

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
124 Main Street
Goshen, NY 10924
845-291-2332
Contact: Jackie Lawler, Epidemiologist

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 assessmentⁱ. 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 disabilitiesⁱⁱ. 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.

CHIP Focus Area	Evidenced Based Strategies
Reduce Obesity in Adults	<ul style="list-style-type: none"> Create healthy community and worksite environments that promote and support nutrition standards Promote physical activity in community venues through worksite policies, signage, joint use agreements and social support Increase the availability of affordable healthy foods through sustaining current farmer's markets in communities with limited access Promote the adoption of complete streets
Reduce Obesity in Children	<ul style="list-style-type: none"> Encourage districts to prohibit advertising of less nutritious foods and beverages and to adopt standards for competitive foods Implement the Comprehensive School Physical Activity Programs (CSPAP) Encourage employers to implement breastfeeding friendly policies
Reduce Illness, Disability and Disease Related to Tobacco Use and Secondhand Smoke Exposure	<ul style="list-style-type: none"> Promote tobacco use cessation, especially among low socioeconomic status populations and those with poor mental health Encourage the adoption of smoke-free policies in publicly and privately operated housing
Increase Access to High Quality Chronic Disease Preventative Care in Community Settings	<ul style="list-style-type: none"> Implement policy, systems or environmental approaches to increase access to cancer screening services for colorectal, breast and cervical cancers Increase public awareness and education about colorectal, breast and cervical cancer screenings
Reduce Premature Births	<ul style="list-style-type: none"> Utilize community health workers for home visiting to assist women in engaging in health care services, securing basic needs and practicing healthy behaviors Identify and promote educational messages to promote smoking cessation, healthy eating and family planning methods Develop and implement strategies to encourage healthcare providers to integrate behavioral health screenings as part of primary care through public health detailing
Prevention of Unintended and Adolescent Pregnancy	<ul style="list-style-type: none"> Identify and promote educational messages on delaying sexual activity, contraceptive use and preventative health care Work with community partners to support evidenced-based sexual health education and reproductive health care services for teens in community and school-based settings

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%ⁱⁱⁱ. 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^{iv}. 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^v.

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

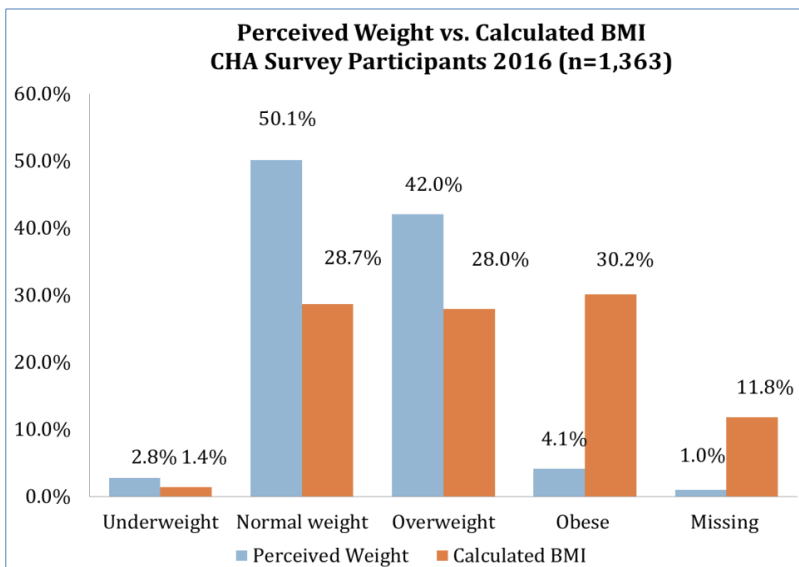
Women, Infants and Children. Data reviewed through Orange County Birth Certificate analysis showed smoking among mothers from Port Jervis was significantly higher than in the County from 2013-2015 (13.9% vs. 5.9%, respectively). Through the home visiting program, all pregnant women will be asked about 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

TOP 10 LEADING CAUSES OF DEATH IN ORANGE COUNTY, 2014		
Rank Order	Cause of Death	Death Rates (per 100,00 population)
1	Diseases of the Heart	184.8
2	Malignant Neoplasms	153.7
3	Chronic Lower Respiratory Disease (CLRD)	35.4
4	Total Accidents	34.3
5	Cerebrovascular Disease	32.4
6	Pneumonia	17.3
7	Diabetes Mellitus	16.2
8	Suicide	9.0
9	Cirrhosis of the Liver	6.9
10	Homicide and Legal Intervention	2.4

Source: New York State Department of Health Vital Statistics, as of May 2016



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^{vi}. Transportation gaps

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^{vii}. 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*).

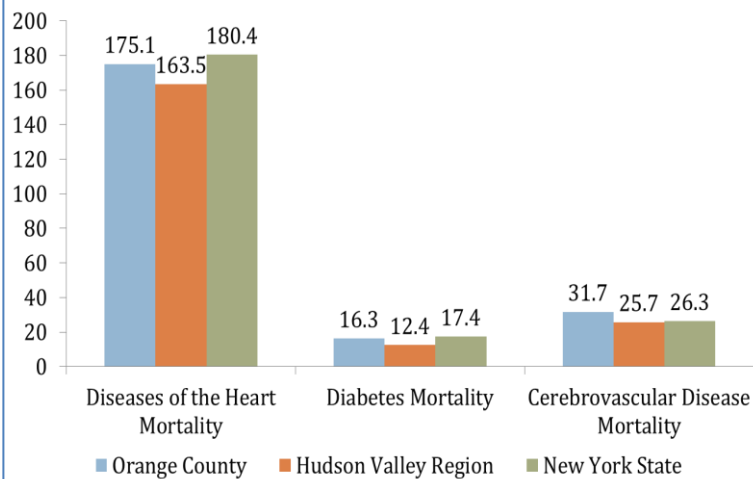
Compared to previous years, more adults reported being diagnosed with being overweight or obese in addition to a diagnosis of high blood pressure, diabetes, and heart disease. In addition to obesity, smoking is a risk factor for cancer, diabetes and stroke and is the leading cause of preventable death 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^{viii}.

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

Source: Expanded 2013-2014 BRFSS (Behavioral Risk Factor Surveillance System), NYSDOH

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^{ix}. 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*).

Chronic Disease Mortality Rates per 100,000 population, age-adjusted, 2012-2014

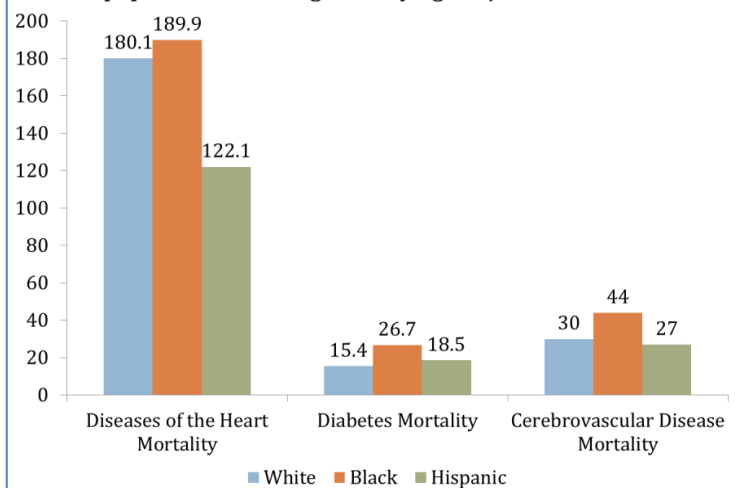


Sources: NYSDOH Vital Statistics and SPARCS data, Community Health Indicator Reports, 2012-2014

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.

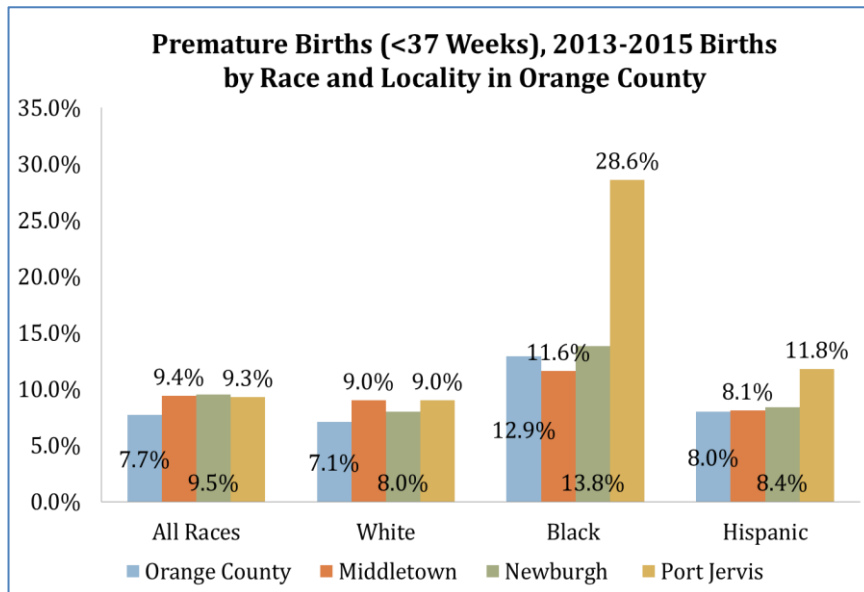
Chronic Disease Mortality Rates by Race per 100,000 population for Orange County, age-adjusted, 2012-2014



Sources: NYSDOH Vital Statistics and SPARCS data, Community Health Indicator Reports, 2012-2014

Priority Area #2: Promoting Health Women, Infants and Children

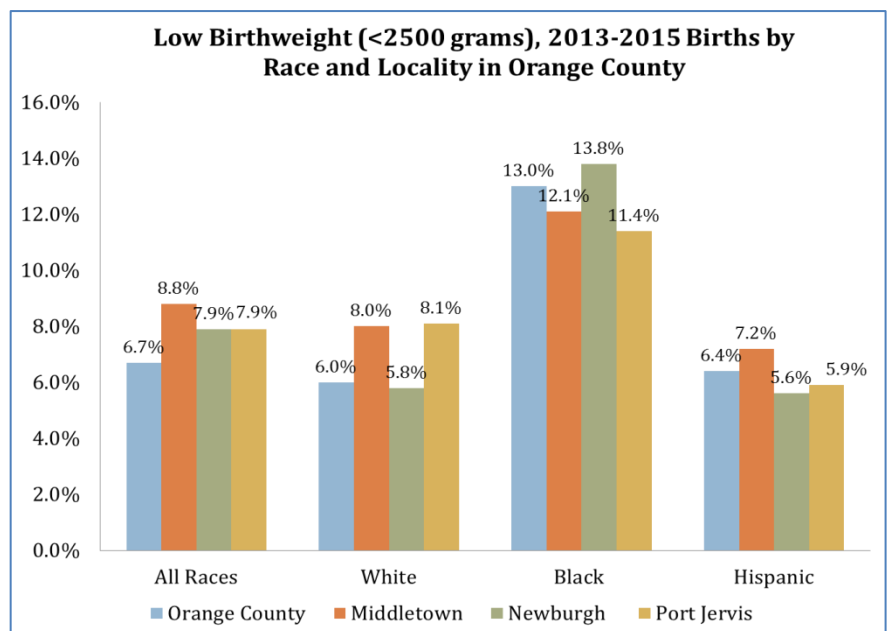
Promoting the health of women, infants and children continues to be a public health priority for the United States, New York and Orange County. Maternal and infant health data continue to be widely used indicators of the overall health of a community. Improving positive pregnancy outcomes can greatly 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



Source: Orange County Birth Certificates, 2016

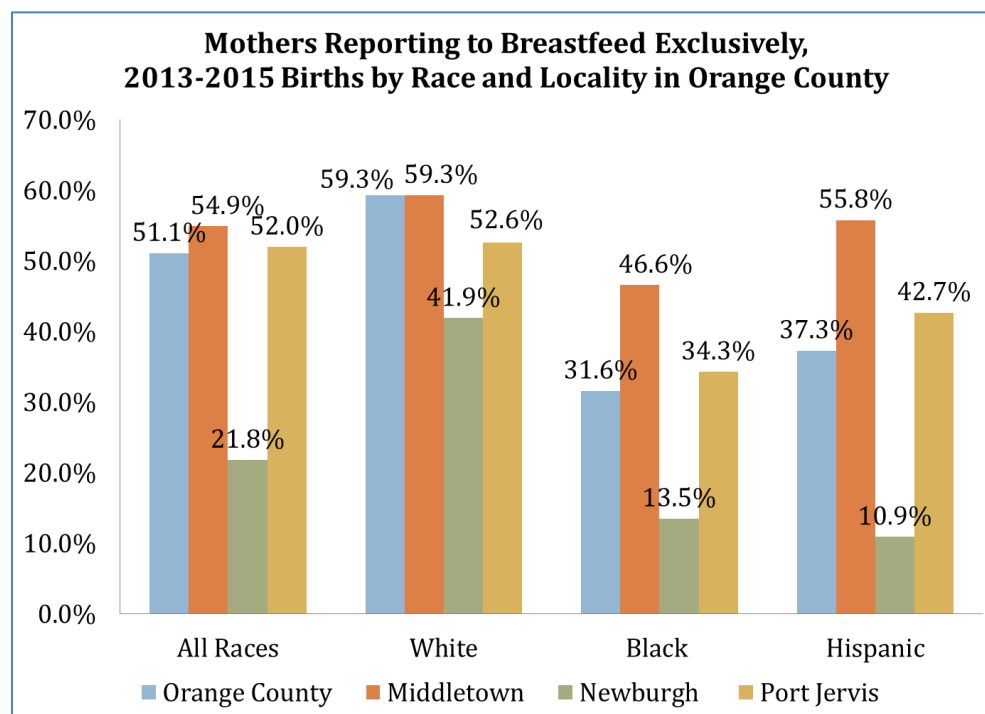
disparities within the county. Utilizing Orange County Birth Certificate data, quarterly analysis is performed and reviewed within the Maternal Infant Community Health Collaborative (MICHC) advisory board. Overall, Orange County has reached the NYS 2017 objective of a preterm birth rate of 10.2%. The 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



Source: Orange County Birth Certificates, 2016

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^x. 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^{xi}. 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 MICHHC program and Healthy Orange will jointly use the evidence-based model “Business Care for Breastfeeding” to encourage employers to implement breastfeeding friendly policies.

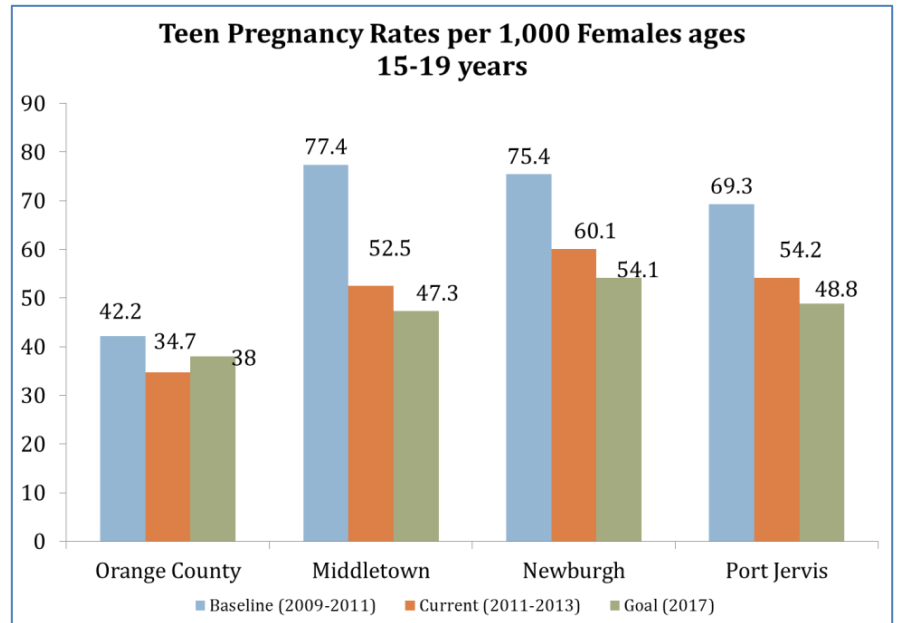


Source: Orange County Birth Certificates, 2016

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^{xii}, as seen in the graph below.

MICHHC 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 MICHHC 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. MICHHC 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.



Source: New York State Department of Health Vital Statistics, 2016

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 (OCDOH) 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 OCDOH 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^{xiii}. Within the priority area of Promoting Healthy Women, Infants and Children, OCDOH will work collaboratively with OCDOH 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 OCDOH 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

ACTION PLAN

Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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: <i>Public Health Educator (PHE), Health and Wellness Coordinator (HWC), Orange County Planning Department (OCPD)</i> Implementation Partners: <i>Small retailers, Bon Secours Hospital, St Lukes Cornwall Hospital, Orange Regional Medical Center</i>	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 Number and type of community venues that adopt and/or implement nutrition and beverage standards
(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: <i>Small and large business employers, Chamber of Commerce, ORMC</i>	January 2016-December 2018	CHIP Evaluation Measurement Database	Number and type of community venues that promote physical activity through signage, worksite polices and joint use agreements Number of adults who have access to community venues that promote physical activity

ACTION PLAN					
Evidenced Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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: <i>HWC, Port Jervis Farmer's Market manager, Groundwork, House of Refuge, Office for Aging, Veteran's Affairs, Cornell Cooperative Extension (CCE)</i> Space: <i>First Baptist Church Newburgh, House of Refuge, City of Port Jervis, Newburgh Mall</i>	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: <i>Sr. PHE, HWC, Groundwork, NY Farm and Agriculture Department, City of Newburgh municipality leaders</i>	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: <i>HWC, CCE, Port Jervis Market Manager</i> Provide clients: <i>Office for the Aging, Department of Social Services, Women Infants and Children (WIC)</i>	January 2016-December 2018	EBT transaction data collection	Higher percentage of farmer's markets accepting SNAP and WIC checks

Evidenced Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(4) Promote the adoption of complete streets policies	Maintain quarterly complete streets committee to promote the awareness of complete streets and assist with adoption of policies	Staff Time: <i>Sr. PHE, OCPD, Orange County Citizens Foundation</i> Advisory Capacity: <i>Tri-State Transportation Council</i>	January 2016- Decemeber 2018	Meeting minutes	Increased awareness and number of complete streets policies adopted
	Educate municipality leadership during yearly Planning Federation Conference and subsequent workshops about implementing complete streets	Staff Time: <i>Sr. PHE, and OCPD</i> Space provided: <i>Municipality leadership</i>	January 2016- Decemeber 2018	Meeting minutes	Number and percent of residents affected by policies and number/percentage of roads impacted by complete streets policies

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

ACTION PLAN					
Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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)	Draft policies, engage with school districts and stakeholders during wellness committee meetings to adopt policies	Staff Time: <i>PHE, Newburgh Enlarged City School District, Port Jervis School District, Eat Smart New York, CCE, Enlarged City School District of Middletown (ECSDM)</i> Provide clients and space: <i>Newburgh Enlarged City School District, Port Jervis School District, ECSDM</i>	January 2016-December 2018	CHIP Evaluation Measurement Database	Number of districts with local wellness polices that prohibit advertising and promotion of less nutritious foods and beverages
					Number of districts that adopt and implement standards for competitive foods
					Number of districts implementing CSPAP
	Increase the number of schools with comprehensive and strong local school wellness policies				Number schools that adopt and implement comprehensive and strong local school wellness policies

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

ACTION PLAN					
Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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: <i>Sr. PHE, HWC, MICHC coordinator, St. Anthony's Hospital, Orange Regional Medical Center (ORMC)</i> Implementation partners: <i>St. Anthony's Hospital, Small retailers, Bon Secours Hospital, St Luke's Cornwall Hospital, ORMC, For-profit business worksites to be identified</i>	January 2016-December 2018	CHIP Evaluation Measurement Database	Number of women reached by policies and practices to support breastfeeding
			January 2016-December 2018	CHIP Evaluation Measurement Database	Demographics (age, race and ethnicity) of women reached by policies and practices to support breastfeeding

PERFORMANCE STANDARDS			
Short Term Process Indicators	Baseline	Source	Frequency
By December 2017, 7 worksites, bodegas, or hospitals will implement nutrition standards or practice (systems) changes.	Three worksites (2015)	Healthy Orange	Quarterly
By December 2017, 5 community venues will promote physical activity through signage, worksite policies, social support or joint use agreements.	Four venues (2015)	Healthy Orange	Quarterly
By October 2017, increase the number of participants utilizing the farmers markets in Newburgh and Port Jervis by 10% to approximately 3,200 participants.	2,900 participants (2015)	Healthy Orange	Seasonally
By June 2016, increase the number of farmers participating by 2 in the City of Newburgh's established farmer's market.	Average 4 (2015)	Healthy Orange	Monthly, Seasonally
By June 2016, increase the number of farmers markets who accept EBT benefits from one to two markets.	One market (2015)	Healthy Orange	Annually
By June 2017, two school districts will implement the CSPAP guidelines.	None	HOSC Grant	Annually
By June 2018, increase the number of comprehensive school wellness policies to 3 districts.	One- Newburgh (2015-2016 academic year)	HOSC Grant	Annually
By December 2017, increase the number of employers with breastfeeding policies by 2.	To be determined by April 2017	Healthy Orange	Quarterly
By June 2017, provide 6 worksites with the Business Care for Breastfeeding toolkit.	No baseline available	Healthy Orange	Quarterly

PERFORMANCE STANDARDS				
Long Term Outcome Indicators	Baseline	NYSDOH P.A. Goal	Source	Frequency
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%.	Overweight and Obese: 67.3% Obese: 32.5% (2013-2014)	Obese: 30.5% by 2018	New York State Behavioral Risk Factor Surveillance Survey	Every four years
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%.	Overweight and Obese: 35.8% Obese: 19% (2012-2014)	Obese: 16.7% by 2018	NYS Student Weight Category Status Reporting System	Every two years
By December 2018, increase the total number of municipalities with complete streets policies from 1 policy to 4 policies.	Zero policies (2014) One policy (2015)	Increase number of policies	Healthy Orange, Orange County Planning Department	Quarterly
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%.	72.8% (2013-2014)	77.4% by 2018	NYS Behavioral Risk Factor Surveillance System	Every four years
By December 2018, increase the percentage of women who plan to breastfeed exclusively by 10% from 50.1% to 55.1%.	50.1% (2015)	48.1% by 2018	Electronic Birth Certificate Data/Orange County Database	Quarterly

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

ACTION PLAN

Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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: <i>Sr. PHE, Center for Tobacco Free Hudson Valley</i> Provide Clients: <i>Cornerstone Family Healthcare, MCHC, Hudson River Healthcare, St. Luke's Hospital, Bon Secours Hospital, ORMC</i>	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

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

PERFORMANCE MEASURES				
Short Term Process Indicators	Source	Frequency		
By January 2018, increase the number of smoke-free policies in housing to 2 policies.	CHIP Evaluation Measurement Database	Quarterly		
By January 2018, hold at least one American Lung Association “Freedom from Smoking” training for health care providers.	CHIP Evaluation Measurement Database	Bi-annually		
Long Term Process and Outcome Indicators	Source	Baseline	NYSDOH P.A. Goal	Frequency
By December 2018, increase the number of smoke-free housing policies to 4 policies.	CHIP Evaluation Measurement Database	One policy (2016)		Annually
By December 2018, decrease the percentage of current adult smokers by 20% from 15.5% to 12.3% (NYSDOH Prevention Agenda 2018 Goal).	Behavioral Risk Factor Surveillance System (BRFSS)	15.5% (2013-2014)	12.3% Current Adult smokers by 2018	Every four years
By December 2018, decrease the percentage of current everyday teenage smokers to 4%.	Orange County Youth Development Survey	5.7% (2014-2015)		Every two years

PRIORITY AREA: PREVENTING CHRONIC DISEASE
FOCUS AREA 3: Increase access to High Quality Chronic Disease Preventative Care and Management in Clinical and Community Settings
<p>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.</p> <p>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)</p> <p>STRATEGIES THAT ADDRESS DISPARITY: #1 and 2</p>

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

PERFORMANCE MEASURES			
Short Term Process Indicators	Baseline	Source	Frequency
By January 2017, analyze the number of worksites with policies with flex time or paid time off for cancer screenings.	Baseline to be determined	Orange County Cancer Services	Once
By December 2017, increase the number of worksites with screening policies by 10%.	Baseline to be determined	CHIP Evaluation Database	Quarterly
By December 2017, increase the usage of the Orange County Government policy for cancer screenings.	Baseline to be determined	Orange County Government Payroll	Bi-annually
By June 2017, initiate 10 media alerts for cancer awareness education campaigns and screening events.	No baseline available	CHIP Evaluation Database	Quarterly

PERFORMANCE MEASURES				
Long Term Outcome Indicators	Baseline	NYSDOH P.A. Goal	Source	Frequency
By December 2018, increase the percentage of women ages 50-74 receiving breast cancer screening by 5% from 76.8% (2013-2014) to 80.6%.	76.8% (2013-2014)	80.5% by 2018	New York State Behavioral Risk Factor Surveillance Survey	Every four years
By December 2018, increase the percentage of adults aged 50-75 receiving colorectal screening by 10% from 58.1% (2013-2014) to 64%.	58.1% (2013-2014)	80% by 2018	New York State Behavioral Risk Factor Surveillance Survey	Every four years
By December 2018, increase the percentage of women ages 21-65 receiving cervical cancer screening by 5% from 82.8% (2013-2014) to 87%.	82.8% (2013-2014)	88% by 2018	New York State Behavioral Risk Factor Surveillance Survey	Every four years

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

Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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, MICHHC coordinator, MICHHC Public Health Nurse Advisory Capacity: MICHHC 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 MICHHC/CHIP database	Reduction in premature births

ACTION PLAN					
Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
	Increase recruitment activities and the number of Black women engaged in home visiting services	Staff Time: <i>MICHC Coordinator, CHWs, Healthy Families, MICHC Public Health Nurse, Cornerstone Family Healthcare, MCHC</i> Advisory Capacity: <i>Interfaith Council, MICHC Advisory Board</i>	January 2017-December 2018	Number and percentage of Black women served in MICHC/CHIP database	Increased number of Black women enrolled in home visiting services
	Ask all pregnant women about tobacco use and refer smokers for counseling and smoking cessation services	Staff Time: <i>CHWs, MICHC Coordinator,</i> Provide Services: <i>Healthy Families, Cornerstone Family Healthcare, MCHC</i>	January 2016-December 2018	Number and percentage of women for whom tobacco counseling was provided as part of a visit and referred in MICHC/CHIP database	Decreased number of women who smoke during pregnancy

ACTION PLAN					
Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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	<p>Staff Time: <i>Healthy Orange Partners, CHW's, MICHC Coordinator, Cornell Cooperative Extension (CCE), MICHC Public Health Nurse, WIC</i></p> <p>Provide Space and clients: <i>Safe Homes of Orange County, Alcohol and Drug Abuse Council (ADAC), OC Dept of Mental Health</i></p>	January 2016-December 2018	Number of attendees educated in MICHC/CHIP database	Increased knowledge of women to maintain healthy lifestyle

ACTION PLAN					
Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(2 cont.) Identify and promote educational messages to promote smoking cessation, healthy eating, and family planning methods	Implement public health awareness campaign related to the importance of preconception and interconception health at health centers, frequently targeted businesses and family planning sites	Provide Space and Clients (cont.): <i>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 School, WIC I</i>	January 2016-December 2018	Number of outreach events and number of individuals reached, measured quarterly in MICHC/CHIP database	Increased knowledge of the importance of preconception health as it relates to birth outcomes

ACTION PLAN					
Evidence Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(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	Survey OB-GYN, primary care and pediatric provider offices to determine which (if any) risk assessment tools are utilized for depression and substance abuse	Staff Time: <i>Touro Medical College Students and MICHC Public Health Nurse</i>	January 2016-December 2018	Number and percentage of targeted provider practices that received a detailing visit and completed a survey on risk assessment tools in MICHC/CHIP database	Increased number of providers integrating behavioral health screenings as part of primary care for women
(4) Provide outreach and education to health care 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: <i>Orange County Dept of Mental Health</i> Staff Time: <i>MICHC Coordinator, County-contractor</i> Volunteer Time: <i>Touro College of Osteopathic Medicine</i>	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				
Short Term Process Indicators	Source	Baseline	NYSDOH P.A. Goal	Frequency
By December 2017, increase the number of high risk pregnant women referred for home visiting services.	Orange County referral database	78 women (2015)		Monthly
By December 2017, increase the number of referrals to services including Healthy Families.	Orange County referral database	130 referrals (2015)		Monthly
Long Term Outcome Indicators	Source	Baseline	NYSDOH P.A. Goal	Frequency
By December 2018, decrease the percentage of pre-term births in Newburgh, Port Jervis and Middletown by 10% to 8.3%.	Electronic Birth Certificate Data/Orange County Database	9.3% (2013-2015)	10.2% by 2018	Quarterly
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.	Orange County Birth Certificate Data	Middletown: 51.4% Newburgh: 39.9% Port Jervis: 52.6% (2013-2015)		Quarterly
By December 2018, decrease the percentage of pre-term births in Black women by 10% from 13.1% to 11.7%.	Electronic Birth Certificate Data/Orange County Database	13.1% (2013-2015)	10% reduction in disparity	Annually
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.	MICHHC Orange County Database	38.5 weeks (2015)		Annually
By December 2018, increase the percentage of women in Orange County with early prenatal care from 72.7% to 75%.	New York State Department of Health Vital Statistics	72.7% (2012-2014)		Annually
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.	Orange County Birth Certificate Data	Middletown: 5% Newburgh: 9.6% Port Jervis: 14.1% (2013-2015)	12.3% by 2018	Quarterly

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

ACTION PLAN					
Evidenced Based Strategy	Activities	Lead Partners	Timeframe	Evaluation Measure	Outcome: Product/Result
(1) Identify and promote educational messages on delaying sexual activity, contraceptive use and preventive health care	Develop a campaign to distribute condoms, promote the utilization of family planning methods and stress the importance of disease prevention	Staff Time: <i>MICHC Public Health Nurse, CHWs, Planned Parenthood</i> Provide clients: <i>OB-GYN providers, Cornerstone Family Healthcare, MCHC</i>	January 2016-December 2018	Number of teens reached through campaign efforts quarterly in MICHC/CHIP database	Increased awareness of family planning community resources and brochures

(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	Provide education on sexual health and contraceptive use during home visiting and CBO classes and encourage the use of CDC's Reproductive Life Plan	Staff Time: <i>MICHC Coordinator, CHWs, MICHC Public Health Nurse</i> Provide Space: <i>Newburgh Enlarged Central School District, Port Jervis School District, Middletown Enlarged City School District</i>	January 2017-December 2018	Number of reproductive life plans completed with teens, home visits with teens in MICHC/ CHIP database Number of community providers delivering evidenced based programming and number of teens reached	Increased number of teens and young mothers educated about the importance of avoiding unplanned pregnancies
	Collaborate with Planned Parenthood through the training of educators to complete reproductive life plans with teens in schools	Staff Time: <i>MICHC Coordinator, Planned Parenthood</i>	By September 2017	Number of educators trained	Increased number of teens educated about the importance of avoiding unplanned pregnancies
	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	Staff Time: <i>MICHC Coordinator, Planned Parenthood of the Hudson Valley,</i> Space and Staff Time: <i>Touro College of Osteopathic Medicine</i>	At least one by June 2017	Number of providers in attendance at event	Increased awareness among health care providers of the effectiveness of LARCs

PERFORMANCE MEASURES				
Short Term Process Indicators	Source	Baseline	NYSDOH P.A. Goal	Frequency
By January 2017, train at least 3 educators from Planned Parenthood to complete reproductive life plans with teens.	MICHHC/CHIP Database	No baseline		As needed
By December 2018, increase the number of teens receiving individual sexual health reproductive life planning by 50% to approximately 20 teens per year.	MICHHC/CHIP Database	13 teens (2015)		Quarterly
By December 2018, increase the number of outreach events that include condom distribution by 10% from 17 events to 19 events.	MICHHC/CHIP Database	17 events (2015)		Quarterly
Long Term Outcome Indicators	Source	Baseline	NYSDOH P.A. Goal	Frequency
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)	New York State County Zip Code Perinatal Data Profile	Middletown: 52.5 Newburgh: 60.1 Port Jervis: 54.2 (2011-2013)	10% reduction in disparity	Annually or as often as available

References

1. Institute of Medicine (IOM). (2012). Accelerating Progress in Obesity Prevention. Available at: <http://www.iom.edu/Reports/2012/Accelerating-Progress-in-Obesity-Prevention.aspx>
2. Centers for Disease Control and Prevention Community Guides. (2012). Available at: <http://www.thecommunityguide.org/index.html>
3. Anderson, et al. (2001). Five a day fruit and vegetable intervention improves consumption in a low income population. *J Am Diet Assoc.* Feb; 101(2): 195-202. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/11271692>
4. Prevention Institute. (2007). Prevention is Primary: Strategies for Community Wellbeing. Available at: <http://www.preventioninstitute.org/component/jlibrary/article/id-102/127.html>
5. Healthy People 2020 Objectives. Available at: <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=29>
6. ChangeLab Solutions. (2010). Model Laws and Resolutions: Complete Streets. Available at: <http://changelabsolutions.org/publications/laws-resolutions-cs>
7. New York State Department of Health. (2012). Prevention Agenda 2013-2017. Available at: http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/
8. New York State Department of Health. (2008-2010). One Million Fewer Smokers by 2010: Shaping a Tobacco-Free Society for all New Yorkers. Available at: http://www.health.ny.gov/prevention/tobacco_control/docs/2010_million_fewer_smokers_strategic_plan.pdf
9. Centers for Disease Control and Prevention. (2012). Winnable Battles. <http://www.cdc.gov/WinnableBattles/Tobacco/index.html>
10. Centers for Disease Control and Prevention. (2007). Best Practices for Tobacco Control. Available at: http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm
11. Rosenthal EL, Brownstein, JN, Hirsch, GR, Willaert AM, Scott JR., Holderby LR, Fox DJ. (2010). Community Health Workers: Part of the Solution. *Health Affairs.* 29 (7): 1338-1342.
12. Larson K, Levy J, Rome MG, Matte TD, Silver LD, Friedn TR. (2006). Public Health Detailing: A Strategy to Improve the Delivery of Clinical Preventive Services in New York City. *Public Health Rep.* May-Jun; 121(3): 228-234.
13. Forsetlund L, Bjørndal A, Rashidian A, Jamtvedt G, O'Brien MA, Wolf FM, Davis D, Odgaard-Jensen J, Oxman AD. (2012). Continuing education meetings and workshops for health professionals. Available at: <http://summaries.cochrane.org/CD003030/continuing-education-meetings-and-workshops-for-health-professionals#sthash.63VWwFng.dpuf>
14. American Community Survey. (2015). Available at: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

15. USDA Food Atlas. (2016). Available at: <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>

ⁱAdapted from Public Health Accreditation Board (PHAB) Acronyms and Glossary of Terms, Version 1.0 (PDF: 512KB / 38 pages)
<http://www.phaboard.org/wp-content/uploads/PHAB-Acronyms-and-Glossary-of-Terms-Version-1.0.pdf>

ⁱⁱ http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/summary.htm

ⁱⁱⁱ <https://www.health.ny.gov/statistics/brfss/expanded/2013/county/>

^{iv} <http://admin.healthlinkny.thehcn.net/index.php?module=indicators&controller=index&action=view&indicatorId=94&localeId=1915>

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

^{vi} <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>

^{vii} http://www.health.ny.gov/prevention/obesity/statistics_and_impact/docs/2008-2010_student_weight_status_by_county_and_level.pdf

^{viii} https://www.nationalacademies.org/hmd/~media/Files/Report%20Files/2015/TobaccoMinAge/tobacco_minimum_age_report_brief.pdf

^{ix} <http://admin.healthlinkny.thehcn.net/index.php?module=indicators&controller=index&action=view&indicatorId=8&localeId=1915>

^x <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm>

^{xi} http://www.medscape.com/viewarticle/582761_4

^{xii} <http://www.health.ny.gov/statistics/chac/perinatal/county/orange.htm>

^{xiii}

[http://www.orangecountygov.com/filestorage/124/1348/16688/Recommendations to Address the Heroin Prescription Opiate Abuse in OC 5 13 20 14.pdf](http://www.orangecountygov.com/filestorage/124/1348/16688/Recommendations%20to%20Address%20the%20Heroin%20Prescription%20Opiate%20Abuse%20in%20OC%205%2013%2014.pdf)

APPENDIX

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

MICHHC 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



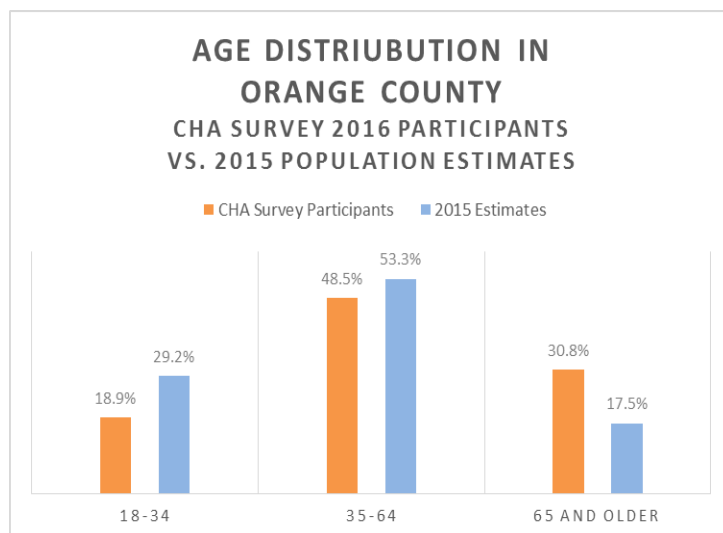
Special thanks to the Healthy Orange members who attended our 2016 annual meeting and helped with distribution of the 2016 Community Health Assessment Survey. We couldn't have done it without you!

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 of 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

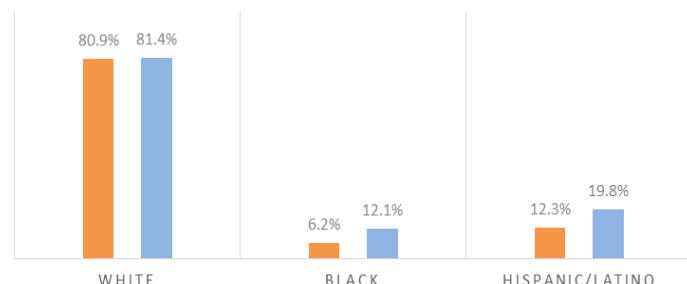
A total of 1,363 Orange County residents completed the 2016 Community Health Assessment survey. Survey respondents were less likely to be Black (6.2% vs. 12.1%), Hispanic (12.3% vs. 19.8%) and between the ages of 18-34 years (18.9% vs. 29.2%) as compared to Orange County population estimates in 2015.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



RACIAL COMPOSITION IN ORANGE COUNTY CHA SURVEY 2016 PARTICIPANTS VS. 2015 POPULATION ESTIMATES

CHA Survey Participants 2015 Estimates



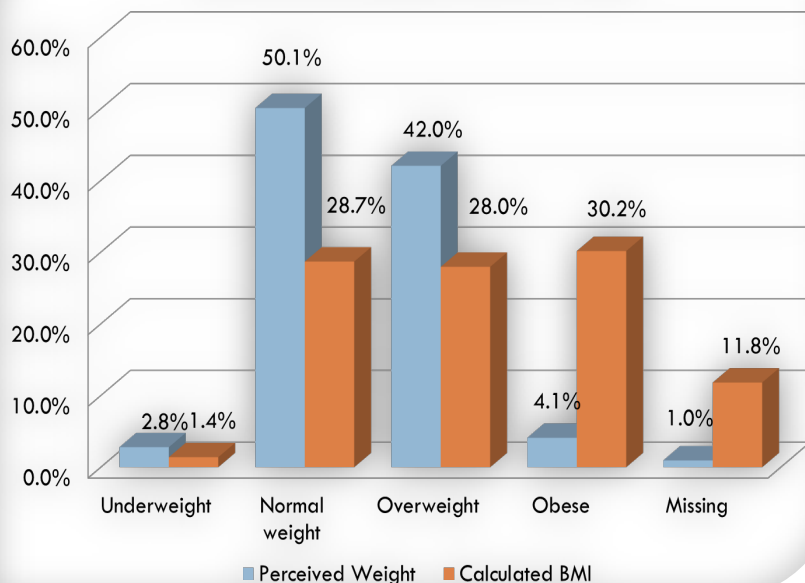
Health Status

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.

Perceived Weight vs. Calculated BMI CHA Survey Participants 2016 (n=1363)



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%).

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

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?

<input type="checkbox"/> 18–24 years	<input type="checkbox"/> 45–54	<input type="checkbox"/> 75 years and older
<input type="checkbox"/> 25–34	<input type="checkbox"/> 55–64	
<input type="checkbox"/> 35–44	<input type="checkbox"/> 65–74	
4. How do you identify yourself? ☐ Male ☐ Female ☐ Other _____
5. What category best describes your race?

<input type="checkbox"/> White	<input type="checkbox"/> Native American
<input type="checkbox"/> Black or African American	<input type="checkbox"/> Other (please tell us) _____
<input type="checkbox"/> Asian or Pacific Islander	
6. Are you Hispanic or Latino? ☐ Yes ☐ No
7. Are you currently employed?

<input type="checkbox"/> Yes, full-time	<input type="checkbox"/> No	<input type="checkbox"/> Retired
<input type="checkbox"/> Yes, part-time	<input type="checkbox"/> No, currently seeking employment	<input type="checkbox"/> Stay at home parent
<input type="checkbox"/> No, currently a student		
8. What was the highest level of education you received?

<input type="checkbox"/> Less than high school	<input type="checkbox"/> Associate's degree
<input type="checkbox"/> High school graduate/GED	<input type="checkbox"/> Bachelor's degree
<input type="checkbox"/> Some college	<input type="checkbox"/> Graduate/Doctoral/Post Doctoral
9. During the past 12 months, what was your total household income before taxes?

<input type="checkbox"/> Less than \$24,999	<input type="checkbox"/> \$75,000 – \$99,999
<input type="checkbox"/> \$25,000 – \$49,999	<input type="checkbox"/> \$100,000 or more
<input type="checkbox"/> \$50,000 – \$74,999	<input type="checkbox"/> Prefer not to answer
10. How would you describe your overall health?

<input type="checkbox"/> Very Healthy	<input type="checkbox"/> Somewhat healthy	<input type="checkbox"/> Very unhealthy
<input type="checkbox"/> Healthy	<input type="checkbox"/> Unhealthy	<input type="checkbox"/> Other (Please specify) _____
11. How would you describe your overall mental health?

<input type="checkbox"/> Very Healthy	<input type="checkbox"/> Somewhat healthy	<input type="checkbox"/> Very unhealthy
<input type="checkbox"/> Healthy	<input type="checkbox"/> Unhealthy	<input type="checkbox"/> 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?

Diabetes	<input type="checkbox"/> Yes	<input type="checkbox"/> No
High Blood Pressure	<input type="checkbox"/> Yes	<input type="checkbox"/> No
High Cholesterol	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Cancer	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Asthma	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Depression or Anxiety	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Osteoporosis	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Overweight/Obesity	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Heart Disease	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Chronic Pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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 ☐ Health Care Coverage
☐ Obesity ☐ Domestic Violence
☐ 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.

[illegible]

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)

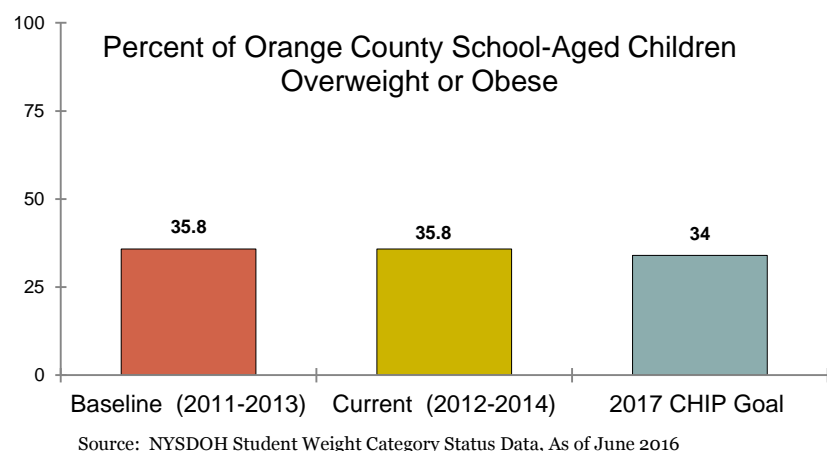
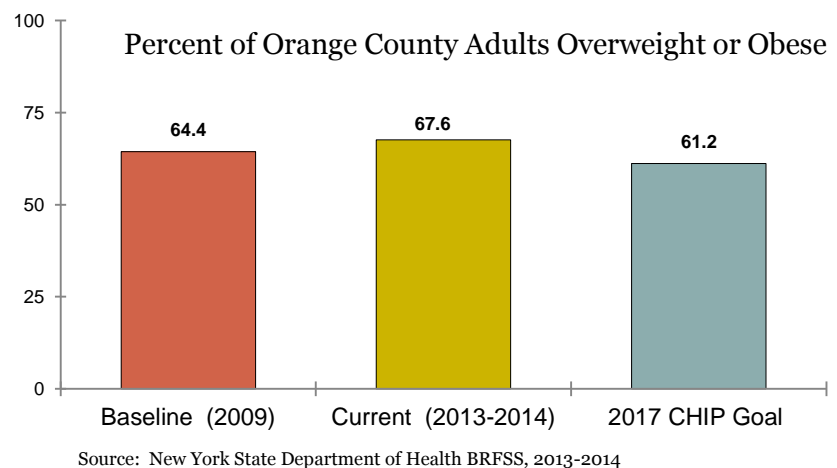
32.5%
of Orange County adults are
obese (BMI ≥ 30)

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



Photo Courtesy of: CDC and Amanda Mills

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.



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

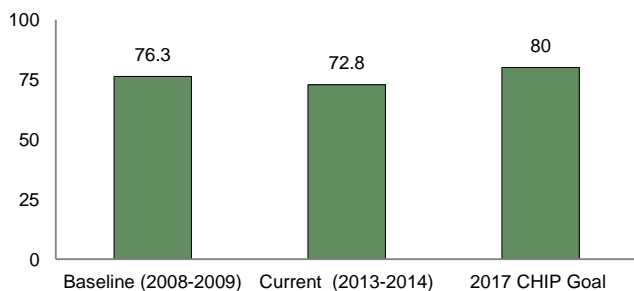
Evidenced Based Strategy #2: Promoting the adoption of complete streets policies

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**

Percent of Adults Participating in Leisure Time Physical Activity in Past 30 Days



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

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

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%**

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

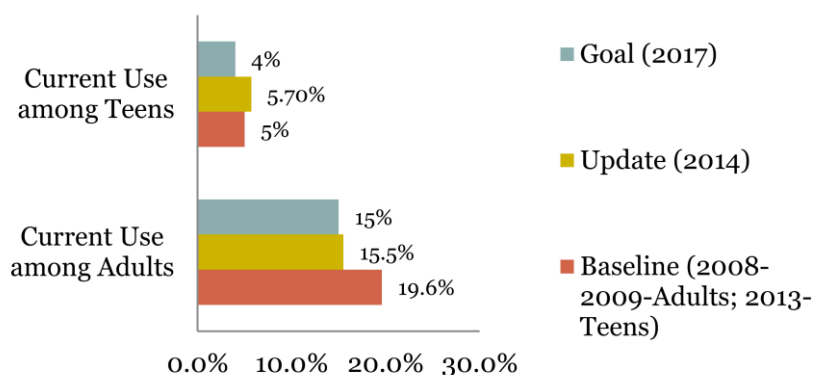
Source: CDC, Behavior Risk Factor Surveillance System (BRFSS), 2014



Photo Courtesy of: CDC, Dawn Arlotta and Cade Martin

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



Cessation Advertising

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

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

Sources: New York State Department of Health BRFSS, 2013-2014, Healthy Orange High School Survey, 2013 and Orange County Youth Development Survey, 2014

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)

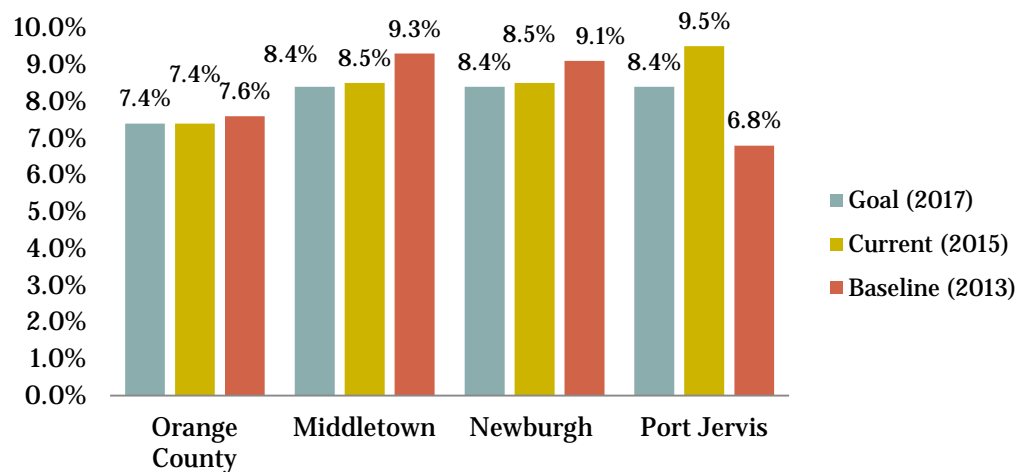
7.6%

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

Sources: CDC, National Vital Statistics Report, 2015; March of Dimes, National Center for Health Statistics, 2015 and Orange County Birth Certificate Data, 2015

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).**

Percentage of Orange County Births-Short Gestation (<37 weeks)



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.

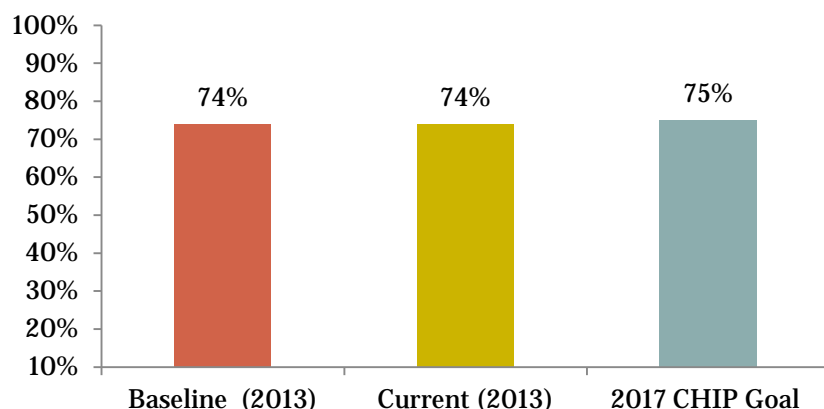
Activities:

- 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**

Percentage of Births with Early Prenatal Care



Source: New York State Department of Health Vital Statistics, 2015



Photo Courtesy of: Centers for Disease Control and Prevention

Performance Measures Short and Long Term Goals:

- Increase the number of pregnant women referred for home visiting services, including to the MICHHC 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

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

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

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

During the calendar years of **2014** and **2015**:

- ✓ Number of outreach events: **462**
- ✓ Number of people targeted at outreach events: **6476**
- ✓ Number of outreach events including condoms: **26**
- ✓ Number of meetings with faith based organizations: **21**
- ✓ Number of life plans completed with teens: **699**
- ✓ Number of life plans completed : **847**
- ✓ Number of meetings with school administrators: **6**

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

