ORANGE COUNTY COMMUNITY HEALTH IMPROVEMENT PLAN UPDATE: 2016-2018

Our shared vision and health promotion strategic plan to address the most pressing health issues of our residents

Service Area: Orange County
Participating LHD: Orange County Department of Health
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Executive Summary

What is a Community Health Improvement Plan (CHIP)?

A Community Health Improvement Plan (CHIP) is the long-term systematic effort to address public health problems based on a community-wide health assessment. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community. This is a collaborative process between the health department and key, diverse stakeholders in the community including the area hospitals to coordinate efforts, establish priorities, and combine resources to guide health promotion strategies.

How will we use the CHIP?

This document has been continually reviewed and revised to incorporate new opportunities and reflect changes for additional challenges from 2013-2016 version. This 2016-2018 update will guide efforts for the next 3 years as we strive to improve population-level health issues. Access to this document is provided on the Orange County Health Department website here: www.orangecountygov.com/health under “community health assessments”.

How did we choose our priorities?

The New York State Department of Health (NYSDOH) in partnership with the Health Planning Council and over 140 organizations across the State, created the Prevention Agenda Health Improvement Plan for 2013-2018. The Prevention Agenda establishes goals for each priority area and defines indicators to measure progress toward achieving these goals, including reductions in health disparities among racial, ethnic, and socioeconomic groups and persons with disabilities. The five Prevention Agenda priority areas include:

- Prevent chronic diseases
- Promote healthy and safe environments
- Promote healthy women, infants and children
- Promote mental health and prevent substance abuse
- Prevent HIV, sexually transmitted diseases, vaccine-preventable diseases and healthcare-associated infections

As part of the required update to the CHIP, the NYSDOH requires all health departments to choose two priority areas and at least one health disparity within the State Prevention Agenda to address in their communities. To assess the needs of Orange County residents, a community health survey was distributed in conjunction with a systematic review of multiple data sources. The survey questions were derived from previous local, state and national surveys such as the Behavioral Risk Factor Surveillance Survey (BRFSS) as well as questions regarding health care usage and need in Orange County. The online and paper survey was completed in both English and Spanish in collaboration with the three community hospital organizations, Federally Qualified Health Centers (FQHCs) and over 40 community organizations. Nearly 1,400 consumer surveys were completed and results were shared with participating partners and placed on the Orange County Department of Health (OCDOH) website. A list of participating community organizations and events along with survey results can be found in the Appendix.

In addition to the surveys, OCDOH led the effort to develop the CHIP from the use of local data collection and review of extensive secondary data from numerous sources including but not limited to: BRFSS, NYSDOH Prevention Agenda Dashboard, NYSDOH County Health Indicators by Race/Ethnicity, NYSDOH Sub-County Health Data Report, NYSDOH Student Weight Category Status Reporting System data, the Robert Wood Johnson Foundation County Health Rankings, HealthLinkNY Healthy Communities Index, Orange County Youth Development Survey, NYS County and Zip Code Perinatal Data Profile, NYSDOH Opioid Poisoning, Overdose and Prevention Report and analysis of Orange County Birth Certificate data.

Individual meetings with each of the area hospitals were conducted as well as collaborative meetings with the FQHCs. Community partners were engaged through the Healthy Orange Team, the OCDOH umbrella initiative to
address chronic diseases, as well as other community partners in a variety of sectors (government, education, non-profit, business, etc.). Notably, the Healthy Orange Team has grown to include 65 stakeholders of which nearly 50 were present during the annual meeting in June 2016. The team is broken up geographically by the three cities of Middletown, Port Jervis and Newburgh, each of which meets bi-monthly and the entire Healthy Orange Team meets annually to discuss ongoing projects, successes, challenges and identifies additional avenues for collaboration to address the CHIP strategies. The community is also engaged through the Maternal Infant Community Health Collaborative, which brings together partners among diverse sectors of the community to guide grant activities, leverage resources and identify ways to obtain and share local data around the health of infants and women of child-bearing age in the areas of need located in Newburgh, Middletown and Port Jervis. Together in these coalitions, partners are tasked with the development and implementation of each of the CHIP strategies. When feasible, community forums and surveys are conducted to engage the broader community at-large.

What priorities were chosen?

The two overarching priority areas chosen were Preventing Chronic Disease and Promoting Healthy Women, Infants, and Children, which is a continuation from the 2013-2016 cycle. Within each of the priorities’ strategic plan, the reduction of health disparities will be addressed through the concentration of efforts in the cities of Middletown, Newburgh and Port Jervis and surrounding towns which see the greatest economic and health disparities.

Within the priority area of Preventing Chronic Disease, two of the same focus areas were chosen and one additional focus area was added including:
1) Reducing obesity in children and adults (expanded)
2) Reducing illness, disability and disease related to tobacco use and secondhand smoke exposure (strategies changed)
3) Increasing screening rates for cardiovascular disease, diabetes and breast, cervical and colorectal cancers, especially in disparate populations (new)

Within the priority area of Promoting Healthy Women, Infants and Children, the same two focus areas were chosen:
1) Reducing premature births (expanded)
2) Prevention of unintended and adolescent pregnancy with a focus on reproductive, preconception and inter-conception health (strategies changed)

What has changed from 2013-2016?

Although the two priority areas have remained the same, the goals and objectives have been expanded and some have been slightly modified due to the review of new data sources and resource availability. A 2016 status report can be found in the Appendix. In October 2015, OCDOH received a five year grant from the NYSDOH entitled “Creating Healthy Schools and Communities” (CHSC). This grant allowed for the expansion of activities around the focus area of chronic disease prevention, specifically obesity reduction, with the school districts and surrounding communities in the areas of Newburgh, Port Jervis and Middletown. In addition, new data from the BFRSS indicated that Orange County had the lowest colorectal cancer screening rates (58.1%) in adults ages 50-75 from 2013-2014 compared to 68.1% for New York State. Screening for breast cancer and cervical cancer were also below the Prevention Agenda 2018 goals. To address this need, we have added a focus on increasing cancer screening rates with policy, environmental and systems change-strategies and renewed our partnerships with the American Cancer Society and the YWCA of Orange County to help us accomplish these goals.

BFRSS data also showed that Orange County is close to achieving the 12.7% Prevention Agenda objective of current adult smokers (15.5%, 2013-2014). However, smoking among mothers from Port Jervis was significantly higher than in the county from 2013-2015 (13.9% vs. 5.9%, respectively). Funding for the county cessation program was recently removed from the 2017 county budget but understanding the importance that smoking and second hand smoke exposure plays in chronic disease, we will focus on partnering with other
organizations such as the American Lung Association to encourage the adoption of smoke free policies in the community with an emphasis on public housing. In addition, smoking cessation will also be encouraged through the priority area of Promoting Healthy Women, Infants and Children.

**What strategies are being implemented to address the priority areas?**

Every strategy chosen is either evidence-based or a highly-evaluated promising practice, such as the development of a farmer’s market, to maximize both effectiveness and the resources available.

<table>
<thead>
<tr>
<th>CHIP Focus Area</th>
<th>Evidenced Based Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Obesity in Adults</td>
<td>• Create healthy community and worksite environments that promote and support nutrition standards</td>
</tr>
<tr>
<td></td>
<td>• Promote physical activity in community venues through worksite policies, signage, joint use agreements and social support</td>
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<tr>
<td></td>
<td>• Increase the availability of affordable healthy foods through sustaining current farmer’s markets in communities with limited access</td>
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<tr>
<td></td>
<td>• Promote the adoption of complete streets</td>
</tr>
<tr>
<td>Reduce Obesity in Children</td>
<td>• Encourage districts to prohibit advertising of less nutritious foods and beverages and to adopt standards for competitive foods</td>
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<tr>
<td></td>
<td>• Implement the Comprehensive School Physical Activity Programs (CSPAP)</td>
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<tr>
<td></td>
<td>• Encourage employers to implement breastfeeding friendly policies</td>
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<tr>
<td>Reduce Illness, Disability and Disease Related to Tobacco Use and Secondhand Smoke Exposure</td>
<td>• Promote tobacco use cessation, especially among low socioeconomic status populations and those with poor mental health</td>
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<tr>
<td></td>
<td>• Encourage the adoption of smoke-free policies in publicly and privately operated housing</td>
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<tr>
<td>Increase Access to High Quality Chronic Disease Preventative Care in Community Settings</td>
<td>• Implement policy, systems or environmental approaches to increase access to cancer screening services for colorectal, breast and cervical cancers</td>
</tr>
<tr>
<td></td>
<td>• Increase public awareness and education about colorectal, breast and cervical cancer screenings</td>
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<tr>
<td>Reduce Premature Births</td>
<td>• Utilize community health workers for home visiting to assist women in engaging in health care services, securing basic needs and practicing healthy behaviors</td>
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<td></td>
<td>• Identify and promote educational messages to promote smoking cessation, healthy eating and family planning methods</td>
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<tr>
<td></td>
<td>• Develop and implement strategies to encourage healthcare providers to integrate behavioral health screenings as part of primary care through public health detailing</td>
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<tr>
<td>Prevention of Unintended and Adolescent Pregnancy</td>
<td>• Identify and promote educational messages on delaying sexual activity, contraceptive use and preventative health care</td>
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<tr>
<td></td>
<td>• Work with community partners to support evidenced-based sexual health education and reproductive health care services for teens in community and school-based settings</td>
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**How is progress and improvements being tracked?**

Progress, improvements and data are tracked and collected through quarterly meetings with partners within each of the strategies and documented in an excel database. Both short term and long term indicators are collected through primary data analysis, anecdotal comments from partners and the community and review of secondary data sources including NYSDOH. Data updates are completed quarterly, placed directly on the CHIP document and uploaded to the OCDOH website under community health assessments. Full descriptions of process measures, partners, timelines and outcome objects can be found in the CHIP 2016-2018 document.
Community Description

Orange County is located in the southeastern area of New York State, bounded on the east by the Hudson River and on the west by the Delaware River. It is located approximately 60 miles north of New York City with 40 municipalities and approximately 377,647 residents in 2015. Of Orange County residents, 50% are male, 81.4% are White, 12.1% are Black and 19.8% are Hispanic or Latino. Orange County is a mix of urban, suburban, farmland and rural areas. Twenty-four percent of the population resides in rural areas, twice the average of New York State. Agriculture is a leading industry in Orange County and constitutes more than half of the county’s open space. At first glance, Orange County appears to be an affluent suburban community that enjoys a median household income above the New York State average ($70,848 vs. $58,687, respectively), a smaller percentage of individuals living below the poverty line (12.8% vs. 15.6% respectively), a smaller unemployment rate (7.3% vs. 8.2%, respectively) and boasts a higher percentage of high school graduates as compared to New York State (88% and 85.4%, respectively). However, aggregate county data is misleading and masks the disparities within the county. The urban areas of Orange County are characterized by severe socioeconomic and health inequities. One-third of Orange County's population living below the poverty line resides in the three major cities (Newburgh, Middletown and Port Jervis). All three cities have higher poverty rates than the county average, with Newburgh’s rate more than twice the average at 34.4%. All three cities have a disproportionate number of students who are considered economically disadvantaged, including over 75% of the student population in both Middletown and Newburgh and 65% of the student population in Port Jervis. The average median household income in Orange County is $70,848 while in contrast Newburgh residents average barely half of that. These cities enjoyed a prosperous past as industrial manufacturing and transportation centers, but have been hit hard by the industrial decline as in many of the Northeast manufacturing cities. There are also larger minority populations living in the cities of Middletown and Newburgh as compared to the county as a whole. Nearly 32% of Newburgh residents are Black and 51.7% are Hispanic or Latino. In the City of Middletown, 25.2% of residents are Black and 38.4% are Hispanic or Latino. Poorer socioeconomic and health indicators are also found within the minority populations in Orange County. Sixteen percent of Black families are living below the poverty line compared to 13.5% of Hispanic families and 7.4% of White families. Also in the cities of Middletown and Newburgh, over 25% of adults lack a high school diploma compared to approximately 12% of county adults. Social determinants such as income, education, job availability and unemployment, race and ethnicity, and access to affordable housing are strong predictors of health outcomes. Although the geographic area captured by the Community Health Improvement Plan includes all of Orange County, there will be a significant focus on the underserved populations, including the cities outlined above and their surrounding more rural areas to help address these inequities. To help address these inequities, a Health Equity Director position was created in January of 2016 at OCDOH and on March 8, 2017, the first Healthography and Healthy Equity conference will be held by the Health Department.
Priority Areas and Reviewed Data

The two overarching priority areas chosen were Preventing Chronic Disease and Promoting Healthy Women, Infants, and Children, which is a continuation from the 2013-2016 cycle. Within each of the priorities’ strategic plan, the reduction of health disparities will be addressed through the concentration of efforts in the cities of Middletown, Newburgh and Port Jervis and surrounding towns which see the greatest economic and health disparities. Although the two priority areas have remained the same, the goals and objectives have been expanded and some have been slightly modified due to the review of new data sources and resource availability. Data sources reviewed included: the Behavioral Risk Factor Surveillance Survey (BRFSS), NYSDOH Prevention Agenda Dashboard, NYSDOH County Health Indicators by Race/Ethnicity, NYSDOH Sub-County Health Data Report, NYSDOH Student Weight Category Status Reporting System data, the Robert Wood Johnson Foundation County Health Rankings, HealthLinkNY Healthy Communities Index, Orange County Youth Development Survey, NYS County and Zip Code Perinatal Data Profile, NYSDOH 2015 Opioid Poisoning, Overdose and Prevention Report and analysis of Orange County Birth Certificate data. In addition, the 2016 Community Health Survey was completed with 1,363 residents. The full report can be found in the Appendix.

New Additions for 2016-2018

New data from the BFRSS indicated that Orange County had the lowest colorectal cancer screening rate (58.1%) in adults ages 50-75 from 2013-2014 in New York State (NYS). This is 10% lower than the State average at 69.3%. Screening for breast cancer and cervical cancer were also below the Prevention Agenda 2018 goals at 76.8% and 82.8% among females ages 18 and above, respectively. To address this need, a focus on increasing cancer screening rates was added with an emphasis on policy, environmental and systems change-strategies. OCDOH has also renewed partnerships with the American Cancer Society, the YWCA of Orange County and with the DSRIP Public Health Council to help accomplish these goals. Poor screening rates could have also contributed to worse outcomes. The Orange County age-adjusted death rate from breast cancer in 2009-2013 at 24.5 per 100,000 females was the highest in the Hudson Valley Region and higher than the NYS rate of 21.2 per 100,000 females. The colorectal cancer death rate in the same time period for all adults in Orange County was 15.6 per 100,000 residents, the second highest in the Hudson Valley Region next to Sullivan County and above the NYS rate at 14.6 per 100,000.

BFRSS data also showed that Orange County is very close to achieving the 12.3% Prevention Agenda objective of current adult smokers (15.5%, 2013-2014). Funding for the county cessation program was recently removed from the 2017 county budget but understanding the importance that smoking and second hand smoke exposure plays in chronic disease, we will focus on partnering with other organizations such as the American Lung Association to encourage the adoption of smoke free policies in the community with an emphasis on public housing. In addition, smoking cessation will also be encouraged through the priority area of Promoting Healthy
Women, Infants and Children. Data reviewed through Orange County Birth Certificate analysis showed smoking among mothers from Port Jervis was significantly higher than in the County from 2013-2015 (13.9% vs. 5.9%, respectively). Through the home visiting program, all pregnant women will be asked about tobacco use and smokers will be referred for counseling and smoking cessation services. Detailed information on the priority strategies can be found in the charts below.

**Priority Area #1: Preventing Chronic Disease**

Chronic disease is among the leading causes of morbidity and mortality across Orange County, New York State and the Nation. Obesity is a leading contributor to cancer, cardiovascular disease, diabetes, stroke and hypertension, all of which can lead to premature death. Two of the top ten causes of death in Orange County in 2014 were diseases of heart and malignant neoplasms (cancer), as seen in the chart (right). According to results from the 2013-2014 Behavioral Risk Factor Surveillance Survey, nearly 68% of Orange County residents are overweight or obese compared to 64% from 2009-2010. In addition to increasing obesity among adults, perception of one’s own obesity is also concerning. Orange County residents who recently completed the 2016 Community Health Assessment Survey did not perceive themselves as obese even as self-reported height and weight reflected a much different picture as seen in the graph (below, left). Behavior modification might not be occurring if individuals are only viewing themselves as slightly overweight versus obese. Maintaining a healthy lifestyle through regular physical activity, healthy eating and eliminating tobacco use can help prevent obesity and its sequela. Seventy two percent of adults reported leisure time physical activity in Orange County in 2013-2014 compared to 76.3% in 2009 versus the NYS average of 73.3% in 2014. The USDA Food Atlas Map shows that 16% of Orange County residents have barriers in obtaining healthy foods, including the cities of Middletown, Port Jervis and Newburgh and their surrounding areas. Transportation gaps

<table>
<thead>
<tr>
<th>Rank Order</th>
<th>Cause of Death</th>
<th>Death Rates (per 100,000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of the Heart</td>
<td>184.8</td>
</tr>
<tr>
<td>2</td>
<td>Malignant Neoplasms</td>
<td>153.7</td>
</tr>
<tr>
<td>3</td>
<td>Chronic Lower Respiratory Disease (CLRD)</td>
<td>35.4</td>
</tr>
<tr>
<td>4</td>
<td>Total Accidents</td>
<td>34.3</td>
</tr>
<tr>
<td>5</td>
<td>Cerebrovascular Disease</td>
<td>32.4</td>
</tr>
<tr>
<td>6</td>
<td>Pneumonia</td>
<td>17.3</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes Mellitus</td>
<td>16.2</td>
</tr>
<tr>
<td>8</td>
<td>Suicide</td>
<td>9.0</td>
</tr>
<tr>
<td>9</td>
<td>Cirrhosis of the Liver</td>
<td>6.9</td>
</tr>
<tr>
<td>10</td>
<td>Homicide and Legal Intervention</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: New York State Department of Health Vital Statistics, as of May 2016
in Orange County’s rural areas make it difficult for residents, especially seniors, to obtain a variety of healthy foods. Recent data collected from nearly every school district in the County revealed that 28% of elementary students and nearly 40% of middle and high school students are either overweight or obese\textsuperscript{viii}. As well documented, becoming overweight in childhood drastically increases the likelihood of being overweight as an adult and is a known contributing factor to many chronic diseases. A comparison from the 2008-2009 and 2013-2014 BRFSS data compared with County Community Health Assessment surveys can be found in the chart (below).

Compared to previous years, more adults reported being diagnosed with being overweight or obese in addition to a diagnosis of high blood pressure, diabetes, and heart disease. In addition to obesity, smoking is a risk factor for cancer, diabetes and stroke and is the leading cause of preventable death in the United States. Data reviewed from the Orange County Youth Development Survey 2014-2015 showed 5.7% of surveyed 8th, 10th and 12th graders are current smokers and over 75% initiated smoking before age 15. As with obesity, teens who smoke are also more likely to continue smoking through their adult life. On December 22, 2016, the Orange County Legislature passed a resolution to become the 11th County (including New York City) in New York State to raise the legal age to purchase tobacco products from 18 to 21. Legislation like this has been lauded by the National Institutes of Health for its impact to reduce the number of tobacco users\textsuperscript{viii}.

As noted earlier, BFRSS data shows 15.5% of Orange County adults are current smokers compared to 15.9% in New York State. Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects such as cancer, respiratory infections, and asthma\textsuperscript{x}. Overall, Orange County has lower mortality rates from diseases of the heart, diabetes and cerebrovascular disease than New York State but higher than the Hudson Valley Region, as seen in the graph below. However, rates particularly among Black residents of Orange County are significantly higher than Orange County as a whole (below, right).
OCDOH is fortunate to have a division that primarily focuses on chronic disease prevention. Community Health Outreach has been involved in a number of health promotion grant programs over the past 22 years. Healthy Orange is in the forefront of chronic disease prevention and encompasses programs that aim to increase the consumption of healthy foods, increase opportunities for physical activity, and decrease tobacco use and exposure, in order to improve the overall health of Orange County residents. Healthy Orange also addresses issues surrounding obesity and chronic disease, utilizing best practices to make policy, systems, and environmental changes relative to exercise, nutrition, and tobacco use. Healthy Orange has received guaranteed funds from county resources since 2007. Each year, funds are available for all activities related to chronic disease prevention for both county activities and through an RFA process for community members to achieve the goals listed above. Healthy Orange aims to engage numerous community partners in its activities to reach as much of the population as possible. Healthy Orange started as a biannual meeting in one location. After feedback from many of the partners, traveling to one of end of county from the other was preventing greater participation. Splitting the Healthy Orange Team into smaller geographically-based coalitions allows for more frequent meetings and better attendance which ultimately leads to better partnerships. Regular bi-monthly meetings are held in each of the three cities of Newburgh, Port Jervis and Middletown and we are also looking to expand to the Southern tier of the county. Notably, the Healthy Orange Team has grown to include 65 stakeholders of which nearly 50 were present during the annual meeting in June 2016 including all of the area hospitals. Meetings are used to discuss ongoing projects, review new data, successes, challenges and identify additional avenues for collaboration to address the CHIP strategies. With this strong partnership, Healthy Orange has made numerous policy, environmental, and systems changes in all facets of the community.
Priority Area #2: Promoting Health Women, Infants and Children

Promoting the health of women, infants and children continues to be a public health priority for the United States, New York and Orange County. Maternal and infant health data continue to be widely used indicators of the overall health of a community. Improving positive pregnancy outcomes can greatly enhance the well-being of both mother and child. Prenatal care, gestational age, and birthweight are strong indicators of both maternal and infant health. Aggregate maternal and infant indicators for Orange County are misleading and mask the disparities within the county. Utilizing Orange County Birth Certificate data, quarterly analysis is performed and reviewed within the Maternal Infant Community Health Collaborative (MICHC) advisory board. Overall, Orange County has reached the NYS 2017 objective of a preterm birth rate of 10.2%. The Orange County rate is currently at 7.7% for 2013-2015. Although declining from the previous CHIP, each of the cities of Newburgh (9.5%), Middletown (9.4%) and Port Jervis (9.3%) continue to struggle in this area as seen in the graph (above). Data show significant outcome disparities among Black women giving birth in Orange County in multiple zip codes in the county, as seen in the graphs below. Black babies born to mothers from Newburgh were more likely to be born premature than White babies in Newburgh (13.8% vs. 8%). It should be noted that the percentage for Black babies born to mothers who live in Port Jervis is unreliable due to small numbers. To address this need, the MICHC program will increase recruitment activities and the number of Black women engaged in home visiting services to improve birth outcomes such as premature birth and low birthweight. In Orange County, only 6.7% of births were babies with low birthweights (2013-2015). However, 8.8% of births in Middletown, 7.9% of births in Port Jervis and 7.9% in Newburgh were low birthweight babies. This disparity is even greater when
the data are parsed by race and ethnicity as seen below. Black babies in Orange County are nearly twice as likely to have a low birthweight as all races combined. Two of the leading known causes of infant death are pre-term delivery and low birthweight. There were 74 infant deaths in Orange County from 2012-2014. Approximately 42% of these deaths came from the cities of Newburgh, Middletown and Port Jervis, compared to 53% from 2009-2011. Studies have shown that women who seek early prenatal care exhibit lower incidence of preterm birth compared to women who enter prenatal care after their first trimester. From 2012-2014, 72.7% of births had early first trimester prenatal care compared to 73.7% in New York State and 69.9% in the Hudson Valley Region. Plans to exclusively breastfeed in Orange County vary significantly by race, ethnicity and zip code. The lowest rates are in Black women in Orange County, women who reside in Newburgh and Black women who reside in Newburgh. Again, it should be noted that the percentage for Black mothers who live in Port Jervis is unreliable due to small numbers. In order to address these disparities, both the MICHC program and Healthy Orange will jointly use the evidence-based model “Business Care for Breastfeeding” to encourage employers to implement breastfeeding friendly policies.
Although there is a national, state and overall county trend of declining teen pregnancy rates, the disparities in the cities still remain. Teen pregnancy and teen births in the three cities are also impacting the overall health of the community. The teen pregnancy rate is defined as the number of females ages 15-19 who become pregnant per 1,000 females in the same age range. Newburgh leads the county with a rate of 60.1 per 1,000, followed by Port Jervis at 54.2 per 1,000 and Middletown at 52.5 per 1,000, as seen in the graph below.

MICHC brings together partners among diverse sectors of the community to guide grant activities, leverage resources and identify ways to obtain and share local data around the health of infants and women of child-bearing age in the areas of need located in Newburgh, Middletown and Port Jervis. Since these urban centers of the community have data indicators that are continually worse than county averages, as documented above, OCDOH and its community partners continue to target the three cities within the 2016-2018 CHIP and designation of resources through the MICHC grant. This program has fostered close integration of all the maternal, infant and child serving programs administered by both OCDOH and community partners to build on existing programs and strengthen resources available to women of child-bearing age in the target cities. MICHC has already improved the number of positive pregnancy outcomes through education, outreach, home visitation, referrals and follow up for referral completion. The goals are to increase the percentage of women receiving first trimester prenatal care, decrease the percentage of low birthweight babies, decrease the number of infant mortalities, decrease the number of preterm births and decrease teen pregnancy rates. Through the past three years, nearly each of these indicators has trended in a positive direction for Orange County as a whole and in the three target cities. The advisory board quarterly meeting allows for the review of data and partners are tasked with the development and implementation of each of the CHIP strategies.
OTHER COUNTY HEALTH PRIORITY AREAS

Although not selected as part of the Community Health Improvement Plan, data review from the recent NYSDOH publication, Opioid Poisoning, Overdose and Prevention in 2015 reinforced anecdotal information that Orange County’s Department of Mental Health (OCDOMH) had been receiving since 2013. From 2009-2013, Orange County was among the top ten counties in NYS for the highest death rate due to drug overdoses in adults from 2009-2013 at 12.4 per 100,000 residents. In addition, the rates for opioid-related emergency department admissions skyrocketed from 118.6 per 100,000 population in 2010 to 255.1 per 100,000 population in 2013, compared to 175 per 100,000 for NYS in 2013. In 2013, OCDOH collaborated with the OCDOMH to form a multi-agency task-force and provide recommendations to address the rise of opiate abuse in the county. The Health Commissioner co-chairs the committee that continues to meet quarterly and implement the strategies outlined in a white paper that was created in 2014 by the taskforce\textsuperscript{iii}. Within the priority area of Promoting Healthy Women, Infants and Children, OCDOH will work collaboratively with OCDOMH to develop a public health detailing campaign to inform and educate primary care physicians, OB-GYNs, and pediatricians on the importance of utilizing an evidenced-based tool to screen for mental illness and substance abuse and refer to treatment if necessary. Providing substance abuse treatment or mental illness treatment for pregnant women or women of child bearing age can greatly reduce preterm births and improve women's health across the lifespan. Although not chosen as an official CHIP priority area, OCDOH continues to work in multiple capacities with OCDOMH in the priority area of promoting mental health and preventing substance abuse.

STRATEGIC PLAN CHARTS

The remaining document is a detailed strategic plan with time-specific measurable goals, objectives and performance measures for process and outcome evaluation. Each of the strategies chosen are considered best or promising practices and evidence-based. Within each activity, multiple stakeholders and community partners are actively engaged especially in communities with significant burden of disease and health disparities. Progress, improvements and data are tracked and collected through quarterly meetings with partners within each of the strategies and documented in a database. Data updates are completed quarterly, placed directly on the CHIP document on the OCDOH website under community health assessments. Updates to the CHIP will also be shared at the collaborative meetings mentioned above as well as other stakeholder coalitions and forwarded via email through partner lists.
**PREVENTION OF CHRONIC DISEASE: STRATEGIC PLAN**

**PRIORITY AREA:** PREVENTING CHRONIC DISEASE

**FOCUS AREA 1:** Reduce Obesity in Adults

**GOAL 1.1:** Create community environments that promote and support healthy food and beverage choices and physical activity

**OBJECTIVE #1:** By December 31, 2018, reduce the percentage of adults who are obese by 5% to 30.9%. (Baseline: 32.5% 2013-2014)

(Data source: NYS Behavioral Risk Factor Surveillance Survey)

**STRATEGIES THAT ADDRESS DISPARITY:** #1, 2, and 3

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**ACTION PLAN**

<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
</table>
| (1) Increase the number of institutions with nutrition standards for healthy food and beverage procurement, with emphasis in the cities of Middletown, Newburgh and Port Jervis | Draft polices, engage stakeholders with community based organizations (CBOs) and worksites to adopt policies | **Staff Time:** *Public Health Educator (PHE)*, *Health and Wellness Coordinator (HWC)*, *Orange County Planning Department (OCPD)*  
**Implementation Partners:** Small retailers, Bon Secours Hospital, St Lukes Cornwall Hospital, Orange Regional Medical Center | January 2016-December 2018 | CHIP Evaluation Measurement Database | Number of type of municipalities, CBOs, worksites and hospitals to develop and adopt policies to implement nutrition standards including cafeterias, snack bars, vending machines, CSAs and bodegas |
| (2) Promote physical activity in community venues through signage, worksite polices, social support and joint use agreements | Draft polices, engage stakeholders with CBOs and worksites to adopt policies | **Staff Time:** PHE, HWC, and OCPD  
**Implementation Partners:** Small and large business employers, Chamber of Commerce, ORMC | January 2016-December 2018 | CHIP Evaluation Measurement Database | Number and type of community venues that adopt and/or implement nutrition and beverage standards |

Number of adults who have access to community venues that promote physical activity
<table>
<thead>
<tr>
<th>Evidenced Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
</table>
| (3) Increase availability of affordable healthy foods especially in communities with limited access through sustaining Health Department funded farmer's markets | Maintain current farmer’s markets in Newburgh (2) and Port Jervis through the continuation of contracts with farmer's market managers and growing the number of farmers who participate | **Staff Time:** HWC, Port Jervis Farmer’s Market manager, Groundwork, House of Refuge, Office for Aging, Veteran’s Affairs, Cornell Cooperative Extension (CCE)  
**Space:** First Baptist Church Newburgh, House of Refuge, City of Port Jervis, Newburgh Mall | June 2016-December 2018 | CHIP Evaluation Measurement Database | Number of participants and farmers  
Increased availability of locally produced items and availability in low income areas directed towards those without transportation |
| Expand current Newburgh farmer's market services to include delivery of fresh produce to homebound and those in areas with little or no access to fresh fruits and vegetables | **Staff Time:** Sr. PHE, HWC, Groundwork, NY Farm and Agriculture Department, City of Newburgh municipality leaders | January 2017-December 2018 | CHIP Evaluation Measurement Database | Number of participants |
| Increase participation of farmer's markets that take SNAP benefits and WIC checks and increase number of SNAP and WIC participants who use their benefits at farmer's markets | **Staff Time:** HWC, CCE, Port Jervis Market Manager  
**Provide clients:** Office for the Aging, Department of Social Services, Women Infants and Children (WIC) | January 2016-December 2018 | EBT transaction data collection | Higher percentage of farmer's markets accepting SNAP and WIC checks |
<table>
<thead>
<tr>
<th>Evidenced Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) Promote the adoption of complete streets policies</td>
<td>Maintain quarterly complete streets committee to promote the awareness of complete streets and assist with adoption of policies</td>
<td><strong>Staff Time:</strong> Sr. PHE, OCPD, Orange County Citizens Foundation  <strong>Advisory Capacity:</strong> Tri-State Transportation Council</td>
<td>January 2016-December 2018</td>
<td>Meeting minutes</td>
<td>Increased awareness and number of complete streets policies adopted</td>
</tr>
<tr>
<td></td>
<td>Educate municipality leadership during yearly Planning Federation Conference and subsequent workshops about implementing complete streets</td>
<td><strong>Staff Time:</strong> Sr. PHE, and OCPD  <strong>Space provided:</strong> Municipality leadership</td>
<td>January 2016-December 2018</td>
<td>Meeting minutes</td>
<td>Number and percent of residents affected by policies and number/percentage of roads impacted by complete streets policies</td>
</tr>
</tbody>
</table>
**PRIORITY AREA: PREVENTING CHRONIC DISEASE**

**FOCUS AREA 1: Reduce Obesity in Children**

**GOAL 1.2:** Prevent childhood obesity through early child care and schools

**OBJECTIVE #1:** By December 31, 2018, reduce the percentage of children who are obese by 5%. (Baseline: 19% 2012-2014) (Data source: Student Weight Category Status Reporting System)

**STRATEGIES THAT ADDRESS DISPARITY: #1**

<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Encourage districts to prohibit advertising and promotion of less nutritious foods and beverages, to adopt and implement standards for competitive foods and to implement Comprehensive School Physical Activity Programs (CSPAP) through the Healthy Orange Schools and Communities Grant (HOSC)</td>
<td>Draft policies, engage with school districts and stakeholders during wellness committee meetings to adopt policies</td>
<td><strong>Staff Time:</strong> PHE, Newburgh Enlarged City School District, Port Jervis School District, Eat Smart New York, CCE, Enlarged City School District of Middletown (ECSDM)</td>
<td>January 2016-December 2018</td>
<td>CHIP Evaluation Measurement Database</td>
<td>Number of districts with local wellness policies that prohibit advertising and promotion of less nutritious foods and beverages</td>
</tr>
<tr>
<td>Increase the number of schools with comprehensive and strong local school wellness policies</td>
<td><strong>Provide clients and space:</strong> Newburgh Enlarged City School District, Port Jervis School District, ECSDM</td>
<td></td>
<td></td>
<td></td>
<td>Number of districts that adopt and implement standards for competitive foods</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Number of districts implementing CSPAP</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Number schools that adopt and implement comprehensive and strong local school wellness policies</td>
</tr>
</tbody>
</table>
### PRIORITY AREA: PREVENTING CHRONIC DISEASE

**FOCUS AREA 1:** Reduce Obesity in Children

**GOAL 1.3:** Expand the role of public and private employers in obesity prevention

**OBJECTIVE #1:** By December 31, 2018, increase the percentage of employers with supports for breastfeeding at the worksite by 10%.  
(Baseline to be determined) (Data source: CHIP Evaluation Measurement Database)

**STRATEGIES THAT ADDRESS DISPARITY: #1**

<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
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<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
</table>
| (1) Use the Business Care for Breastfeeding to encourage employers to implement breastfeeding friendly policies | Implement policies of public and private employers to support breastfeeding | **Staff Time:** Sr. PHE, HWC, MICHC coordinator, St. Anthony's Hospital, Orange Regional Medical Center (ORMC)  
**Implementation partners:** St. Anthony's Hospital, Small retailers, Bon Secours Hospital, St Luke’s Cornwall Hospital, ORMC, For-profit business worksites to be identified | January 2016-December 2018 | CHIP Evaluation Measurement Database | Number of women reached by policies and practices to support breastfeeding |
<p>| | | | January 2016-December 2018 | CHIP Evaluation Measurement Database | Demographics (age, race and ethnicity) of women reached by policies and practices to support breastfeeding |</p>
<table>
<thead>
<tr>
<th>PERFORMANCE STANDARDS</th>
<th>Baseline</th>
<th>Source</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Term Process Indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By December 2017, 7 worksites, bodegas, or hospitals will implement nutrition standards or practice (systems) changes.</td>
<td>Three worksites (2015)</td>
<td>Healthy Orange</td>
<td>Quarterly</td>
</tr>
<tr>
<td>By December 2017, 5 community venues will promote physical activity through signage, worksite polices, social support or joint use agreements.</td>
<td>Four venues (2015)</td>
<td>Healthy Orange</td>
<td>Quarterly</td>
</tr>
<tr>
<td>By October 2017, increase the number of participants utilizing the farmers markets in Newburgh and Port Jervis by 10% to approximately 3,200 participants.</td>
<td>2,900 participants (2015)</td>
<td>Healthy Orange</td>
<td>Seasonally</td>
</tr>
<tr>
<td>By June 2016, increase the number of farmers participating by 2 in the City of Newburgh’s established farmer’s market.</td>
<td>Average 4 (2015)</td>
<td>Healthy Orange</td>
<td>Monthly, Seasonally</td>
</tr>
<tr>
<td>By June 2016, increase the number of farmers markets who accept EBT benefits from one to two markets.</td>
<td>One market (2015)</td>
<td>Healthy Orange</td>
<td>Annually</td>
</tr>
<tr>
<td>By June 2017, two school districts will implement the CSPAP guidelines.</td>
<td>None</td>
<td>HOSC Grant</td>
<td>Annually</td>
</tr>
<tr>
<td>By June 2018, increase the number of comprehensive school wellness policies to 3 districts.</td>
<td>One- Newburgh (2015-2016 academic year)</td>
<td>HOSC Grant</td>
<td>Annually</td>
</tr>
<tr>
<td>By December 2017, increase the number of employers with breastfeeding policies by 2.</td>
<td>To be determined by April 2017</td>
<td>Healthy Orange</td>
<td>Quarterly</td>
</tr>
<tr>
<td>By June 2017, provide 6 worksites with the Business Care for Breastfeeding toolkit.</td>
<td>No baseline available</td>
<td>Healthy Orange</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Long Term Outcome Indicators</td>
<td>Baseline</td>
<td>NYSDOH P.A. Goal</td>
<td>Source</td>
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</tr>
<tr>
<td>By December 2018, decrease the percentage of adults (18 and over) who are overweight or obese by 5% from 67.6% (2013-2014) to 64% and decrease the percentage of obese adults by 5% from 32.5% (2013-2014) to 30.9%.</td>
<td>Overweight and Obese: 67.3% Obese: 32.5% (2013-2014)</td>
<td>Obese: 30.5% by 2018</td>
<td>New York State Behavioral Risk Factor Surveillance Survey</td>
</tr>
<tr>
<td>By December 2018, decrease the percentage of children who are overweight or obese by 5% from 35.8% (2012-2014) to 34% and decrease the percentage of obese children by 5% from 19% (2012-2014) to 18%.</td>
<td>Overweight and Obese: 35.8% Obese: 19% (2012-2014)</td>
<td>Obese: 16.7% by 2018</td>
<td>NYS Student Weight Category Status Reporting System</td>
</tr>
<tr>
<td>By December 2018, increase the total number of municipalities with complete streets policies from 1 policy to 4 policies.</td>
<td>Zero policies (2014) One policy (2015)</td>
<td>Increase number of policies</td>
<td>Healthy Orange, Orange County Planning Department</td>
</tr>
<tr>
<td>By December 2018, increase the number of adults who report engaging in physical activity in the past 30 days by 10% from 72.8% (2013-2014) to 80%.</td>
<td>72.8% (2013-2014)</td>
<td>77.4% by 2018</td>
<td>NYS Behavioral Risk Factor Surveillance System</td>
</tr>
<tr>
<td>By December 2018, increase the percentage of women who plan to breastfeed exclusively by 10% from 50.1% to 55.1%.</td>
<td>50.1% (2015)</td>
<td>48.1% by 2018</td>
<td>Electronic Birth Certificate Data/Orange County Database</td>
</tr>
</tbody>
</table>
**PRIORITY AREA:** PREVENTING CHRONIC DISEASE

**FOCUS AREA 2:** Reduce Illness, Disability and Disease Related to Tobacco Use and Secondhand Smoke Exposure

**GOAL 2.2:** Promote tobacco use cessation, especially among populations with low social economic status (SES) and those with poor mental health.

**OBJECTIVE #1:** By December 31, 2018, decrease the prevalence of cigarette smoking by adults ages 18 years and older to 12.3% (Baseline 2013-2014: 15.5%) (Data source: NYS Behavioral Risk Factor Surveillance Survey).

**STRATEGIES THAT ADDRESS DISPARITY:** #1

<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
</table>
| (1) Promote tobacco use cessation, especially among low SES populations and those with poor mental health | Promote use of evidence-based tobacco dependent treatment through offering the ALA Freedom from Smoking training to local providers | **Staff Time:** Sr. PHE, Center for Tobacco Free Hudson Valley  
**Provide Clients:** Cornerstone Family Healthcare, MCHC, Hudson River Healthcare, St. Luke’s Hospital, Bon Secours Hospital, ORMC | January 2017 - December 2018 | Number of providers attending training | Increased number of health care providers trained  
Increased number of adults referred for tobacco dependent treatment |
**PRIORITY AREA: PREVENTING CHRONIC DISEASE**

**FOCUS AREA 2:** Reduce Illness, Disability and Disease Related to Tobacco Use and Secondhand Smoke Exposure

**GOAL 2.3:** Eliminate exposure to secondhand smoke.

**OBJECTIVE #1:** By December 31, 2018, increase the number of smoke-free polices in publicly and privately operated housing by 3 policies (Baseline 2016: 1 policy) (Data source: CHIP Evaluation Measurement Database).

**STRATEGIES THAT ADDRESS DISPARITY:** #1

<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Encourage the adoption of smoke-free policies in publicly and privately operated housing</td>
<td>Host a smoke-free housing summit for local housing authorities</td>
<td><strong>Staff Time:</strong> Senior Public Health Educator (Sr PHE), Center for Tobacco Free Hudson Valley, POW'R Against Tobacco</td>
<td>January 2017-June 2017</td>
<td>Meeting minutes</td>
<td>Increased number of public housing authorities, privately owned apartments and market-rate apartments that pass 100% smoke-free policies</td>
</tr>
<tr>
<td></td>
<td>Hold quarterly meeting with Healthy Orange Coalition Members to identify partners for collaboration and lessons learned</td>
<td><strong>Staff Time:</strong> Sr. PHE, Healthy Orange Coalition Members, American Heart Association, American Cancer Society, Center for Tobacco Free Hudson Valley</td>
<td>January 2017-December 2018</td>
<td>Meeting minutes</td>
<td>Provide partners with ongoing progress and forum to discuss successes, barriers, and strategies to recruit additional housing authorities to pass 100% smoke free policies</td>
</tr>
</tbody>
</table>
### PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th>Short Term Process Indicators</th>
<th>Source</th>
<th>Frequency</th>
<th>Source</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By January 2018, increase the number of smoke-free policies in housing to 2 policies.</td>
<td>CHIP Evaluation Measurement Database</td>
<td>Quarterly</td>
<td>By January 2018, hold at least one American Lung Association “Freedom from Smoking” training for health care providers.</td>
<td>Bi-annually</td>
</tr>
<tr>
<td>By January 2018, hold at least one American Lung Association “Freedom from Smoking” training for health care providers.</td>
<td>CHIP Evaluation Measurement Database</td>
<td>Bi-annually</td>
<td>By January 2018, hold at least one American Lung Association “Freedom from Smoking” training for health care providers.</td>
<td>Bi-annually</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long Term Process and Outcome Indicators</th>
<th>Source</th>
<th>Baseline</th>
<th>NYSDOH P.A. Goal</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By December 2018, increase the number of smoke-free housing policies to 4 policies.</td>
<td>CHIP Evaluation Measurement Database</td>
<td>One policy (2016)</td>
<td>NYSDOH P.A. Goal</td>
<td>Annually</td>
</tr>
<tr>
<td>By December 2018, decrease the percentage of current adult smokers by 20% from 15.5% to 12.3% (NYSDOH Prevention Agenda 2018 Goal).</td>
<td>Behavioral Risk Factor Surveillance System (BRFSS)</td>
<td>15.5% (2013-2014)</td>
<td>12.3% Current Adult smokers by 2018</td>
<td>Every four years</td>
</tr>
<tr>
<td>By December 2018, decrease the percentage of current everyday teenage smokers to 4%.</td>
<td>Orange County Youth Development Survey</td>
<td>5.7% (2014-2015)</td>
<td></td>
<td>Every two years</td>
</tr>
</tbody>
</table>
PRIORITY AREA: PREVENTING CHRONIC DISEASE

FOCUS AREA 3: Increase access to High Quality Chronic Disease Preventative Care and Management in Clinical and Community Settings

GOAL 1.1: Increase screening rates for breast, cervical and colorectal cancers, especially among disparate populations in the cities of Newburgh, Middletown and Port Jervis.

OBJECTIVE #1: By December 31, 2018, increase the percentage of adults receiving breast cancer, cervical, and colorectal cancer screenings by 5%. (Baselines: 76.8% Breast Cancer Screening; 82.8% Cervical Cancer Screening and 58.1% Colorectal Cancer Screening) (Data source: NYS Behavioral Risk Factor Surveillance Survey)

STRATEGIES THAT ADDRESS DISPARITY: #1 and 2

<table>
<thead>
<tr>
<th>ACTION PLAN</th>
<th>Evidence Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Implement policy, systems or environmental approaches to increase access to cancer screening services (i.e. breast, cervical and colorectal cancers)</td>
<td>Draft policies, engage stakeholders (CBOs and worksites) to adopt policies</td>
<td><strong>Staff Time:</strong> HCW, American Cancer Society, Orange County Cancer Services, Crystal Run Healthcare</td>
<td><strong>Message Promotion:</strong> American Cancer Society, Orange County Government, Crystal Run Healthcare, Orange County Cancer Services, St Lukes Hospital, Bon Secours Hospital, ORMC</td>
<td>January 2016-December 2018</td>
<td>CHIP Evaluation Measurement Database</td>
<td>Number of worksites</td>
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<td></td>
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<td></td>
<td>Number of employees that have worksites with policies for flex time or paid time off for cancer screenings</td>
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<tr>
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<td></td>
<td>Number of screening events held in partnership with ACS and other cancer organizations</td>
</tr>
<tr>
<td>(2) Implement evidence-based activities that increase public awareness about breast, cervical and colorectal cancer screenings</td>
<td>Create media campaign including press releases to advertise cancer screening events by and in conjunction with community partners</td>
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<td>Number and type of media alerts distributed</td>
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<td></td>
<td></td>
<td>Number of partners, employers and local elected officials participating in awareness events</td>
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<td></td>
<td></td>
<td>Number of events held, promoted and attended</td>
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</tbody>
</table>
### PERFORMANCE MEASURES

#### Short Term Process Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>Source</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By January 2017, analyze the number of worksites with policies with flex</td>
<td>Baseline to be determined</td>
<td>Orange County Cancer Services</td>
<td>Once</td>
</tr>
<tr>
<td>time or paid time off for cancer screenings.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By December 2017, increase the number of worksites with screening</td>
<td>Baseline to be determined</td>
<td>CHIP Evaluation Database</td>
<td>Quarterly</td>
</tr>
<tr>
<td>policies by 10%.</td>
<td></td>
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<tr>
<td>By December 2017, increase the usage of the Orange County Government</td>
<td>Baseline to be determined</td>
<td>Orange County Government Payroll</td>
<td>Bi-annually</td>
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<tr>
<td>policy for cancer screenings.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By June 2017, initiate 10 media alerts for cancer awareness education</td>
<td>No baseline available</td>
<td>CHIP Evaluation Database</td>
<td>Quarterly</td>
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<tr>
<td>campaigns and screening events.</td>
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</table>

#### Long Term Outcome Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>NYSDOH P.A. Goal</th>
<th>Source</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By December 2018, increase the percentage of women ages 50-74 receiving</td>
<td>76.8% (2013-2014)</td>
<td>80.5% by 2018</td>
<td>New York State Behavioral Risk</td>
<td>Every four years</td>
</tr>
<tr>
<td>breast cancer screening by 5% from 76.8% (2013-2014) to 80.6%.</td>
<td></td>
<td></td>
<td>Factor Surveillance Survey</td>
<td></td>
</tr>
<tr>
<td>By December 2018, increase the percentage of adults aged 50-75 receiving</td>
<td>58.1% (2013-2014)</td>
<td>80% by 2018</td>
<td>New York State Behavioral Risk</td>
<td>Every four years</td>
</tr>
<tr>
<td>colorectal screening by 10% from 58.1% (2013-2014) to 64%.</td>
<td></td>
<td></td>
<td>Factor Surveillance Survey</td>
<td></td>
</tr>
<tr>
<td>By December 2018, increase the percentage of women ages 21-65 receiving</td>
<td>82.8% (2013-2014)</td>
<td>88% by 2018</td>
<td>New York State Behavioral Risk</td>
<td>Every four years</td>
</tr>
<tr>
<td>cervical cancer screening by 5% from 82.8% (2013-2014) to 87%.</td>
<td></td>
<td></td>
<td>Factor Surveillance Survey</td>
<td></td>
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</table>
## PROMOTING HEALTHY WOMEN, INFANTS AND CHILDREN: STRATEGIC PLAN

### PRIORITY AREA:

**PROMOTING HEALTHY WOMEN, INFANTS AND CHILDREN**

### FOCUS AREA 1:

Maternal and Infant Health

### GOAL 1:
Reduce premature births in Orange County.

### OBJECTIVE #1:
By December 31, 2018, reduce the percentage of preterm births to 8.4% in the high poverty cities of Middletown, Newburgh and Port Jervis (Baseline Averages: 9.4%, 9.5% and 9.3% respectively from 2013-2015) and reduce the disparity of prematurity in Black women by 10% to 11.7% from 13.1% (Baseline: 13.1% from 2013-2015).

Data sources: NYS County/Zip Code Perinatal Data Profile and Orange County Birth Certificate Database

### STRATEGIES THAT ADDRESS DISPARITIES: #1, 2 AND 3

### ACTION PLAN

<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
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<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
</table>
| (1) Utilize community health worker models for home visiting to provide enhanced support to assist women in getting health insurance, engaging in health care services, securing basic needs assistance and practicing healthy behaviors | Utilize community health workers (CHW) and family support workers to implement home visiting programs within the three cities of high need: Newburgh, Middletown, New Windsor, Walden and Port Jervis | **Staff Time:** CHWs, Healthy Families, MICHC coordinator, MICHC Public Health Nurse  
**Advisory Capacity:** MICHC advisory board  
**Referral Agencies:** Cornerstone Family Healthcare, Hudson River Healthcare, Middletown Community Health Center (MCHC), St. Luke’s Hospital, Orange Regional Medical Center, Bon Secours Hospital, Women, Infant and Children (WIC) | January 2016-December 2018 | Number and percentage of women served, number of CHW visits, number of women who began prenatal care in first trimester, and those receiving adequate prenatal care (12 or more visits) in MICHC/CHIP database | Reduction in premature births |
<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
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<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase recruitment activities and the number of Black women engaged in home visiting services</td>
<td><strong>Staff Time:</strong> MICHC Coordinator, CHWs, Healthy Families, MICHC Public Health Nurse, Cornerstone Family Healthcare, MCHC <strong>Advisory Capacity:</strong> Interfaith Council, MICHC Advisory Board</td>
<td>January 2017-December 2018</td>
<td>Number and percentage of Black women served in MICHC/CHIP database</td>
<td>Increased number of Black women enrolled in home visiting services</td>
<td></td>
</tr>
<tr>
<td>Ask all pregnant women about tobacco use and refer smokers for counseling and smoking cessation services</td>
<td><strong>Staff Time:</strong> CHWs, MICHC Coordinator, <strong>Provide Services:</strong> Healthy Families, Cornerstone Family Healthcare, MCHC</td>
<td>January 2016-December 2018</td>
<td>Number and percentage of women for whom tobacco counseling was provided as part of a visit and referred in MICHC/CHIP database</td>
<td>Decreased number of women who smoke during pregnancy</td>
<td></td>
</tr>
<tr>
<td>Evidence Based Strategy</td>
<td>Activities</td>
<td>Lead Partners</td>
<td>Timeframe</td>
<td>Evaluation Measure</td>
<td>Outcome: Product/Result</td>
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</tbody>
</table>
| (2) Identify and promote educational messages to promote smoking cessation, healthy eating, and family planning methods | Provide educational workshops to women of child-bearing age to promote healthy behaviors at least 4 times per year | **Staff Time:** Healthy Orange Partners, CHW’s, MICHC Coordinator, Cornell Cooperative Extension (CCE), MICHC Public Health Nurse, WIC  
**Provide Space and clients:** Safe Homes of Orange County, Alcohol and Drug Abuse Council (ADAC), OC Dept of Mental Health | January 2016-December 2018 | Number of attendees educated in MICHC/CHIP database | Increased knowledge of women to maintain healthy lifestyle |
<table>
<thead>
<tr>
<th>Evidence Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2 cont.) Identify and promote educational messages to promote smoking cessation, healthy eating, and family planning methods</td>
<td>Implement public health awareness campaign related to the importance of preconception and interconception health at health centers, frequently targeted businesses and family planning sites</td>
<td>Provide Space and Clients (cont.): Planned Parenthood, Cornerstone Family Healthcare, Hudson River Healthcare, MCHC, Orange County Dept of Social Services, Catholic Charities, Newburgh Ministry, Independent Living, Hudson House, Food Pantries, Newburgh Library, Interfaith Council, Easter Seals: Project Discovery, Newburgh Enlarged School District, Port Jervis School District, Nora Cronin Catholic Schoo, WIC I</td>
<td>January 2016-December 2018</td>
<td>Number of outreach events and number of individuals reached, measured quarterly in MICHC/CHIP database</td>
<td>Increased knowledge of the importance of preconception health as it relates to birth outcomes</td>
</tr>
<tr>
<td>Evidence Based Strategy</td>
<td>Activities</td>
<td>Lead Partners</td>
<td>Timeframe</td>
<td>Evaluation Measure</td>
<td>Outcome: Product/Result</td>
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<tr>
<td>(3) Develop and implement strategies to engage healthcare providers to integrate behavioral health screenings as part of primary care with women during pregnancy, preconception, interconception and post-partum stages</td>
<td>Survey OB-GYN, primary care and pediatric provider offices to determine which (if any) risk assessment tools are utilized for depression and substance abuse</td>
<td><strong>Staff Time:</strong> <em>Touro Medical College Students and MICHC Public Health Nurse</em></td>
<td>January 2016-December 2018</td>
<td>Number and percentage of targeted provider practices that received a detailing visit and completed a survey on risk assessment tools in MICHC/CHIP database</td>
<td>Increased number of providers integrating behavioral health screenings as part of primary care for women</td>
</tr>
</tbody>
</table>
| (4) Provide outreach and education to healthcare providers through a public health detailing campaign to improve knowledge, beliefs and practice change related to the improved use of evidenced based clinical and community interventions to reduce preterm birth and improve women’s health across the lifespan | Develop a public health detailing campaign to inform and educate primary care physicians, OB-GYNs, and pediatricians on the implementation of the OASAS tool “S-BIRT”- (screening and brief intervention referral and treatment) and the increased use of LARCs (long action reversible contraceptives) into daily practice | **Staff Time and Training:** *Orange County Dept of Mental Health*  
**Staff Time:** *MICHC Coordinator, County-contractor*  
**Volunteer Time:** *Touro College of Osteopathic Medicine* | January 2016-December 2018 | Number and percentage of targeted provider practices that received a detailing visit and number of providers and practices adopting S-BIRT at baseline, 3 months and 6 months after campaign in MICHC/CHIP database | Increased knowledge of providers on the use of S-BIRT and LARCs and increased number of providers recommending LARCs to their patients and utilizing S-BIRT into daily practice |
## PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th>Short Term Process Indicators</th>
<th>Source</th>
<th>Baseline</th>
<th>NYSDOH P.A. Goal</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By December 2017, increase the number of high risk pregnant women referred for home visiting services.</td>
<td>Orange County referral database</td>
<td>78 women (2015)</td>
<td></td>
<td>Monthly</td>
</tr>
<tr>
<td>By December 2017, increase the number of referrals to services including Healthy Families.</td>
<td>Orange County referral database</td>
<td>130 referrals (2015)</td>
<td></td>
<td>Monthly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long Term Outcome Indicators</th>
<th>Source</th>
<th>Baseline</th>
<th>NYSDOH P.A. Goal</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By December 2018, decrease the percentage of pre-term births in Newburgh, Port Jervis and Middletown by 10% to 8.3%.</td>
<td>Electronic Birth Certificate Data/Orange County Database</td>
<td>9.3% (2013-2015)</td>
<td>10.2% by 2018</td>
<td>Quarterly</td>
</tr>
<tr>
<td>By December 2018, increase the percentage of women who have adequate prenatal care by 10% in Middletown, Port Jervis and Newburgh from 51.4%, 39.9% and 52.6% to 56.5%, 43.9% and 62.2%, respectively.</td>
<td>Orange County Birth Certificate Data</td>
<td>Middletown: 51.4% Newburgh: 39.9% Port Jervis: 52.6% (2013-2015)</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>By December 2018, decrease the percentage of pre-term births in Black women by 10% from 13.1% to 11.7%.</td>
<td>Electronic Birth Certificate Data/Orange County Database</td>
<td>13.1% (2013-2015)</td>
<td>10% reduction in disparity</td>
<td>Annually</td>
</tr>
<tr>
<td>By December 2018, increase the gestational age of infants born to women enrolled in home visiting programs in Newburgh, Port Jervis and Middletown to 39 weeks.</td>
<td>MICHC Orange County Database</td>
<td>38.5 weeks (2015)</td>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>By December 2018, increase the percentage of women in Orange County with early prenatal care from 72.7% to 75%.</td>
<td>New York State Department of Health Vital Statistics</td>
<td>72.7% (2012-2014)</td>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>By December 2018, decrease the percentage of women who smoke by 10% in the three cities of Middletown, Newburgh and Port Jervis from 5%, 9.6% and 14.1% to 4.5%, 8.6% and 12.7%, respectively.</td>
<td>Orange County Birth Certificate Data</td>
<td>Middletown: 5% Newburgh: 9.6% Port Jervis: 14.1% (2013-2015)</td>
<td>12.3% by 2018</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>
**PRIORITY AREA:** PROMOTING HEALTHY WOMEN, INFANTS AND CHILDREN

**FOCUS AREA 3:** Reproductive, Preconception and Inter-Conception Health

**GOAL 6:** Prevention of Unintended and Adolescent Pregnancy

**OBJECTIVE 6.1:** By December 2018, reduce the rate of teenage pregnancy (rates per 1,000 females 15-19 years) in the cities of Newburgh (60.1), Port Jervis (54.2) and Middletown (52.5) by 10% to 54.1, 48.8 and 47.3 respectively. (Data sources: NYS County/Zip Code Perinatal Data Profile)

**STRATEGIES THAT ADDRESS DISPARITY: #1, 2, and 3**

<table>
<thead>
<tr>
<th>ACTION PLAN</th>
<th>Evidenced Based Strategy</th>
<th>Activities</th>
<th>Lead Partners</th>
<th>Timeframe</th>
<th>Evaluation Measure</th>
<th>Outcome: Product/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Identify and promote educational messages on delaying sexual activity, contraceptive use and preventive health care</td>
<td>Develop a campaign to distribute condoms, promote the utilization of family planning methods and stress the importance of disease prevention</td>
<td><strong>Staff Time:</strong> MICHC Public Health Nurse, CHWs, Planned Parenthood <strong>Provide clients:</strong> OB-GYN providers, Cornerstone Family Healthcare, MCHC</td>
<td>January 2016-December 2018</td>
<td>Number of teens reached through campaign efforts quarterly in MICHC/CHIP database</td>
<td>Increased awareness of family planning community resources and brochures</td>
<td></td>
</tr>
</tbody>
</table>
(2) Work with community partners to support the delivery of evidence-based sexual health education and confidential reproductive health care services for teens in both community and school-based settings.

<table>
<thead>
<tr>
<th>Provide education on sexual health and contraceptive use during home visiting and CBO classes and encourage the use of CDC's Reproductive Life Plan</th>
<th><strong>Staff Time:</strong> MICHIC Coordinator, CHWs, MICHIC Public Health Nurse</th>
<th><strong>Provide Space:</strong> Newburgh Enlarged Central School District, Port Jervis School District, Middletown Enlarged City School District</th>
<th>January 2017-December 2018</th>
<th>Number of reproductive life plans completed with teens, home visits with teens in MICHIC/CHIP database</th>
<th>Increased number of teens and young mothers educated about the importance of avoiding unplanned pregnancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborate with Planned Parenthood through the training of educators to complete reproductive life plans with teens in schools</td>
<td><strong>Staff Time:</strong> MICHIC Coordinator, Planned Parenthood</td>
<td></td>
<td>By September 2017</td>
<td>Number of educators trained</td>
<td>Increased number of teens educated about the importance of avoiding unplanned pregnancies</td>
</tr>
<tr>
<td>Develop and promote a continuing medical education (CME) event in collaboration with Touro College and Planned Parenthood for health care providers on the effectiveness and importance of promoting LARCs (long acting reversible contraceptives) among teenagers</td>
<td><strong>Staff Time:</strong> MICHIC Coordinator, Planned Parenthood of the Hudson Valley, Space and <strong>Staff Time:</strong> Touro College of Osteopathic Medicine</td>
<td></td>
<td>At least one by June 2017</td>
<td>Number of providers in attendance at event</td>
<td>Increased awareness among health care providers of the effectiveness of LARCs</td>
</tr>
</tbody>
</table>
## PERFORMANCE MEASURES

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</thead>
<tbody>
<tr>
<td>By January 2017, train at least 3 educators from Planned Parenthood to complete reproductive life plans with teens.</td>
<td>MICHC/CHIP Database</td>
<td>No baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>By December 2018, increase the number of teens receiving individual sexual health reproductive life planning by 50% to approximately 20 teens per year.</td>
<td>MICHC/CHIP Database</td>
<td>13 teens (2015)</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>By December 2018, increase the number of outreach events that include condom distribution by 10% from 17 events to 19 events.</td>
<td>MICHC/CHIP Database</td>
<td>17 events (2015)</td>
<td></td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long Term Outcome Indicators</th>
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<th>Baseline</th>
<th>NYSDOH P.A. Goal</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>By December 2018, reduce the rate of teenage pregnancy (rates per 1,000 females 15-19 years) in the cities of Newburgh (60.1), Port Jervis (54.2) and Middletown (52.5) by 10% to 54.1, 48.8 and 47.3 respectively. (NYSDOH Rest of State 2013 Rate: 26.1)</td>
<td>New York State County Zip Code Perinatal Data Profile</td>
<td>Middletown: 52.5 Newburgh: 60.1 Port Jervis: 54.2 (2011-2013)</td>
<td>10% reduction in disparity</td>
<td>Annually or as often as available</td>
</tr>
</tbody>
</table>
References


Adapted from Public Health Accreditation Board (PHAB) Acronyms and Glossary of Terms, Version 1.0 (PDF: 512KB / 38 pages) 


http://admin.healthlinkny.thehcn.net/index.php?module=indicators&controller=index&action=view&indicatorId=94&localeId=1915

http://admin.healthlinkny.thehcn.net/index.php?module=indicators&controller=index&action=view&indicatorId=98&localeId=1915


http://admin.healthlinkny.thehcn.net/index.php?module=indicators&controller=index&action=view&indicatorId=8&localeId=1915

http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm

http://www.medscape.com/viewarticle/582761_4


Healthy Orange Team Members (Middletown, Newburgh and Port Jervis)

- Access Physical Therapy
- Access: Supports for Living Inc.
- Affinity Health
- Alcohol & Drug Abuse Council of Orange County (ADAC)
- American Cancer Society
- American Heart Association
- American Lung Association
- AMSCAN, Inc.
- Bon Secours Community Hospital
- Boys and Girls Club
- Braeside Camp
- Center for Hope
- Chester Police
- Cintas Corporation
- City of Middletown
- City of Newburgh
- City of Port Jervis
- Cornell Cooperative Extension
- Cornerstone Family Healthcare (Formerly, Greater Hudson Valley Family Health Center)
- Downing Park Urban Farm
- Easter Seals
- Eat Smart New York
- Enlarged City School District of Middletown
- Enlarged City School District of Newburgh
- Ezras Choilim Health Center
- Evercare Community Outreach
- Food Bank of the Hudson Valley
- Goshen Central School District
- Grace Church
- House of Refuge
- Hudson Health Plan
- Hudson Valley Food Bank
- Hudson Valley Seed
- Jewish Family Services of Orange County
- Maternal Infant Services Network (MISN)
- Middletown Cares Coalition
- Middletown Community Health Center, Inc.
- Middletown Recreation and Parks
- Middletown YMCA
- Newburgh Armory
- Newburgh Head Start Day Care
- Newburgh Land Bank
- Newburgh Meals on Wheels
- Newburgh Ministry
- Operation Port Jervis PRIDE

- Orange County Childcare Council
- Orange County Citizens Foundation
- Orange County Department of Mental Health
- Orange County Office for the Aging
- Orange County Planning Department
- Orange County WIC
- Orange County Youth Bureau
- Orange Regional Medical Center
- Planned Parenthood of the Hudson Valley
- Port Jervis School District
- Port Jervis Community Development Agency
- Port Jervis Farmer’s Market
- Port Jervis Parks and Recreation
- POW’R Against Tobacco
- RECAP Headstart
- Save-a-lot
- Shoprite
- St. Anthony’s Community Hospital
- St. Luke’s Cornwall Hospital
- SUNY Orange
- TOUCH, Inc.
- Touro College of Osteopathic Medicine
- United Health Care
- United Way
- Village of Warwick
- Washingtonville High School
- YMCA of Orange County
- YWCA Cancer Services of the Hudson Valley
MICHC Advisory Board Members

- Alcohol & Drug Abuse Council of Orange County (ADAC)
- Catholic Charities Community Services of Orange County
- Cornell Cooperative Extension
- Cultural Equity Task Force
- Cornerstone Family Healthcare (Formerly, GHVFHC)
- Ecclesia House
- Healthy Orange
- Hudson River HealthCare
- Independent Living, Inc.
- Maternal Infant Services Network (MISN)
- Mental Health Association in Orange County, Inc.
- Middletown Community Health Center, Inc.
- Middletown Cares Coalition
- Middletown ABCD Day Care
- MPV Healthcare- Hudson Health Plan
- Access: Supports for Living (Formerly, Occupations Inc.)
- Orange County Department of Mental Health
- Orange County Department of Social Services
- Orange County WIC Office
- Orange County Youth Bureau
- Orange Regional Medical Center
- Planned Parenthood Mid-Hudson Valley
- Port Jervis Recreation Department
- Safe Homes of Orange County
- SIDS Foundation
- St. Luke’s Cornwall Hospital
Community Health Assessment 2016 Survey Partner Organizations  
Solicitation and Collection of Nearly 1,400 Resident Surveys

- Access: Supports for Living  
- American Lung Association  
- Alcohol and Drug Abuse Council of Orange County  
- Bon Secours Community Hospital  
- Chester Library  
- Child Care Council of Orange County  
- City of Middletown  
- Cornerstone Family Healthcare  
- Cornwall Library  
- Crystal Run Healthcare  
- Empower Port Jervis  
- Florida Library  
- Grace Methodist Food Pantry  
- Healthy Orange Newburgh Farmer’s Market  
- Highland Falls Library  
- Holy Deliverance Food Pantry  
- Hudson River Healthcare  
- Independent Living, Inc.  
- Josephine Louise Public Library  
- Maternal Infant Community Health Collaborative  
- Mental Health Association  
- Middletown and Newburgh Department of Motor Vehicles  
- Middletown Community Health Center  
- Middletown Teacher’s Retirement Association  
- Montgomery Free Library  
- Mulberry House Senior Center  
- National Night Out  
- Newburgh Armory  
- Newburgh Illumination Event  
- Newburgh Library  
- Orange Classic 10K  
- Orange County Department of Emergency Management  
- Orange County Department of Health Immunization Clinics: Goshen, Middletown and Newburgh  
- Orange County Citizens Foundation  
- Orange County Department of Tourism  
- Orange County Office for the Aging  
- Orange County Department Youth Bureau  
- Orange Regional Medical Center  
- Pine Bush Teacher’s Retirement Association  
- Planned Parenthood of the Hudson Valley  
- Port Jervis Library  
- Shoprite  
- St. Anthony’s Community Hospital  
- St. Francis Food Pantry  
- St. George Food Pantry  
- St. Luke’s Cornwall Hospital  
- St. Lukes Population Health Coalition  
- Touro College of Osteopathic Medicine  
- Thrall Library  
- Walden Police

Special thanks to the Healthy Orange members who attended our 2016 annual meeting and helped with distribution of the 2016 Community Health Assessment Survey. We couldn’t have done it without you!
As an integral part in updating the Community Health Improvement Plan, the Orange County Department of Health (OCDOH) surveyed county residents directly to determine health status, identify health priorities and local health needs in the county. The Community Health Assessment Survey 2016 was developed using a majority of questions from the 2013 Community Health Assessment Survey and modified based on feedback from that year. The survey was made available in both English and Spanish. Surveys were administered in the community and online via the County’s website to reach diverse population groups. Orange County Department of Health partnered with Orange Regional Medical Center, St. Anthony’s Community Hospital, Bon Secours Community Hospital, St Luke’s Cornwall Hospital, and many of the Federally Qualified Health Centers in the County to have surveys administered in patient registration and waiting areas. The surveys for Orange County residents were also administered in a variety community settings including: DMV offices, farmer’s markets, libraries, churches, Meals on Wheels recipients, food pantries, day cares, senior centers, community events and street outreach, local supermarkets, and during Department of Health clinics. The online survey link was also broadly distributed by the following partner organizations: Mental Health Association, Childcare Council of Orange County, Crystal Run Healthcare, Orange County Citizen’s Foundation, Orange County Youth Bureau, Alcohol and Drug Abuse Council of Orange County, American Lung Association’s Center for Tobacco Free Hudson Valley, City of Middletown municipality, Access: Supports for Living, Independent Living, and the Middletown and Pine Bush Teacher’s Retirement Associations.

Demographics
A total of 1,363 Orange County residents completed the 2016 Community Health Assessment survey. Survey respondents were less likely to be Black (6.2% vs. 12.1%), Hispanic (12.3% vs. 19.8%) and between the ages of 18-34 years (18.9% vs. 29.2%) as compared to Orange County population estimates in 2015. A majority of respondents were white (80.9%) and between the ages of 35-64 years (48.5%) (See below).

Over seventy percent of the surveyed residents were female (compared to 50% reported in the 2015 American Community Survey Estimates) and a greater percentage of survey respondents reported higher levels of education. Most surveyed residents are employed full-time (43%) or retired (28%). Eleven percent are not employed or employed part-time, 3.7% are stay-at-home parents, 1.5% reported as students and 1% did not answer the question. Total household income before taxes in the past 12 months was reported as follows: 18.1% less than $24,999, 18.8% between $25,000 and $49,999, 13.2% between $50,000 and $74,999, 11.6% between $75,000 and $99,999, and 19.8% more than $100,000. The geographical distribution of surveyed residents was assessed using current zip code. Residents completing the survey reported living in the following Orange County zip codes: Middletown (16.7%), Newburgh (12%), Monroe (10.3%), New Windsor (6.1%) and Port Jervis (6.0%). These zip codes also accounted for 51% of the Orange County population in 2015.
Health Status

Of the 1,363 surveyed residents, over 73.8% described their overall health as either healthy or very healthy and 80.8% described their overall mental health as either healthy or very healthy. Only 10.9% of respondents reported that they currently smoke. Respondents described their weight as being either normal weight (50.1%) or overweight (42%) and few indicated they were obese (4.1%). In addition to perceived weight, BMI was calculated using the self-reported height and weight of respondents. Individuals were considered underweight if they had a BMI less than 18.5, normal weight if their BMI was between 18.5 and 24.9, overweight if they had a BMI between 25.0 and 29.9, and obese if their BMI was above 30.

When comparing calculated BMI to respondents’ perceived weight, it is clear that surveyed residents greatly underestimated their weight category, specifically among those considered obese (See below). Despite 58.2% of survey respondents having a BMI that is considered either overweight or obese and nearly half considering themselves overweight or obese, only 30% were told that they were overweight or obese by their health care provider. When asked how often survey participants engage in physical activity, 18.5% do not exercise at all, 34.2% exercise 1 to 2 times a week, 26.8% exercise 3 to 4 times a week, and 18.4% exercise 5 or more times a week.

Medical Care

Nearly 90% of surveyed residents have visited their doctor for a routine physical exam or check-up in the past 2 years (79.5% in the past year, 9.4% in the past two years). Less than 5% of respondents reported it being more than 3 years since they went for a checkup. Survey respondents reported a number of reasons for not having a routine physical exam in the past two years including lack of health insurance, unaffordability of care including high deductibles or co-pays, lack of time and either were afraid or do not like going.
When respondents were asked where they go most often when sick, many reported going to a doctor’s office (63.4%) or urgent care (15.8%) to seek care. When surveyed residents had a health question or concern, many of them went to their doctor or nurse practitioner for information (62.1%). Fifteen percent of respondents made use of the internet for health information or talked to family and friends when they had a health question (4.8%).

**Chronic Diseases**

The prevalence of various chronic health conditions among surveyed residents was assessed. A comparison to the previous 2013 CHA survey and the 2008-2009 and 2013-2014 Expanded Behavioral Risk Factor Surveillance System (BRFSS) data for diabetes, high blood pressure, asthma, obesity, and heart disease is found in the table below. Nearly 13% of respondents have been told by a health care provider that they have diabetes, 32% have high blood pressure, and 12.8% have heart disease. Surprisingly, only 30% of respondents reported having their health care provider diagnose them with being overweight or obese compared to nearly two-thirds of Orange County residents having a BMI in those ranges. Other commonly reported chronic diseases among survey respondents included hyperlipidemia (25.8%), depression or anxiety (17.5%), chronic pain (12.5%) and asthma (11.9%).

<table>
<thead>
<tr>
<th>Chronic Disease Assessment Surveys 2013 &amp; 2016</th>
<th>CHA Survey 2013 (n=1,479)</th>
<th>2008-2009 BRFSS (n=654)</th>
<th>CHA Survey 2016 (n=1,363)</th>
<th>2013-2014 BRFSS* (n=522)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you been told by a health care provider that you have:</td>
<td>8.8%</td>
<td>6.9%</td>
<td>12.5%</td>
<td>13%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>25.0%</td>
<td>25.6%</td>
<td>31.9%</td>
<td>25.2%</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>12.4%</td>
<td>14.8%</td>
<td>11.9%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Asthma</td>
<td>28.1%</td>
<td>30.0%</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Overweight/Obese (Calculated BMI)</td>
<td>59.4%</td>
<td>64.4%</td>
<td>58.1%</td>
<td>67.6%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>5.7%</td>
<td>5.6%</td>
<td>12.8%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Health Priorities**

Surveyed residents were asked to choose up to five health priorities important to them and their families living in Orange County. A total of 5,112 health priorities were selected. The top five health priorities chosen were:

- Routine care for adults
- Dental care
- Routine care for children
- Women’s health
- Health care coverage
Orange County Department of Health

Steven M. Neuhaus
County Executive

Eli N. Avila, MD, JD, MPH, FCLM
Commissioner of Health

2016 Orange County Community Health Assessment Survey

1. Are you an Orange County resident? □ Yes □ No

2. What is your zip code? ___ ___ ___ ___ ___

3. What is your age?
   □ 18–24 years □ 45–54 □ 75 years and older
   □ 25–34 □ 55–64
   □ 35–44 □ 65–74

4. How do you identify yourself? □ Male □ Female □ Other ______________

5. What category best describes your race?
   □ White □ Native American
   □ Black or African American □ Other (please tell us) ______________
   □ Asian or Pacific Islander

6. Are you Hispanic or Latino? □ Yes □ No

7. Are you currently employed?
   □ Yes, full-time □ No □ Retired
   □ Yes, part-time □ No, currently seeking employment □ Stay at home parent
   □ No, currently a student

8. What was the highest level of education you received?
   □ Less than high school □ Associate’s degree
   □ High school graduate/GED □ Bachelor’s degree
   □ Some college □ Graduate/Doctoral/Post Doctoral

9. During the past 12 months, what was your total household income before taxes?
   □ Less than $24,999 □ $75,000 – $99,999
   □ $25,000 – $49,999 □ $100,000 or more
   □ $50,000 – $74,999 □ Prefer not to answer

10. How would you describe your overall health?
    □ Very Healthy □ Somewhat healthy □ Very unhealthy
    □ Healthy □ Unhealthy □ Other (Please specify) ______________

11. How would you describe your overall mental health?
    □ Very Healthy □ Somewhat healthy □ Very unhealthy
    □ Healthy □ Unhealthy □ Other (Please specify) ______________

12. How would you describe your weight?
    □ Underweight □ Normal weight □ Overweight □ Obese

13. How many times per week do you engage in physical activity or exercise lasting at least a half an hour?
    □ 0 (none) □ 1–2 □ 3–4 □ 5 (or more)

14. How tall are you without shoes? _______ Feet _______ Inches

15. How much do you weigh? _______ Pounds

16. Have you smoked at least 100 cigarettes in your entire life? □ Yes □ No
17. Do you now smoke cigarettes?  
☐ Everyday  ☐ Some days  ☐ Not At All

18. When you have a health question or concern, where do you go for information?  
☐ Doctor/Health Professional  ☐ Media (e.g. TV, Newspaper)  
☐ Family/Friends  ☐ Social Media (e.g. Facebook, Twitter)  
☐ Internet  ☐ Other (please tell us)  
☐ Don’t know where to go

19. Where do you go most often when you are sick?  
☐ Health Professional’s Office  ☐ Medical Clinic  ☐ Other (Please describe)  
☐ Emergency Room  ☐ Urgent Care Center

20. How long has it been since you visited a health professional for a routine physical exam or check-up?  
☐ In the past year  ☐ In the past 5 years  ☐ Never  
☐ In the past 2 years  ☐ Five or more years ago  ☐ Don’t Know

21. What prevents you from getting medical care from a healthcare provider? Check all that apply.  
☐ Nothing prevents me from getting medical care  ☐ Cannot find a doctor who speaks my language  
☐ No health insurance  ☐ Health Care Provider said it was not needed  
☐ Cannot afford  ☐ Do not like going / Afraid to go  
☐ Co-pay or deductible too high  ☐ Did not have childcare  
☐ Insurance does not cover  ☐ Didn’t know where to go  
☐ Too far to travel  ☐ Couldn’t get an appointment  
☐ Did not have transportation  ☐ The wait was too long  
☐ Did not have the time  ☐ Other (please tell us)

22. Have you been told by a health care provider that you have?  
<table>
<thead>
<tr>
<th>Condition</th>
<th>☐ Yes</th>
<th>☐ No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Cancer</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Asthma</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Depression or Anxiety</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Overweight/Obesity</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
</tbody>
</table>

23. What are the top five (5) health priorities for you and your family living in Orange County?  
☐ Routine Care for Adults  ☐ Diabetes  ☐ Sexually Transmitted Diseases  
☐ Routine Care for Children  ☐ Heart Disease  ☐ Alcohol/Substance Use  
☐ Prenatal & Pregnancy Care  ☐ Asthma  ☐ Prescription Pain Killer Abuse  
☐ Family Planning         ☐ Tobacco  ☐ Mental Illness  
☐ Women’s Health           ☐ Cancer   ☐ Intellectual/Developmental Disabilities  
☐ Dental Care              ☐ HIV/AIDS ☐ Domestic Violence  
☐ Obesity                  ☐ Domestic Violence  ☐ Health Care Coverage  
☐ Other (Please specify)   ☐

24. How can we reach you with health messages or public service announcements?  
   Check all that apply.  
☐ Internet (our website) ☐ Newspaper ☐ School newsletter  
☐ Facebook ☐ Radio ☐ Waiting rooms  
☐ Twitter ☐ Television ☐ Other (Please specify)  
☐

Thank you for your time and effort. Your input will help shape future health initiatives in Orange County.
Focus Area 1: Reduce Obesity in Children and Adults

Obesity is a risk factor for...

- Heart disease
- Stroke
- Type 2 diabetes
- Certain types of cancer
- Responsible for some of the leading causes of preventable death

34.9% of U.S. adults are obese (BMI ≥30)

27% of New York State adults are obese (BMI ≥30)

32.5% of Orange County adults are obese (BMI ≥30)

The Orange County Department of Health’s Community Health Improvement Plan aims to combat obesity through a number of strategies through the Healthy Orange program. The goal is to create community environments that promote and support healthy food and beverage choices and physical activity.

Source: CDC, Behavior Risk Factor Surveillance System (BRFSS), 2014

Source: New York State Department of Health BRFSS, 2013-2014

For the full Community Health Improvement Plan, visit: www.orangecountygov.com/health under community health assessments
Focus Area 1: Reduce Obesity in Children and Adults

**Evidenced Based Strategy #1:** Increase availability and affordable healthy foods through sustaining and creating farmers markets

**Activities:**
- Maintaining Newburgh market(s) and supporting a market manager for the revamped Port Jervis Market in 2016
- Working with Orange County Farmer’s Market Coordinator to increase EBT machines at existing farmer’s markets and ability to use WIC checks

✓ Increased participation in Newburgh by 88%
✓ Increased SNAP benefits used by 55% from Year 1 to Year 2
✓ Increased Fresh Connect Coupons used by over 288% from Year 1 to Year 2

**Evidenced Based Strategy #2:** Promoting the adoption of complete streets policies

**Activities:**
- Develop complete streets committee to promote awareness and adoption of policies in municipalities
- Meet with municipalities to educate leadership about the benefits of complete streets

✓ Baseline (2014): Zero policies
✓ Current (2016): Two policies (City of Port Jervis, Village of Warwick)
✓ CHIP Goal (2017): Four policies

<table>
<thead>
<tr>
<th>Evaluation Measure</th>
<th>Baseline Data (2014)</th>
<th>2015 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average # of participants at Newburgh on Broadway Farmer’s Market per season</td>
<td>1,400 participants</td>
<td>2,633 participants</td>
</tr>
<tr>
<td>Number of Farmers at Market</td>
<td>3 Farmers (range from 2-6)</td>
<td>4 Farmers (range 3-5)</td>
</tr>
<tr>
<td>Percent of Farmers able to take SNAP benefits, Fresh Checks, and/or Veterans Coupons</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Dollar amount of Veteran’s Coupons issued</td>
<td>No data available</td>
<td>$1,600</td>
</tr>
<tr>
<td>Amount of $ used through SNAP benefits (EBT machine)</td>
<td>$450</td>
<td>$698</td>
</tr>
<tr>
<td>Number of EBT machine transactions (proxy for # of individuals using SNAP benefits)</td>
<td>No data available</td>
<td>58 transactions</td>
</tr>
<tr>
<td>Dollar amount of Senior Coupons Issued</td>
<td>No data available</td>
<td>$4,000</td>
</tr>
<tr>
<td>Amount of Fresh Connect Coupons Used</td>
<td>$68</td>
<td>$264</td>
</tr>
</tbody>
</table>

Table 1. Process Evaluation for Newburgh farmers market

**Evidence Based Strategy #3:** Increase availability and affordable healthy foods through Farm to School Program

**Activities:**
- Received USDA Grant 2013-2015 for four school districts with high percentages of students who qualify for reduced/free lunch (Newburgh, Middletown, Port Jervis and Valley Central)
- Contracted with Cornell Cooperative Extension (CCE) to develop a tool kit for schools to help understand procurement and bidding processes
- Trained over 30 food service staff on fresh and healthy food preparation
- Integrated nutrition and agricultural education into the classroom and for parents from CCE

✓ All 4 school districts passed policies to include local produce as a procurement option
✓ Increased number of schools that provide local produce from 14 (2013) to 29 schools (2015)
✓ Over 4,000 students and nearly 200 teachers participated
✓ School lunch participation rates increased in 2 out of 4 schools
  - One school by 5%, one school by 10%

Source: New York State Department of Health BRFSS, 2013-2014

For the full Community Health Improvement Plan, visit: [www.orangecountygov.com/health](http://www.orangecountygov.com/health) under community health assessments
Focus Area 2: Reduce illness, disability and disease related to tobacco use and secondhand smoke exposure

Smoking can cause . . .

- Lung diseases (COPD) including emphysema and chronic bronchitis
- Stroke
- Coronary heart disease
- Cancer
- Type 2 diabetes
- Rheumatoid arthritis
- Leading cause of preventable death in the United States

18.1% of U.S. adults are current smokers

14.4% of New York State adults are current smokers

15.5% of Orange County adults are current smokers

Source: CDC, Behavior Risk Factor Surveillance System (BRFSS), 2014

The Orange County Department of Health’s Community Health Improvement Plan aims to combat smoking through a number of strategies through the Healthy Orange program. The goal is to reduce illness, disability and disease related to tobacco use and secondhand smoke exposure by offering free smoking cessation to anyone who lives, works or goes to school in Orange County with an emphasis in the cities of Middletown and Newburgh among individuals with low socioeconomic status.

Current Smoking Rates in Orange County

<table>
<thead>
<tr>
<th>Current Use among Teens</th>
<th>Current Use among Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>5-7%</td>
<td>15%</td>
</tr>
<tr>
<td>5%</td>
<td>15.5%</td>
</tr>
<tr>
<td>19.6%</td>
<td></td>
</tr>
</tbody>
</table>

Cessation Advertising

Baseline: **18 locations** (2013 & QTRs 1 & 2 2014)

To date: **55 locations** (QTRs 3 & 4 2014, 2015, and 2016)


For the full Community Health Improvement Plan, visit: [www.orangecountygov.com/health](http://www.orangecountygov.com/health) under community health assessments
Focus Area 3: Promoting Maternal and Infant Health by Reducing Premature births

Premature birth is . . .
- An infant born before 37 weeks of pregnancy
- The largest contributor to infant death
- The leading cause of long-term neurological disabilities in children
- A contributor to: breathing problems, cerebral palsy, vision and hearing impairment and developmental delay

8.0% of U.S. babies in 2014 were born premature (≤37 weeks gestation)

8.9% of New York babies in 2013 were born premature (≤37 weeks gestation)

7.6% of Orange County babies in 2013 were born premature (≤37 weeks gestation)

The Orange County Department of Health’s Community Health Improvement Plan aims to reduce the number of premature births in the cities of Newburgh, Middletown and Port Jervis through a number of strategies through the 5-year grant: Maternal, Infant and Community Health Collaborative (MICHC).

Evidenced Based Strategy #1: Develop and implement local networks and strategies to ensure high risk pregnant women are linked to the appropriate community resources

Activities:
- Utilize community health workers (CHWs) to reinforce health care utilization for high risk pregnant women
- Develop a cross-referral system with community health centers and community based organizations to ensure enrollment of high risk pregnant women into home visiting and health care services

During the calendar years of 2014 and 2015:
- Established connections with 54 referring organizations
- Received 188 referrals for pregnant women, 66% (124) received at least one home visit
- 39 women gave birth while enrolled in the MICHC program, average gestational age of 37.7 weeks
Focus Area 3: Promoting Maternal and Infant Health by Reducing Premature births

Evidenced Based Strategy #2: Identify and promote educational messages to promote smoking cessation, healthy eating and family planning methods.

Activities:

- Provide educational workshops to women of child-bearing age to promote healthy behaviors at least 4 times a year
- Develop and distribute informational packets emphasizing the importance of preconception health
- Utilizing CHWs to provide home visiting and support women in getting health insurance, securing basic needs and practicing healthy behaviors

During the calendar years of 2014 and 2015:

- Number of educational workshops: 66
- Number of women attending workshops: 1356
- Number of women receiving home visits: 352
- Number of CHW visits completed: 748
- Number of women reached through educational campaigns: 6476

Performance Measures

Short and Long Term Goals:

- Increase the number of pregnant women referred for home visiting services, including to the MICHC program and Healthy Families
- Increase the percentage of women who have adequate and early prenatal care to improve maternal and infant outcomes
- Increase the gestational age of infants born to women enrolled in home visiting programs in the three cities

Health Indicators of Orange County Mothers in 2015:

- 14.7% of Port Jervis mothers reporting smoking during their pregnancy compared to 9.8% in Newburgh, 3.0% in Middletown and 5.3% in all of Orange County
- 68.6% of Port Jervis mothers were overweight or obese before pregnancy compared to 61.6% in Newburgh, 60.2% in Middletown and 55% in all of Orange County


Source: Orange County Birth Certificate Database, 2016

For the full Community Health Improvement Plan, visit: www.orangecountygov.com/health under community health assessments
Focus Area 4: Preventing Unintended and Adolescent Pregnancy

Teen Pregnancy . . .

- Brings substantial social and economic costs accounting for $9.4 billion in the United States in 2010
- Significantly contributes to high school dropout rates among girls
- Impacts their children including higher risk of incarceration, lower academic achievement and greater chances for unemployment as young adults

52 per 1,000
U.S. females ages 15-19 became pregnant in 2011

41.3 per 1,000
New York females ages 15-19 became pregnant during 2011-2013

34.7 per 1,000
Orange County females ages 15-19 became pregnant during 2011-2013

Evidenced Based Strategy #1:
Identify and promote educational messages on delaying sexual activity, contraceptive use and preventative health care

Activities:
- Develop a campaign to distribute condoms, promote the utilization of family planning methods and stress the importance of disease prevention and the importance of preconception health
- Bring together diverse community stakeholders including faith-based organizations to bring awareness of high teen pregnancy rates and determine opportunities for collaboration

Evidenced Based Strategy #2:
Promote annual preconception and inter-conception visits to develop and review reproductive life plans

Activities:
- Provide education on the importance of birth spacing and contraceptives during home visiting and encourage the use of the CDC reproductive life plan worksheet
- Work with community partners to support the delivery of evidenced-based sexual health education and confidential reproductive health care plans for teens in community and school-based settings

Sources: National Campaign to Prevent Teen and Unplanned Pregnancy, 2016; Guttmacher Institute, 2016 and New York State Department of Health Vital Statistics, 2015

Teen Pregnancy Rates per 1,000 Females ages 15-19 years

Orange County Middletown Newburgh Port Jervis