pushed to the voters in 2020, and the potential for legalization in New Jersey seems imminent, governmental agencies, community-based organizations and community members will have to work together to determine the risks, educate the public and develop an action plan for moving forward.

Like tobacco, excessive alcohol use can have negative health effects, especially for those who are under the drinking age of 21. Alcohol can negatively affect a developing brain, and can cause negative side effects for youth throughout their lifespan. Excessive drinking is a risk factor for alcohol poisoning, high blood pressure, heart attacks, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, suicide, interpersonal violence, and motor vehicle crashes.

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<sup>14</sup> State of New Jersey Department of Human Services Division of Mental Health and Addiction Services. New Jersey Substance Abuse Monitoring System (NJSAMS). (2018). Substance Abuse Treatment: Admissions and Discharge Records Retrieved from: <https://njsams.rutgers.edu/njsams/>



While research also shows that moderate alcohol consumption may have certain health benefits, it is important for adults of legal drinking age to use alcohol responsibly. Excessive drinking is the percent of adults that report either binge drinking [consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days], or heavy drinking [drinking more than one (women) or 2 (men) drinks per day on average]. According to the BRFSS Survey, almost 60% of Warren County residents have indicated that they had at least one drink of alcohol within the past 30 days, which is similar to New Jersey overall.<sup>7</sup> Approximately 17% of Warren County residents and 16% of New Jersey residents reported binge drinking in the past 30 days.<sup>7</sup>

Excessive drinking is the percent of adults that report either binge drinking or heavy drinking. Almost 20% of Warren County residents reported an instance of excessive drinking, while only 17% of New Jersey residents reported the same behavior.<sup>8</sup> The rate of alcohol-impaired driving deaths in Warren County was 20%, while equally as bad in New Jersey at 22%.<sup>8</sup>

### Communicable Diseases & Sentinel Events

Although the rates of communicable diseases have steadily decreased with the advent of vaccines, sanitation, and other control measures, these illnesses still pose a public health threat. The New Jersey Department of Health requires health care providers and laboratories to report the incidence of certain illnesses to the local and state health departments. Early notification, in addition to communicable disease investigation, helps aids the health department in preventing further spread of illnesses.

Vaccinations play an important role in minimizing the transmission of communicable diseases. New Jersey requires that children in day care and schools provide documentation of vaccination status or proof of exemption. Vaccine requirements for school children in New Jersey include those for diphtheria, tetanus, and pertussis (DTap/Tdap), polio, measles, mumps, and rubella (MMR), hepatitis B, varicella (chicken pox), meningococcal disease, haemophilus influenzae type B, and influenza.<sup>15</sup> Vaccination rates among sixth graders are slightly lower than the state average. The vaccination rate between 2016 and 2018 for Warren County sixth graders was 64.3%, while the overall state rate was 96.5%.<sup>15</sup> The rates of vaccine-preventable diseases are generally low in Warren County. Recent declines in vaccinations throughout the United States, however, have resulted in a rise in pertussis, or whooping cough, cases. Declines in vaccinations are attributed to a growing anti-vaccinator community, enhanced by social media, which is a group that attributes several health problems to the medical practice of vaccination.

The U.S. influenza surveillance system is a collaborative effort between CDC and its many partners in state, local, and territorial health departments, public health and clinical laboratories, vital statistics offices, healthcare providers, clinics, and emergency departments. Information is collected that allows the CDC to find out when and where influenza activity is occurring, track influenza-related illness, determine what influenza viruses are circulating, detect changes in influenza viruses, and measure the impact influenza is having on hospitalizations and deaths in the United States.

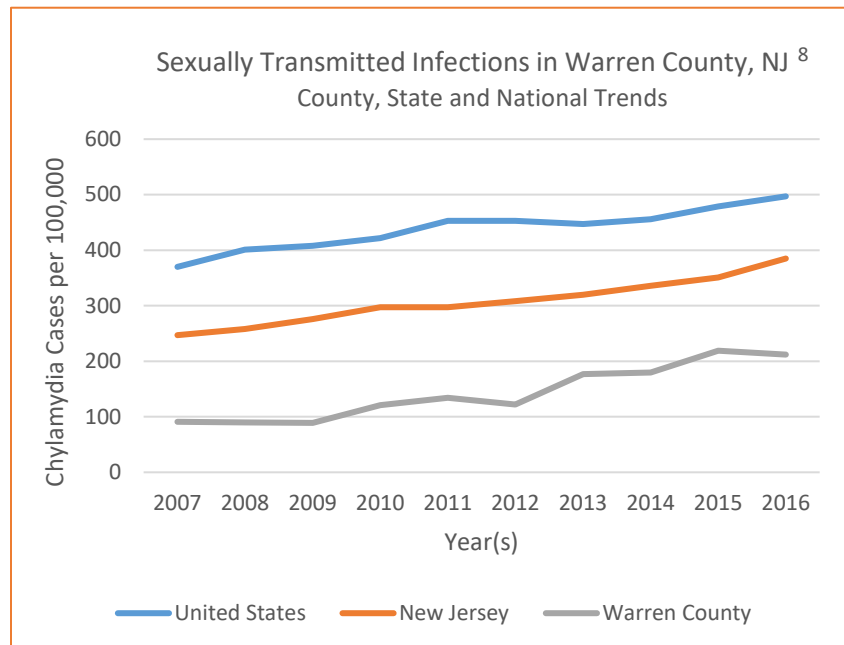
Influenza vaccines also play an important role in reducing the incidence of seasonal flu in Warren County. The CDC recommends that everyone over the age of 6 months old should get a flu vaccine, every season.



Getting a flu vaccine can reduce flu and flu-like illnesses, visits to the doctor, missed work and school due to illness, as well as prevent flu-related hospitalizations.

The Warren County Health Department is a Vaccine For Children (VFC) provider. Vaccines For Children is a federally funded program that provides vaccines at no cost to children who might not otherwise be vaccinated because of the inability to pay (CDC). These children may include uninsured, underinsured, or children from low-income families. Because the regulations are quite strict for VFC providers, many providers in the area have backed out of the VFC program, limiting the number of places that underserved and underinsured children can get vaccinated. The Warren County Health Department has seen an increase in vaccinations, particularly in those that are eligible for the VFC program.

Sexually transmitted diseases, including HIV/AIDS are relatively rare in Warren County. According to the County Health Rankings, there are 122 people living with a diagnosis of HIV per 100,000 people in the county, while in the state overall, there are 474 people living with a diagnosis of HIV per 100,000 people.<sup>8</sup> However, although HIV prevalence is significantly lower in Warren County, the number of sexually transmitted infections has increased since 2009. According to the County Health Rankings, there were 219



newly diagnosed cases of chlamydia per 100,000 residents of Warren County.<sup>8</sup> In New Jersey, that rate is 351 newly diagnosed cases per 100,000 residents.<sup>8</sup> Interestingly, 94% of respondents to the Community Voice Survey indicated that if they engaged in sexual activity, they did it safely.

Lyme disease continues to pose a threat to Warren County residents. Rates of Lyme disease are highest in the northeast and northwest regions of the United States, including New Jersey.

<sup>15</sup> NJDOH (2018). New Jersey Annual Immunization Status Reports: Number of Fully Vaccinated Students, by Grade Type and County, New Jersey, 2017-2018.



### Health Behaviors

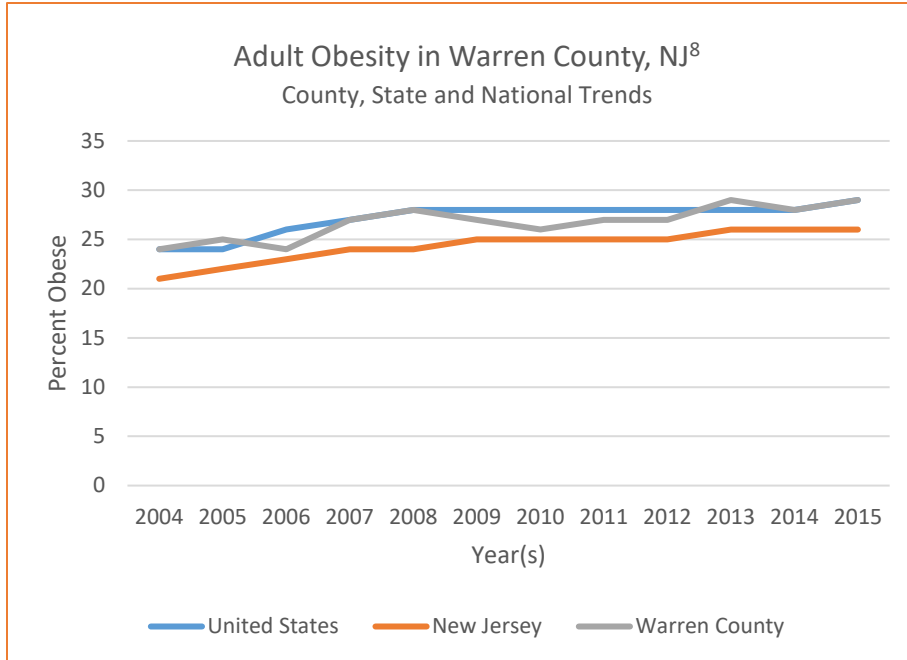
Social determinants of health- where we live, how much money we make, and what our education level is, greatly affect our health behaviors. For example, if you did not graduate from high school, and you are working a job that pays minimum wage, you may struggle to pay your rent on time, to pay for your utilities, and consequently, you might have to buy low-cost food to feed your family. The consistent pattern of eating food that is more affordable but less healthy, meaning it may be higher in fat and sugar, may mean that there is an increased risk for diabetes and obesity, which can only serve to complicate an individual's health status.

Our built environment includes all of the space where we work and play, including the open space and infrastructure. The built environment can influence an individual's health behaviors, including their level of physical activity, in addition to their access to different infrastructure within the community. For example, if a family lives in a neighborhood where the crime level is high, a parent might not let their children play outside, which can lead to a more sedentary lifestyle. If there was a local community center, or a neighborhood playground, children in the community may have more options for physical activity. Additionally, if a family does not have a car, and does not live within walking distance of a grocery store, they may rely on corner stores and bodegas to do their food shopping, which can be more expensive and less nutritious than if the family were able to get to the grocery store.

Nutrition, both knowledge of how to cook healthily, as well as food access, are vital for good overall health. While nutrition education is important, there are more strategies that need to be employed to increase food security and access to healthy food for all residents in Warren County. The rate of food insecurity in Warren County is 9%, while the rate for the state is similar at 10%.<sup>8</sup> According to the secondary data analysis, Warren County ranks poorly among food insecure children likely ineligible for assistance, when compared to New Jersey and the nation overall.

Food insecurity is generally defined as having access to an adequate food supply in order to live a healthy and active life. Food insecurity is a result of many different factors, which include lack of income, lack of utilities and housing, in addition to being socially isolated and issues with behavioral health. In the Community Voice Survey, 76% of respondents reported that people in their neighborhood could buy healthy food at a good price. Although there is public transportation provided by the county, residents still struggle with getting adequate access to healthy, nutritious food.

The causes of obesity (BMI  $\geq 30$ ) and overweight (BMI  $\geq 25$ ) are linked to physical activity, diet, genetics and family history, environment, smoking, other health conditions, taking certain medications, lack of sleep, aging, and stress. The impact of being overweight or obese on the community is far reaching; it is associated with a variety of adverse health outcomes, such as heart disease, cancers, and type 2 diabetes, which is closely related to an increased cost burden. In 2015, the obesity rate in Warren County was 32.4%. In 2018, the obesity rate in the county dropped to 28%.<sup>8</sup> The obesity rate in Warren County is slightly higher than the rate in New Jersey overall, which is 26%.<sup>8</sup> According to the secondary data analysis, Warren County ranks poorly for adults over the age of 20 who are obese, when compared to NJ 2020 objectives.



Overweight and obesity are highly connected to diet. Warren County residents are fortunate to have access to many farmers markets, community supported agriculture (CSA) farm sharing programs, and farm stands from the late spring to early fall. Local produce is also available at grocery stores throughout the local growing season. Generally, produce and fresh food is more expensive than food items

that are canned or frozen, so different demographic groups, including low-income and elderly people with limited income, may find it harder to include fresh, nutritious food in their limited budget. According to the BRFSS Survey, only 70.8% of Warren County residents consume fruit one or more times a day, which is slightly higher than the overall rate of New Jersey, which is 66.4%.<sup>7</sup> Similarly, about 83.5% of Warren County residents are consuming one or more servings of vegetables per day, which is also higher than the rate in New Jersey, which is just under 81%.<sup>7</sup> Overall changes in the American diet, particularly eating more pre-prepared food, as well as increased portion size, have greatly impacted the health of individuals, families, as well as communities.

In addition to nutrition, physical activity is also important for individuals. According to the Community Voice Survey, 84% of respondents claimed that there are public places where neighbors can get together like open spaces, a public library, or a community center. Many of these community-meeting places provide residents of all ages with the opportunity to be connected with their communities, as well as an opportunity for physical activity. For example, libraries or community centers may hold exercise classes, like yoga or Zumba, for different age groups. While this provides an opportunity for physical activity and social interaction, it can also eliminate monetary costs, which are often a barrier for residents. The rate of physical inactivity in Warren County is 24%, while the rate in New Jersey is 23%.<sup>8</sup> Additionally, 88% of Community Voice Survey respondents indicated that there are parks, playgrounds, and other places where people can get exercise safely for free or at a good price.

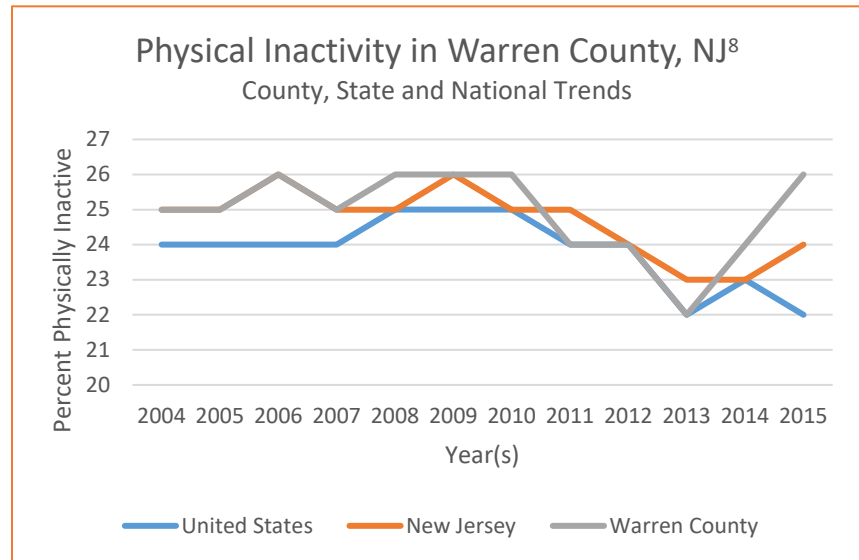




## North Jersey Health Collaborative

### health matters

According to the 2017 BRFSS Survey, 79% of Warren County residents indicated that during the past month, they participated in any physical activities, although only about 28% participated in enough aerobic and muscle strengthening exercises to meet the recommended guidelines.<sup>7</sup> Warren County is fortunate to have ample public outdoor spaces, including parks and trails. In addition to Stephens State Park, Worthington State Forest, Allamuchy Mountain State Park, Jenny Jump State Forest, Marble Hill Natural Resource Area, Rockport Pheasant Farm, White Lake Natural Resource Area, West Oxford Mountain Natural Resource Area, the Paulinskill Valley Rail Trail, the Pequest Wildlife Management Area Trail, the Delaware Water Gap, and the Appalachian Trail, the county is home to municipal parks, sports fields, and public pools. Additionally, local playgrounds and neighborhoods provide a place for youth to engage in physical activity.





## Chapter 4:

### Working Together to Create Solutions

The data presented in this report combines both public health data from the NJHC data portal [www.njhealthmatters](http://www.njhealthmatters) and our first NJHC Community Voice Survey. The primary purpose of this report is to assist our partners in determining where to invest our resources for the greatest impact.

In November the Warren County Committee partners came together to review the data collected, and summarized for the needs assessment. The data served as the catalyst for conversation among the partners which resulted in the following list of overall priority areas:

- Access to Care
- Economic Stability
- Chronic Disease
- Mental Health
- Physical Activity & Nutrition
- Safe Communities
- Substance Use
- Transportation

Strategies have been proposed within each of the priorities listed above. The county partners will continue to review and further refine the strategies to determine which ones to include in our 2019 Community Health Improvement Plan (CHIP).



**North Jersey Health Collaborative**

health matters

## Appendices



# North Jersey Health Collaborative

health matters

## List of NJHC Warren County Community Health Coalition Partners

<i>Warren County Committee 2018 - 2019</i>		
<b>Last Name</b>	<b>First Name</b>	<b>Organization</b>
Anglin	Ashley	Atlantic Health System
Baskaram	Lakshmi	Warren County Community College
Batch	Helen	Warren County Health Department
Bayne	Elizabeth	Kwenyan Professional Health Services
Bednarsky	Kathryn	DASAAC
Blanchfield	Michele	Zufall Health Center
Cameron	Christine	Warren County Health Department
Carter	Latiesha	Norwescap CC4C
Castro	Jennifer	NORWESCAP Hackettstown Early HS
Cerutti	Laura	TransOptions
Cherney	Roger	Atlantic Health System
Cianci	Maureen	Atlantic Health System
Cirignano	Sherri	Rutgers Coop Ext: Dept. of Family & Community Health Sciences
Connelly	Catherine	North Jersey Health Collaborative
Day	Yvette	United Way of Northern NJ
Drager	Pamela	Domestic Abuse & Sexual Assault Crisis Center of Warren County
DeCroce	Tessie	Family Guidance Center of Warren County
Elias	Emily	Domestic Abuse & Sexual Assault Crisis Center of Warren County
Empson	Linda	Eastern Coach Company
Ennis	Robin	United Way of Northern NJ
Epell	Bill	Warren County Prosecutor's Office
Farmer	Terese	St. Luke's Coventry Family Practice
Fernandez	Ingrid	Family Guidance Center of Warren County
Green	Sharon	Warren County Division on Aging & Disability Services
Griffin	Penelope	Family Support Organization of Hunterdon, Somerset
Gubics	Marilyn	Warren County Health Department
Guglielmo	Mary	Warren County Health Department
Hardy	Matthew	DASACC of Warren County
Harris	Mary Jo	Family Guidance Center of Warren County
Hawkins	Laura	Atlantic Health System
Hoffman	Jessica	NORWESCAP
Hosin	Monerra	St. Luke's University Health Network



# North Jersey Health Collaborative

## health matters

Kimmelman	Lia	NORWESCAP
Kirk	Chris	NORWESCAP
Kowalski	Gladys	NORWESCAP
Leon	Jackie	TransOptions
Longcor	Susan	NORWESCAP - Head Start
Magalhaes	Deborah	Zufall Health Center
McDyer	Jan	Warren County Department of Human Services
Meissner	Helene	Norwescap Food Bank
Nienstedt	Stephanie	Warren County Human Services
Parauda	Christine	Local Share Food Share Alliance
Perramant	Sarah	Warren County Health Department
Pennington	Seth	Atlantic Health System
Pino	Lisa	NORWESCAP
Reed	Rajika	St. Luke's University Health Network
Reuido	Alan	St. Luke's Coventry Family Practice
Richter	Laura	Warren County Department of Human Services
Romero	Fergie	Zufall Health Center
Ron	Sonia	Family Support Organization of Hunterdon, Somerset
Sartain	Courtney	Warren County Health Department
Seng	Jim	St. Luke's University Health Network
Soto	Zerimar	Atlantic Health System
Sprich	Lauren	Zufall Health Center
Stewart	Katie	Warren County Health Department
Stettler	Linda	Warren County Economic Development Committee
Stoner	Jenna	Family Guidance Center of Warren County
Summers	Peter	Warren County Health Department
Terry	Kim	Warren County Department of Health
Tilley	Susi	Ridge and Valley Conservancy
Veliz	Dayana	Zufall Health Center
Volturo	John	Atlantic Health System
Walker	David	Somerset Home
Wakim	Sam	Zufall Health Center
Webster	Kate	NORWESCAP - Traditions Family Success Center
Williams	Darla	NORWESCAP - WIC Program
Womer	Portia	Warren County Health Department
Zinckgraf	Jill	Domestic Abuse & Sexual Assault



**List of NJHC Board of Trustee Members**

<b>Last Name</b>	<b>First Name</b>	<b>Organization</b>
Acree	Melissa	NJ 2-1-1 Partnership
Callas	Dan	TransOptions, Inc.
Cognetti	Sheri	Fanwood-Scotch Plains YMCA
Correale	Peter	Pequannock Township Health Department
Destro	Christina	Healthcare Quality Strategies, Inc.
Elnakib	Sara	Rutgers Cooperative Extension of Passaic County
Gorman	Stephanie	Morristown County Office of Health Management
Gungil	Charlene	County of Passaic, Department of Health/ Passaic Regional Public Health Partnership
Harris	Mary Jo	Byrne Criminal Justice Innovation/ NORWESCAP
Hess	Nancy	NORWESCAP/ Skylands RSVP
Johnson	Shanice	Morris County Office of Health Management
Lanza	Denise	Morris County Park Commission
Mann	Diane	Madison Area YMCA
McDonald	James R, III	County of Sussex Department of Health & Human Services – Division of Health
Orapello	Mary Ann	Wayne Township Health Department
Paddilla Gonzalez	Jessica	Housing Partnership NeighborWorks Homeownership Center
Perez	Carlos, Jr.	Morris County Office of Health Management
Skrobala	Kathleen	Morris Regional Public Health Partnership/ Lincoln Park Health Department
Stoller	Arlene	Morris County Office of Health Management
Storms-Mazzucco	Tracy	Center for Prevention and Counseling
Summers	Peter	Warren County Health Department
Vargas	Carol	Atlantic Health System
Weigle	Trevor	Mount Olive Township Health Department





NJHC Warren County Secondary Data Analysis

Indicator	Value			Trend	Score	Negative Disparities		
	County Value	State Value	US Value			Gender	Race/Ethnicity	Age
Age-Adjusted Death Rate due to Colorectal Cancer	3	3	3	3	3			
Mothers who Received Early Prenatal Care	3	3	3	3	3		Hispanic or Latino	20-24
Workers Commuting by Public Transportation	3	3	3	3	3			
Atrial Fibrillation: Medicare Population	3	3	3	2	2.67			
Chronic Kidney Disease: Medicare Population	3	3	3	2	2.67			
Pancreatic Cancer Incidence Rate	3	3	3	2	2.67			
Very Preterm Births	3	3	3	2	2.67			
Depression: Medicare Population	3	3	1	3	2.66			
Voter Turnout: Presidential Election	3	2	1.5	3	2.58			
High Blood Pressure Prevalence	3	3	3	1.5	2.51			
Age-Adjusted Death Rate due to Diabetes	2	3	2	3	2.5			
Solo Drivers with a Long Commute	3	1.5	3	2	2.42			
Mean Travel Time to Work	3	3	3	1	2.34	Male		
Age-Adjusted Death Rate due to Suicide	3	3	1	2	2.33			
Death Rate due to Drug Poisoning	2	1.5	2	3	2.25			
Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	3	3	1	1.5	2.17			
Age-Adjusted Death Rate due to Pancreatic Cancer	2	2	3	2	2.17			
Age-Adjusted Death Rate due to Unintentional Poisonings	2	2	3	2	2.17			
Ischemic Heart Disease: Medicare Population	3	2	3	1	2.17			
Non-Hodgkin Lymphoma Incidence Rate	2	2	3	2	2.17			
Children with Elevated Blood Lead Levels	2	3	1.5	2	2.09			
Adults who Drink Excessively	3	1.5	2	1.5	2.08			
All Cancer Incidence Rate	2	2	3	1.5	2.01	Male		
Food Insecure Children Likely Ineligible for Assistance	2	3	3	1	2.01			



# North Jersey Health Collaborative

## health matters

Liquor Store Density	2	2	3	1.5	2.01		
Age-Adjusted Death Rate due to Unintentional Injuries	2	3	1	2	2		
Age-Adjusted Rate of Adult ED Visits for Acute Myocardial Infarction (Available by Zip Code)	3	1.5	1.5	1.5	2		
Age-Adjusted Rate of ED Visits Due to Influenza	3	1.5	1.5	1.5	2		
Chlamydia Cases	1.5	1.5	1.5	3	2		
Colorectal Cancer Incidence Rate	2	2	2	2	2		
COPD: Medicare Population	2	2	2	2	2		
Mammography Screening: Medicare Population	2	2	2	2	2		
Adults 20+ who are Obese	2	3	1.5	1.5	1.92		
Kindergartners with Required Immunizations	2	2	1.5	2	1.92		
Breast Cancer Incidence Rate	2	2	2	1.5	1.84		
Cancer: Medicare Population	2	2	3	1	1.84		
Heart Failure: Medicare Population	2	2	3	1	1.84		
Infant Mortality Rate	2	3	1	1.5	1.84		
Lung and Bronchus Cancer Incidence Rate	2	3	2	1	1.84		
Melanoma Incidence Rate	1	2	3	2	1.84		
Teen Birth Rate: 15-17	2	3	1	1.5	1.84		
Workers who Drive Alone to Work	2	3	2	1	1.84		White non-Hispanic
Asthma: Medicare Population	1	1	2	3	1.83		
Non-Physician Primary Care Provider Rate	3	1.5	1.5	1	1.83		
Recreation and Fitness Facilities	2	1.5	1.5	2	1.83		
Substantiated Child Abuse Rate	2	3	0	2	1.83		
Age-Adjusted Death Rate due to Motor Vehicle Collisions	2	3	1.5	1	1.76		
Households that are Asset Limited, Income Constrained, Employed (ALICE)	1.5	3	1.5	1.5	1.76		
Age-Adjusted Death Rate due to Hypertensive Heart Disease	1	1	1.5	3	1.75		
Access to Exercise Opportunities	2	2	1	1.5	1.67		



# North Jersey Health Collaborative

## health matters

Age-Adjusted Death Rate due to Lung Cancer	2	3	1	1	1.67		
Children with Low Access to a Grocery Store	2	1.5	1.5	1.5	1.67		
Health Behaviors Ranking	2	1.5	1.5	1.5	1.67		
Households with No Car and Low Access to a Grocery Store	2	1.5	1.5	1.5	1.67		
Low-Income and Low Access to a Grocery Store	2	1.5	1.5	1.5	1.67		
Lyme Disease Cases	1.5	1.5	1.5	2	1.67		
PBT Released	1.5	1.5	1.5	2	1.67		
People 25+ with a Bachelor's Degree or Higher	2	3	1	1	1.67	Unknown/Other	65+
People 65+ with Low Access to a Grocery Store	2	1.5	1.5	1.5	1.67		
People with Low Access to a Grocery Store	2	1.5	1.5	1.5	1.67		
Persons with Disability Living in Poverty	2	2	0	2	1.66		
Poor Mental Health: Average Number of Days	2	1.5	1	1.5	1.58		
Poor Physical Health: Average Number of Days	2	1.5	1	1.5	1.58		
Prostate Cancer Incidence Rate	1	2	3	1	1.51		
Dentist Rate	2	1.5	1.5	1	1.5		
Fast Food Restaurant Density	2	1.5	1.5	1	1.5		
Mental Health Provider Rate	2	1.5	1.5	1	1.5		
Primary Care Provider Rate	2	1.5	1.5	1	1.5		
SNAP Certified Stores	2	1.5	1.5	1	1.5		
Age-Adjusted Death Rate	1	2	1.5	1.5	1.42	Male	
Social Associations	1	1.5	2	1.5	1.42		
Students Passing 4th Grade State Achievement Tests	1	1	1.5	2	1.42		
Students Passing 8th Grade State Achievement Tests	1	1	1.5	2	1.42		
Adults who Smoke	2	1.5	0	1.5	1.41		
Frequent Physical Distress	2	1.5	0	1.5	1.41		
Age-Adjusted Alcohol-Related Emergency Department Visit Rate (Available by Zip Code)	1	1.5	1.5	1.5	1.34		
Age-Adjusted Death Rate due to Cancer	2	2	2	0	1.34	Male	
Age-Adjusted Death Rate due to Heart Disease	1	2	2	1	1.34	Male	
Age-Adjusted Rate of Adult ED Visits for COPD	1	1.5	1.5	1.5	1.34		



# North Jersey Health Collaborative

## health matters

Age-Adjusted Rate of Emergency Department Visits due to Mood Disorder (Available by Zip Code)	1	1.5	1.5	1.5	1.34		
Age-Adjusted Rate of Substance Use Emergency Department Visits	1	1.5	1.5	1.5	1.34		
Clinical Care Ranking	1	1.5	1.5	1.5	1.34		
Diabetes: Medicare Population	1	1	3	1	1.34		
Grocery Store Density	1	1.5	1.5	1.5	1.34		
Hyperlipidemia: Medicare Population	1	1	3	1	1.34		
Hypertension: Medicare Population	1	1	3	1	1.34		
Insufficient Sleep	1	1	2	1.5	1.34		
Morbidity Ranking	1	1.5	1.5	1.5	1.34		
Mortality Ranking	1	1.5	1.5	1.5	1.34		
Physical Environment Ranking	1	1.5	1.5	1.5	1.34		
Preventable Hospital Stays	2	2	2	0	1.34		
Recognized Carcinogens Released into Air	1.5	1.5	1.5	1	1.34		
Social and Economic Factors Ranking	1	1.5	1.5	1.5	1.34		
Syphilis Cases	1.5	1.5	1.5	1	1.34		
Median Household Income	1	2	0	2	1.33	American Indian/Alaskan Native, Hispanic or Latino, Unknown/Other	
Homeownership	1	0	0	3	1.32		
People Living Below Poverty Level	1	0	0	3	1.32	Black non-Hispanic, Hispanic or Latino, Unknown/Other, Two or More Races	<6, 12--17, 18-24
Adults 20+ who are Sedentary	1	1	1.5	1.5	1.25		
Adults 20+ with Diabetes	1	1	1.5	1.5	1.25		
Cost of Licensed Child Care as a Percentage of Income	1	1	1.5	1.5	1.25		
Food Environment Index	1	1.5	0	2	1.25		
Frequent Mental Distress	1	1.5	1	1.5	1.25		
Inadequate Social Support	1	1	1.5	1.5	1.25		
Severe Housing Problems	0	1.5	0	3	1.25		
Students Eligible for the Free Lunch Program	1	0	1.5	2	1.25		
Low-Income Preschool Obesity	0	1.5	1.5	2	1.17		
People 65+ Living Alone	1	1	1	1.5	1.17		



# North Jersey Health Collaborative

## health matters

Rheumatoid Arthritis or Osteoarthritis: Medicare Population	1	1	2	1	1.17		
Child Food Insecurity Rate	2	1	0	1	1.16		
People Living 200% Above Poverty Level	1	1	0	2	1.16		
Unemployed Workers in Civilian Labor Force	1	1	0	2	1.16		
Students Passing 11th Grade State Achievement Tests	1	1	1.5	1	1.09		
Self-Reported General Health Assessment: Poor or Fair	1	1.5	0	1.5	1.08		
Annual Ozone Air Quality	0	1.5	1.5	1.5	1.01		
Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	1	2	0	1	1		
Children with Health Insurance	1	1	1	1	1		
Life Expectancy for Males	1	1	1	1	1		
People 25+ with a High School Degree or Higher	1	1	1	1	1	Asian, Unknown/Other	65+
Per Capita Income	1	2	0	1	1	American Indian/Alaskan Native, Asian, Black non-Hispanic, Two or More Races, Unknown/Other	
Children Living Below Poverty Level	1	0	0	2	0.99	Black non-Hispanic, Hispanic or Latino	
Families Living Below Poverty Level	1	0	0	2	0.99	Black non-Hispanic, Hispanic or Latino, Two or More Races	
Households with Cash Public Assistance Income	1	0	0	2	0.99		
Linguistic Isolation	1	0	0	2	0.99		
Oral Cavity and Pharynx Cancer Incidence Rate	1	0	0	2	0.99		
Farmers Market Density	0	1.5	1	1.5	0.92		
Annual Particle Pollution	0	1.5	1.5	1	0.84		
Life Expectancy for Females	1	2	1	0	0.84		
Liver and Bile Duct Cancer Incidence Rate	0	1	0	2	0.83		
Cost of Family Child Care as a Percentage of Income	0	0	1.5	1.5	0.75		
Drinking Water Violations	0	0	1.5	1.5	0.75		
Adults with Health Insurance	1	1	1	0	0.67	Hispanic or Latino	25-34
Age-Adjusted Death Rate due to Prostate Cancer	1	1	1	0	0.67		
Diabetic Monitoring: Medicare Population	0	1	1	1	0.67		



# North Jersey Health Collaborative

## health matters

Osteoporosis: Medicare Population	1	1	1	0	0.67			
Renters Spending 30% or More of Household Income on Rent	1	1	1	0	0.67			15-24, 65+
Stroke: Medicare Population	0	0	2	1	0.67			
Age-Adjusted Death Rate due to Alzheimer's Disease	1	0	0	1	0.66			
Cervical Cancer Incidence Rate	0	0	0	2	0.66			
Food Insecurity Rate	1	0	0	1	0.66			
Preterm Births	0	0	0	2	0.66		Unknown/Other	
Single-Parent Households	1	0	0	1	0.66			
Young Children Living Below Poverty Level	1	0	0	1	0.66		Black non-Hispanic	
Alcohol-Impaired Driving Deaths	0	1.5	0	1	0.59			
Age-Adjusted Death Rate due to Breast Cancer	0	1	2	0	0.51			
Violent Crime Rate	0	1.5	1.5	0	0.51			
Alzheimer's Disease or Dementia: Medicare Population	0	0	1	1	0.5			
Income Inequality	0	0	0	1.5	0.5			
Student-to-Teacher Ratio	0	1	1.5	0	0.43			
Babies with Low Birth Weight	0	0	0	1	0.33		Unknown/Other	
Babies with Very Low Birth Weight	0	0	0	1	0.33			40-44
Mothers who Received No Prenatal Care	0	0	0	1	0.33			
Tuberculosis Incidence Rate	0	0	0	1	0.33			
Age-Adjusted Death Rate due to Influenza and Pneumonia	0	0	0	0	0			
People 65+ Living Below Poverty Level	0	0	0	0	0			





### FORCES OF CHANGE

FORCES	NEGATIVE	POSITIVE
What do you believe has impacted Warren County's health within the last three years?	<ul style="list-style-type: none"> <li>• Closing of adults day center</li> <li>• Removed mental healthcare from St. Luke's Warren hospital</li> <li>• Closing of federally qualified health center</li> <li>• Changes in affordable care act could lead to less people with health insurance.</li> </ul>	<ul style="list-style-type: none"> <li>• Closed power plants in Pennsylvania, leading to less pollution in New Jersey</li> <li>• New job opportunities on the horizon in Phillipsburg</li> <li>• More Medicaid coverage due to Medicaid expansion</li> </ul>
What do you see happening in the next three years that will impact Warren County's health?	<ul style="list-style-type: none"> <li>• Potential health effects of marijuana legalization</li> </ul>	<ul style="list-style-type: none"> <li>• High awareness of opioid epidemic-ample planning to address opioid addiction</li> <li>• Stigma-free initiative</li> </ul>
What characteristics of Warren County may positively impact health?		<ul style="list-style-type: none"> <li>• Social media use makes folks feel less isolated</li> <li>• Reduced suburban sprawl</li> <li>• Programs for park systems, such as smoke-free parks</li> <li>• Sense of community</li> <li>• Integrated healthcare</li> <li>• Improvements in technology (telemedicine, grocery delivery)</li> <li>• The staff at the Departments of Health and of Human Services that are always working to look at ways to fill the gaps in services.</li> <li>• The Tri-County Continuum of Care (TriCoC) uses a coordinated entry process to house chronically homeless and includes supportive housing resources (also works to end homelessness within the tri-county region through the same process).</li> </ul>
What barriers to improving health exist in Warren County?	<ul style="list-style-type: none"> <li>• Warren County has high rates of suicide</li> <li>• Limited OB/Prenatal care</li> <li>• Transportation won't go out of County</li> <li>• Cost of healthcare</li> <li>• High rates of domestic violence, particularly in Phillipsburg and Washington</li> <li>• High taxes</li> <li>• No services for people who are LGBT+</li> <li>• Social media used for bullying</li> <li>• People don't know what resources are available</li> <li>• Medicare reimbursement changed</li> <li>• Home health aides are not paid well.</li> <li>• Change in how state is paying for supportive housing</li> <li>• Wait for senior housing</li> <li>• Population dropping</li> <li>• High foreclosure rate</li> <li>• Immigration laws may prevent people who are undocumented from receiving services.</li> </ul>	