

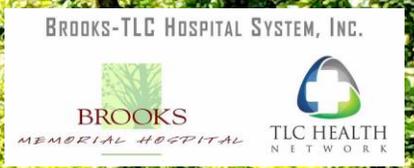
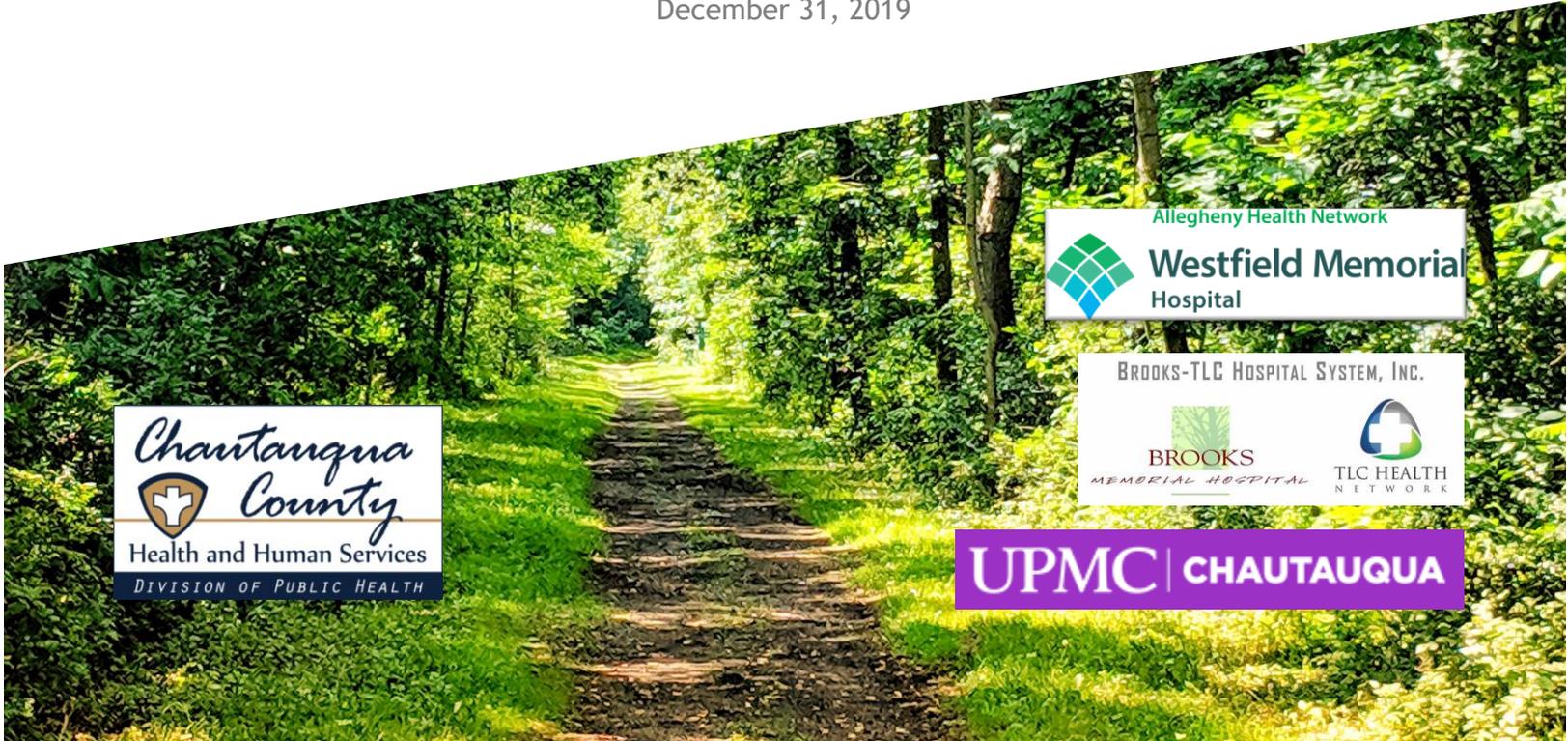
# Chautauqua County Community Health Assessment and Community Health Improvement Plan 2019-2021

Chautauqua County Department of Health and Human Services  
Christine Schuyler, Director of Health and Human Services, 716-753-4590

Brooks-TLC Hospital System, Inc. | Mary LaRowe, President and CEO, 716-366-1111  
UPMC Chautauqua | Brian Durniok, President, 716-487-0141

Allegheny Health Network Westfield Memorial Hospital | Karen Surkala, President, 716-326-4921

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CCDHHS would like to thank all members of the Chautauqua County Community Health Planning Team (CCCHPT) for their collaboration, support, flexibility, and willingness to try new health improvement initiatives. This group consists of representation from UPMC Chautauqua Hospital, Brooks-TLC Hospital System, Inc., Allegheny Health Network Westfield Memorial Hospital, The Chautauqua Center, The Resource Center, Chautauqua County Office for the Aging, KEE Consulting, Prevention Works, Chautauqua County Mental Hygiene, and the Chautauqua County Health Network.

The Population Health Collaborative of Western New York Community Health Improvement team provided guidance and technical assistance throughout the assessment, surveying, and through the development and maintenance of their Keys to Health WNY data platform.

The CCDHHS would also like to thank the countless community agencies, partners and individuals who took the time to provide input through community health surveys, community conversations or key stakeholder interviews.

We are also grateful to the New York State Department of Health staff for providing extensive guidance and data to ease the community health assessment process.

## Executive Summary

In conjunction with the New York State Department of Health's (NYSDOH) Prevention Agenda for 2019-2024, the Chautauqua County Department of Health and Human Services (CCDHHS) and local hospital partners collaborated to complete the Chautauqua County Community Health Assessment, Community Service Plans, and the Community Health Improvement Plan for 2019-2021.

The Prevention Agenda for 2019-2024 is New York State's health improvement plan, the blueprint for state and local action to improve the health and well-being of all New Yorkers and to promote health equity in all populations who experience disparities. The Prevention Agenda was developed and updated by the New York State Public Health and Health Planning Council, in partnership with 100 diverse organizations across New York State, at the request of the Department of Health. The plan was designed to demonstrate how communities across the state can work together to improve overall health and quality of life for all New Yorkers. This is the third cycle for this statewide initiative that started in 2008. New to this 2019-2024 cycle is the incorporation of a "Health Across All Policies" approach, which calls on all State agencies to identify and strengthen the ways in which their policies and programs can have a positive impact on health. The Prevention Agenda envisions New York becoming the Healthiest State in the Nation for all ages and embraces Healthy Aging to support New York's commitment as the first age-friendly state. The updated plan lists five priority areas:

- Prevent Chronic Diseases
- Promote a Healthy and Safe Environment
- Promote Healthy Women, Infants and Children
- Promote Well-being and Prevent Mental and Substance Use Disorders
- Prevent Communicable Diseases

The New York State Department of Health outlines goals and objectives, as well as appropriate evidence-based interventions for each priority area. Indicators for tracking progress of interventions are provided at the county-level, including racial, ethnic and socioeconomic breakdowns to track changes in health disparities.

As required during previous Community Health Assessment processes, local health departments across New York State were again required to work collaboratively with county hospitals. In Chautauqua County, partner hospitals included:

- Brooks-TLC Hospital System, Inc. located in Dunkirk and Irving NY
- UPMC Chautauqua, located in Jamestown, NY
- Allegheny Health Network Westfield Memorial Hospital (WMH), located in Westfield, NY

Key stakeholders for public health and health care were invited to assist in the community health assessment process. Collectively, the local health department, hospitals, and community organizations make up the Chautauqua County Community Health Planning Team (CCCHPT). These additional partners included:

- Chautauqua County Health Network (CCHN), rural health network
- Chautauqua County Department of Mental Hygiene (CCDMH), Local Governmental Unit
- Population Health Collaborative of Western New York, WNY region technical support
- The Chautauqua Center (TCC), federally qualified health center
- The Resource Center, service provider for people with disabilities and diagnostic and treatment center
- Prevention Works, addiction prevention agency
- Chautauqua County Office for the Aging

Per guidance from the NYSDOH, the CCCHPT worked together to gauge the community's perceived health priorities, assets, and needs through a web-based and paper survey, and numerous community conversations. The team thoroughly examined secondary health data provided by the NYSDOH and other key sources, and selected collaborative and organization-specific priorities.

The following collaborative Prevention Agenda priority areas were selected:

- Prevent Chronic Diseases (CCDHHS and all hospitals)
  - Disparity: Low-income residents
- Promote Healthy Women, Infants, and Children (CCDHHS, BMH, WCA)
- Promote Mental Well-Being and Prevent Mental and Substance Use Disorders (CCDHHS and all hospitals)

The CCCHPT worked together and with community partners from all sectors to determine what programming interventions, related to the selected priority areas, were already being implemented in Chautauqua County. One of Chautauqua County's greatest strengths is its collaborative spirit. Rather than adopting new programs and activities, the local health department and community hospitals desired to embrace the concept of "Public Health 3.0" by working to strengthen the efforts currently underway and better connect community partners. The assessment of community needs and evaluation of assets helped to strengthen relationships between partners and painted a beautiful picture of a Health Across All Policies approach in Chautauqua County.

The Community Health Assessment and Community Health Improvement Plan 2019-2021 provides a demographic profile of Chautauqua County, a health profile organized by Prevention

Agenda priority areas, identification of the main health challenges including the broad determinants of health, community assets and resources, and documentation of process and methods used for this assessment.

The complete Community Health Improvement Plan for Chautauqua County can be found in an accompanying document. However, a sample of planned interventions for each of the selected priority areas is featured below.

### *Prevent Chronic Diseases*

In the area of Preventing Chronic Diseases, many community partners are working toward improving community environments that support active transportation and recreational physical activity for people of all ages and abilities. Local efforts for this objective of reducing obesity in our rural community sometimes vary from strategies adopted in urban communities. Our partners include government and municipal facilities departments, community outreach services, local trails organizations, a local supermarket, and the rural health network. Through partnerships, educational sessions, and development of a County Interdepartmental Complete Streets Work Group, success in this area will be measured by an increased number of municipal Complete Streets policies in Chautauqua County, the number of Complete Streets projects that are implemented, and the number of community walking, wheeling, and biking systems that are new or improved.

### *Promote Mental Well-Being and Prevent Mental and Substance Use Disorders*

In the area of Promote Well-Being and Prevent Mental and Substance Use Disorders, our partners are many, as are our efforts. Mental Health First Aid is being offered through a variety of community partners including Chautauqua County Mental Hygiene, The State University of NY at Fredonia, and Erie-2-Chautauqua-Cattaraugus BOCES. The reach for this educational opportunity is wide and diverse. Special attempts are being made to reach college students and those working with youth. Measurement is through the number of classes taught and the number of people educated.

Prevention Works is a community partner that helps to build a safe and healthy environment by effectively educating the community on positive life choices; they are the only New York State Office of Alcoholism & Substance Abuse Services (OASAS) approved and supported alcohol and other drug prevention agency in Chautauqua County. Prevention works was the recipient of the PAX Good Behavior Game grant in 2019 (one of only eleven provided in NYS). This evidence-based environmental intervention is used in classrooms and teaches students self-regulation, self-control and self-management while collaborating with others for peace, productivity, health and happiness. The intervention has been shown to improve academic success, as well as mental health and substance use outcomes later in life. Success for this intervention will be

measured by the number of participating schools, teachers, and the number of students reached.

*Promote Healthy Women, Infants, and Children*

In the Promote Healthy Women, Infants and Children priority area, Chautauqua County will implement evidence-based home visiting programs. These programs include the Maternal and Infant Community Health Collaborative, Nurse Family Partnership, and a new initiative through the Child Abuse Prevention and Treatment Act (CAPTA), in which a Registered Nurse partners with Child Protective Services and initiates contact with the mother of a baby with a positive toxicology screen while she is still in the delivery hospital. These initiatives all work toward reducing infant mortality and morbidity by engaging low-income and/or substance using mothers and encouraging use of multiple supportive community services. Measurement is through number of trained staff, number of clients, number of clients who complete the programs, and number of referrals to community services. These efforts would not be possible without the partnerships with delivery hospitals, Brooks-TLC Hospital System, Inc. and UPMC Chautauqua.

Additionally, Chautauqua County will carry out the strategic plan of the Chautauqua Leadership Institute, which aims to develop, implement and evaluate the Chautauqua County *SART* (Screening, Assessment, Referral, and Treatment) System for children and family services. The countywide system will target families and their children ages 0-5 who are in out-of-home care or at risk of being placed out of the home due to parental substance use.

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## Demographic Profile

### Geographic Location and Overall Population Size

Chautauqua County is the western gateway to New York State, located in its extreme southwest corner between Buffalo, NY and Erie, PA. The county is bordered by Erie County, PA to the south and west, Warren County, PA to the south, Cattaraugus County, NY to the east, and Erie County, NY and Lake Erie to the north.

Chautauqua County is part of Northern Appalachia. The term "Appalachia" is used to describe a cultural region in the eastern United States that stretches from southern New York State to northern Alabama, Mississippi and Georgia. Appalachia is an area characterized by poverty, lack of education and difficulty accessing health care.

Map 1 provides a visual of the towns, cities, villages, and Native American reservations that comprise Chautauqua County.

Chautauqua County is comprised of two cities, Dunkirk and Jamestown, twenty-seven towns, and thirteen villages that cover 1,060 square miles with a population of 134,905 at the time of the 2010 census. A 2018 population projection by the U.S. Census Bureau indicates that the County population declined to 127,939 (-5.2% since 2010), ranking as the 23<sup>rd</sup> most populous county in New York State. Figure 1 shows the changes in Chautauqua County population since its incorporation in 1811. The county population peaked at 147,305 residents in 1970, and has gradually decreased since then.

Map 1. Chautauqua County towns, cities, villages, and reservations

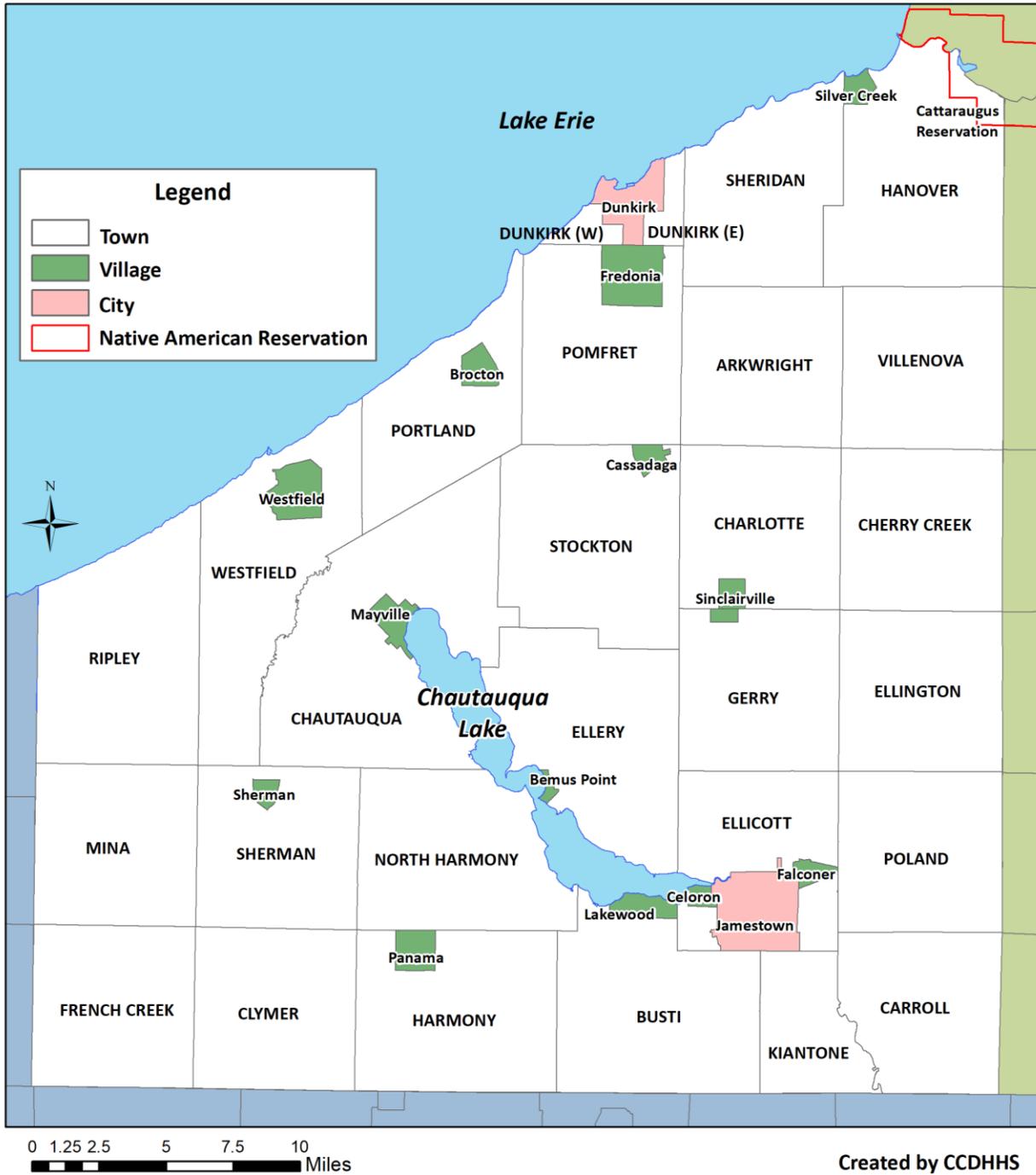
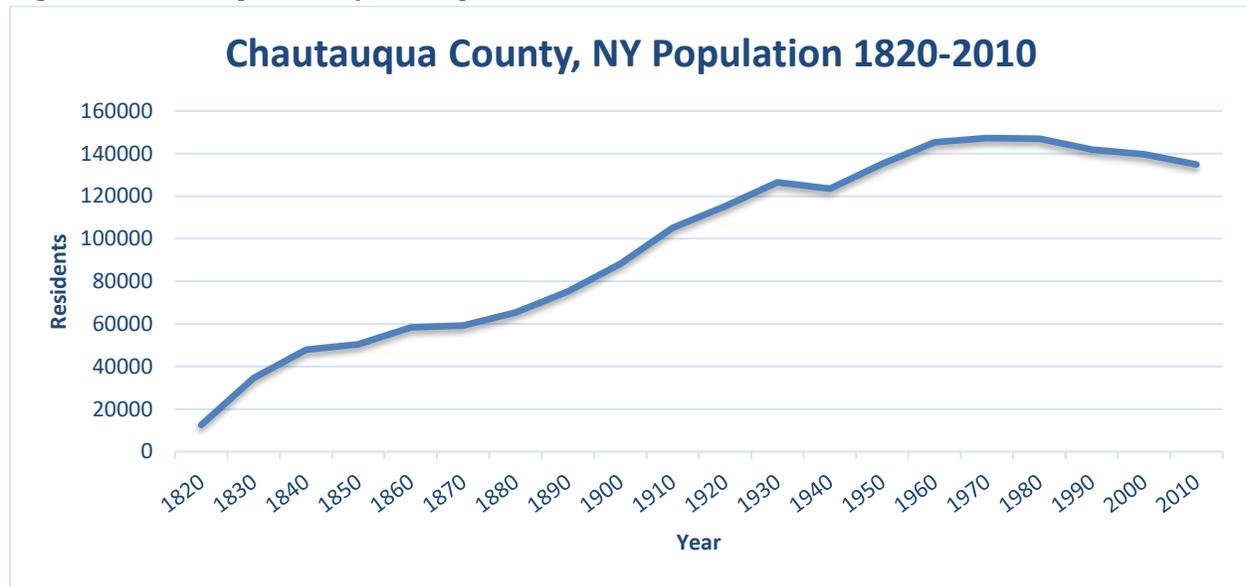


Figure 1. Chautauqua County, NY Population 1820-2010



Sources: NYS Department of Economic Development, State Data Center (2000);  
US Census Bureau American Community Survey

By census definition, 56.1% of the County's population resides in urban areas (3.6% of total land area), while 43.9% resides in rural areas (96.4% of total land area) as of 2010. During the same period, population density in designated urban areas was 2,003.8 residents per square mile, while the density in designated rural areas was 57.9 residents per square mile (American Community Survey 2007-2011).

The vast geographic area of the County coupled with the fact that almost half of its residents are sparsely populated throughout the rural area lends itself to transportation and access challenges. It is also important to recognize that the County is geographically and somewhat socially and economically divided into two regions. The major population centers in the "north county" region are the City of Dunkirk (population of 11,799 in 2018) and the Village of Fredonia (population of 10,501 in 2018). The "south county" region encompasses the City of Jamestown, the County's largest population center of 29,315 (American Community Survey 2018 estimate). The "south county" also includes surrounding areas.

Population declines can stimulate shifts in population characteristics, which may in turn, be associated with declining tax bases, high poverty rates, and lower educational achievement that have implications for the need, availability and delivery of health services among specific subpopulations.

Table 1 provides population estimates for 2010 and 2018 for individual villages, cities, and towns within Chautauqua County. The temporal trend reflects the general County decline in

population since the 2010 Census. The only municipalities that showed an increase, and did not show a decline in population were the Town of Busti and the Cattaraugus Reservation.

Table 1. Population estimates for incorporated places and minor civil divisions, 2010 and 2018

Name	Population		Name	Population	
	2010 Base	2018		2010 Base	2018
Arkwright town	1061	1038	Lakewood village	3002	2817
Bemus Point village	364	351	Balance of Busti town	4349	4392
Balance of Ellery town	4164	3988	Mayville village	1711	1615
Brocton village	1486	1405	Balance of Chautauqua town	2753	2641
Balance of Portland town	3341	3225	Mina town	1106	1050
Carroll town	3524	3350	North Harmony town	2267	2157
Cassadaga village	634	600	Panama village	479	450
Balance of Stockton town	1614	1503	Balance of Harmony town	1727	1632
Cattaraugus Reservation	38	40	Poland town	2356	2232
Celoron village	1112	1037	Ripley town	2415	2294
Cherry Creek village	461	437	Sheridan town	2673	2539
Balance of Cherry Creek town	657	618	Sherman village	730	683
Clymer town	1698	1649	Balance of Sherman town	923	914
Dunkirk city	12563	11799	Silver Creek village	2656	2483
Dunkirk town	1318	1256	Balance of Hanover town	3774	4169
Ellington town	1643	1555	Sinclairville village (pt.)	513	474
Falconer village	2420	2265	Balance of Charlotte town	1216	1202
Balance of Ellicott town	5182	5031	Sinclairville village (pt.)	75	82
Forestville village	697	-	Balance of Gerry town	1830	1754
Fredonia village	11230	10501	Villanova town	1110	1072
Balance of Pomfret town	3735	3570	Westfield village	3224	3006
French Creek town	906	863	Balance of Westfield town	1672	1594
Jamestown city	31146	29315	Chautauqua County	134905	127939
Kiantone town	1350	1291			

Source: US Census Bureau Annual Estimates of Incorporated Places 2010 (Census Count) and 2018 (Estimate)

## Age and Sex Distributions

According to American Community Survey 2013-2017 5-year estimates, the distribution of sexes in the County is approximately equal overall, comprised of 49.4% males and 50.6% females. However, sex distributions fluctuate by age group. The greatest difference is demonstrated among residents aged 85 years and older, for which the population is composed of 70.5% females and only 29.5% males.

The median age of Chautauqua County residents is 42.3 years, slightly higher than the New York State median of 38.4 years. A greater proportion of residents in Chautauqua County are over the age of 65 and 85 than in New York State as a whole (18.5% compared to 15.2% and 2.5%

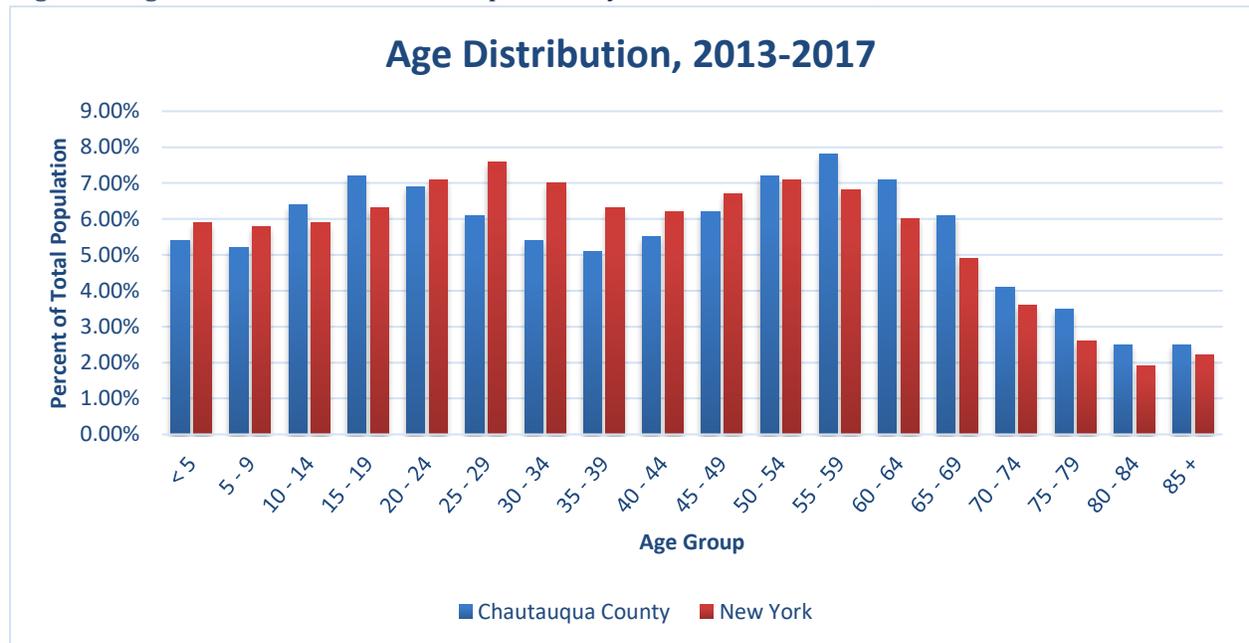
compared to 2.2%, respectively). These statistics are outlined in Table 2. Figure 2 presents the distribution of ages among Chautauqua County and New York State residents.

Table 2. Comparison of selected age and sex statistics, 2013-2017

	Chautauqua		New York State	
Median age (years)	42.3		38.4	
<b>Selected Age Groups</b>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
<b>18 years and over</b>	103,692	79.20%	15,594,924	78.80%
<b>21 years and over</b>	96,997	74.10%	14,779,522	74.70%
<b>62 years and over</b>	29,569	22.60%	3,689,716	18.60%
<b>65 years and over</b>	24,230	18.50%	3,008,351	15.20%
<b>85 years and over</b>	3,212	2.50%	437,814	2.20%
<b>18 years and over</b>	103,692	100.00%	15,594,924	100.00%
<b>Male</b>	50,806	49.00%	7,455,728	47.81%
<b>Female</b>	52,886	51.00%	8,139,196	52.19%
<b>65 years and over</b>	24,230	100.00%	3,008,351	100.00%
<b>Male</b>	10,706	44.18%	1,279,119	42.52%
<b>Female</b>	13,524	55.82%	1,729,232	57.48%
<b>85 years and over</b>	3,212	100.00%	437,814	100.00%
<b>Male</b>	948	29.51%	143,480	32.77%
<b>Female</b>	2,264	70.49%	294,334	67.23%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

Figure 2. Age distribution for Chautauqua County and New York State, 2013-2017



Source: US Census Bureau American Community Survey 2013-2017

## Race and Ethnicity

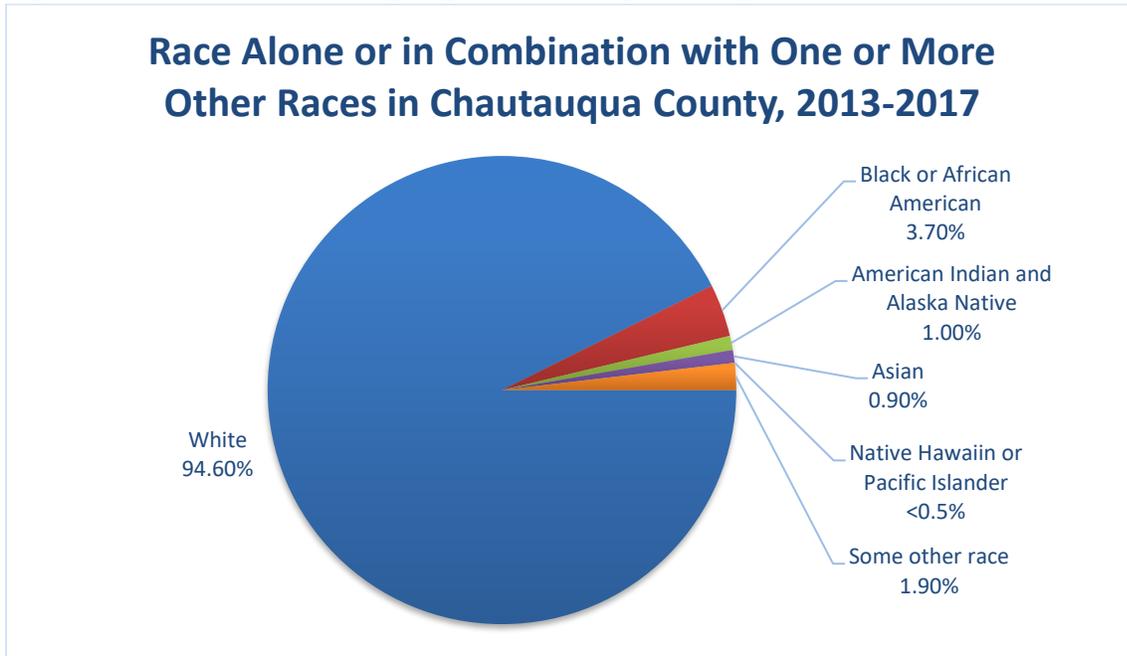
While the majority of Chautauqua County residents are Caucasian, diverse racial and ethnic groups have gradually increased over the past several years. Table 3 and Figure 3 present the racial distribution of Chautauqua County residents according to the U.S. Census Bureau American Community Survey 5-year population estimates 2013-2017.

Table 3. Racial distribution of persons in Chautauqua County, 2013-2017

<i>Race</i>	Chautauqua County		New York State	
	Number	Percent	Estimate	Percent
<b>Total population</b>	130,846	100.00%	19,798,228	100.00%
<b>One race</b>	128,266	98.00%	19,208,202	97.00%
<b>Two or more races</b>	2,580	2.00%	590,026	3.00%
<b>One race</b>	128,266	98.00%	19,208,202	97.00%
<b>White</b>	121,359	92.70%	12,638,791	63.80%
<b>Black or African American</b>	3,459	2.60%	3,100,685	15.70%
<b>American Indian and Alaska Native</b>	411	0.30%	77,130	0.40%
<b>Asian</b>	781	0.60%	1,652,846	8.30%
<b>Native Hawaiian and Other Pacific Islander</b>	41	0.00%	7,937	0.00%
<b>Some other race</b>	2,215	1.70%	1,730,813	8.70%
<b>Two or more races</b>	2,580	2.00%	590,026	3.00%
<b>White and Black or African American</b>	1,108	0.80%	166,338	0.80%
<b>White and American Indian and Alaska Native</b>	674	0.50%	57,039	0.30%
<b>White and Asian</b>	340	0.30%	110,044	0.60%
<b>Black or African American and American Indian and Alaska Native</b>	107	0.10%	22,839	0.10%
<b>Race alone or in combination with one or more other races</b>				
<b>Total population</b>	130,846	130,846	19,798,228	19,798,228
<b>White</b>	123,737	94.60%	13,091,950	66.10%
<b>Black or African American</b>	4,842	3.70%	3,394,050	17.10%
<b>American Indian and Alaska Native</b>	1,306	1.00%	207,483	1.00%
<b>Asian</b>	1,156	0.90%	1,828,118	9.20%
<b>Native Hawaiian and Other Pacific Islander</b>	56	0.00%	29,859	0.20%
<b>Some other race</b>	2,438	1.90%	1,894,979	9.60%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

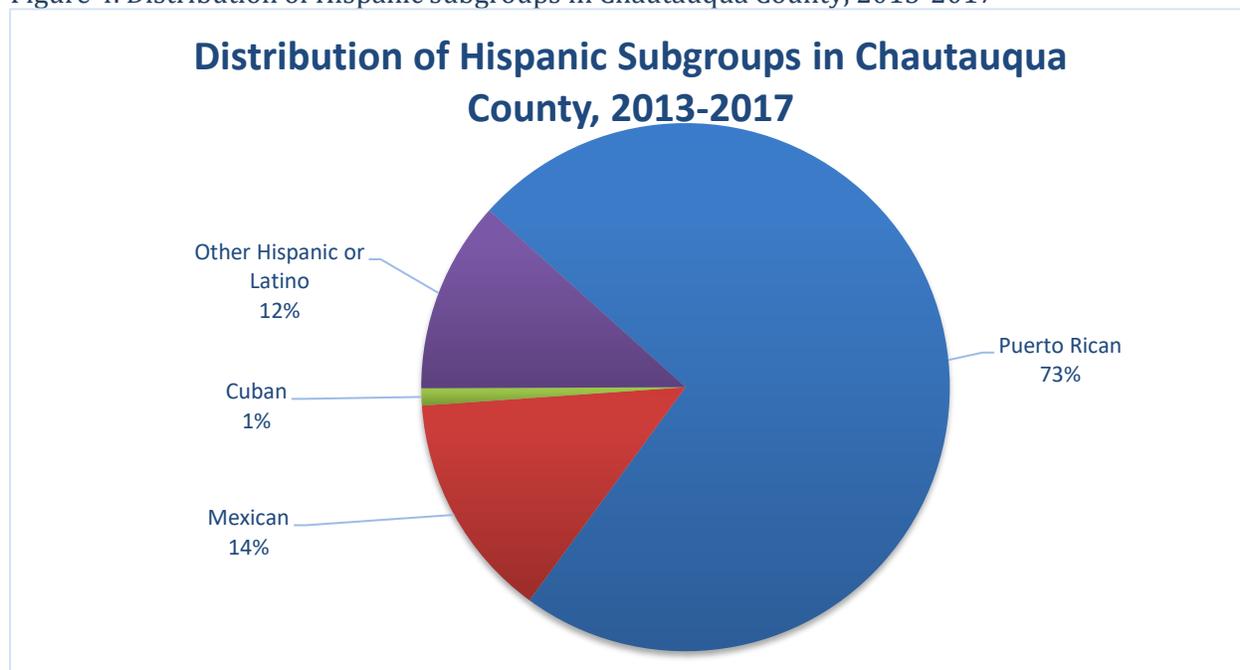
Figure 3. Distribution of racial groups in Chautauqua County, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey; Totals exceed 100% because residents of multiple races are counted in two or more categories.

Hispanics are the fastest growing ethnic group in the County and in the nation, currently making up 7.2% of the County's population, compared to 5.9% observed during the last Community Health Assessment conducted in 2013. According to the U.S. Census Bureau's American Community Survey, the majority of Hispanic residents live in the County's urban areas: with 40% residing in Dunkirk and 27% living in Jamestown. The remaining 32% are scattered throughout Chautauqua County. The largest subgroups of the County's Hispanic/Latino population are Puerto Rican (73%), followed by Mexican (14%). These statistics are presented in Figure 4 and Table 4.

Figure 4. Distribution of Hispanic subgroups in Chautauqua County, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

Table 4. Distribution of Hispanic or Latino ethnicity among Chautauqua County races, 2013-2017

<i>Hispanic or Latino (of any race)</i>	Chautauqua County		New York State	
	Number	Percent	Estimate	Percent
<b>Total population</b>	130,846	130,846	19,798,228	19,798,228
<b>Hispanic or Latino (of any race)</b>	9,427	7.20%	3,726,238	18.80%
<b>Mexican</b>	1,304	1.00%	478,850	2.40%
<b>Puerto Rican</b>	6,918	5.30%	1,112,962	5.60%
<b>Cuban</b>	99	0.10%	76,337	0.40%
<b>Other Hispanic or Latino</b>	1,106	0.80%	2,058,089	10.40%
<b>Not Hispanic or Latino</b>	121,419	92.80%	16,071,990	81.20%
<b>White alone</b>	114,862	87.80%	11,071,563	55.90%
<b>Black or African American alone</b>	3,109	2.40%	2,842,869	14.40%
<b>American Indian and Alaska Native alone</b>	402	0.30%	45,623	0.20%
<b>Asian alone</b>	765	0.60%	1,639,345	8.30%
<b>Native Hawaiian and Other Pacific Islander alone</b>	29	0.00%	5,686	0.00%
<b>Some other race alone</b>	56	0.00%	106,834	0.50%
<b>Two or more races</b>	2,196	1.70%	360,070	1.80%
<b>Two races including Some other race</b>	56	0.00%	35,641	0.20%
<b>Two races excluding Some other race, and Three or more races</b>	2,140	1.60%	324,429	1.60%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

There is a strong migrant presence in the area's agricultural workforce. The SUNY Fredonia Migrant Educational Opportunity Program (MEOP) reports that for the 2019-2020 school year, there were 51 migrant households with children ages 3-21. As of December 2019, 102 students were enrolled in the MEOP (12 preschool, 70 in school, and 20 out-of-school youth ages 16-21). The majority of the migrant population originates from Guatemala and Mexico.

Chautauqua County's eastern boundaries are encapsulated by two Seneca Nation reservations resulting in a small but strong Native American presence. The U.S. Census population estimate for 2018 indicates that only 40 Native Americans residing in the County live on the Cattaraugus Reservation, which spans three counties: Chautauqua, Erie, and Cattaraugus.

Chautauqua County is also home to a significant population of Amish. Precise population counts for this subgroup are difficult to generate because the U.S. Census Bureau's questionnaires do not include questions about religion. Therefore, we must rely on estimates to predict population figures. There are three distinct Amish communities in the County: conservative Troyer Amish in the Conewango Valley (13 church districts, some in Cattaraugus County) and Byler Amish in Chautauqua (2 church districts), and more progressive Clymer-Area Amish in Panama, Clymer, and Sherman (6 church districts). Each church district is comprised of approximately 15-20 families, with families in the Clymer area having approximately 6-7 children and families in the Chautauqua and Conewango Valley areas each having approximately 10-15 children. Overall, there are approximately 2,000-3,000 Amish residents in the County, comprising about 2% of the total population (Amish America 2009). According to the CCDHHS Immunization Program, in 2019, there were approximately 484 students ages 6-13 in grades 1-8 attending the county's 20 Amish schools.

Language and cultural differences can create barriers to the provision of health knowledge, health education and service delivery. U.S. Census Bureau 2013-2017 American Community Survey indicates that 7.8% of the County's population older than 5 years identifies a language other than English as the primary language spoken at home. Of those, 61.1% primarily speak Spanish.

Table 5. Languages spoken in the homes of Chautauqua County residents, 2013-2017

Language Spoken at Home	Chautauqua County		New York	
	Number	Percent	Number	Percent
Population 5 years and over	120,193	100.00%	18,621,351	100.00%
English only	114,132	92.20%	12,924,635	69.40%
Language other than English	9,631	7.80%	5,696,716	30.60%
Speak English less than "very well"	3,570	37.10%	2,524,549	44.30%
Spanish	5,886	4.80%	2,810,962	15.10%
Speak English less than "very well"	2,210	37.50%	1,249,541	44.50%
Other Indo-European languages	3,062	2.50%	1,617,553	8.70%
Speak English less than "very well"	1,022	33.40%	626,938	38.80%
Asian and Pacific Islander languages	485	0.40%	951,683	5.10%
Speak English less than "very well"	307	63.30%	554,119	58.20%
Other languages	198	0.20%	316,518	1.70%
Speak English less than "very well"	31	15.70%	93,951	29.70%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

Minority status and racial and ethnic heritage are linked to a number of health risks and chronic diseases. Knowledge of the projected growth of minority groups and their distribution among locations in the County is relevant to health care planning and delivery.

### Household and Housing Data

American Community Survey 5-year estimates 2013-2017 indicate that during that time period there were 67,422 households in Chautauqua County (Table 6). The average household size was 2.35 people, which is comparable to, but slightly lower than, the state average of 2.63 people. The majority of households were families (62.3%), including married-couple families (45.5%), families with a male householder without a wife present (5.38%) and families with a female householder without a husband present (11.38%). Nonfamily households made up 37.7% of all households in the County; of nonfamily householders, 31.0% were householders living alone. These proportions are approximately equal to those of New York State. Among all households, 27.1% included at least one person under 18 years old, and 42.2% included at least one person 60 years old or older.

Table 6. Chautauqua County households by type, 2013-2017

Households by Type	Chautauqua County		New York	
	Number	Percent	Number	Percent
Total households	52,983	100.00%	7,302,710	100.00%
Family households (families)	32,986	62.26%	4,633,030	63.44%
With own children under 18 years	13,007	24.55%	2,118,154	29.01%
Married-couple family	24,110	45.51%	3,223,907	44.15%
With own children under 18 years	7,882	14.88%	1,405,328	19.24%
Male householder, no wife present, family	2,848	5.38%	363,352	4.98%
With own children under 18 years	1,538	2.90%	145,834	2.00%
Female householder, no husband present, family	6,028	11.38%	1,045,771	14.32%
With own children under 18 years	3,587	6.77%	566,992	7.76%
Nonfamily households	19,997	37.74%	2,669,680	36.56%
Householder living alone	(X)	31.00%	(X)	29.70%
65 years and over	(X)	13.00%	(X)	11.60%
Households with one or more people under 18 years		27.10%		30.10%
Households with one or more people 60 years and over		42.20%		39.40%
Average household size	2.35	(X)	2.63	(X)
Average family size	2.94	(X)	3.31	(X)

Source: U.S. Census Bureau, 2013-2017 American Community Survey

In 2018, per the Chautauqua County Homeless Coalition’s Homeless Management Information System (HMIS), there were 743 enrollments in homeless services in Chautauqua County, an increase from 493 in 2017 and 383 in 2016. The dramatic increase in homelessness can likely be attributed to an increase in the ability to track homeless services, but substance misuse and a lack of affordable, stable housing have also contributed to the increase in homeless persons. Homeless service providers and the community are becoming more aware of the scope of homelessness in the county.

Of the 743 enrollments in 2018, 81% of those individuals entered from a situation where they were either literally homeless, or at imminent risk of becoming homeless. Of the 743, approximately 58% were male, and 41% were female, while 4% were veterans. In 2018, the majority of homeless persons were white; however, African Americans (10%) and Hispanics (21%) were disproportionately affected by homelessness compared to the percentage of these populations in the total population.

The U.S. Census Bureau 2013-2017 American Community Survey estimates that there are 67,422 housing units in Chautauqua County, 78.6% of which are occupied, leaving 21.4%

vacant. Of those units, the majority (68.2%) are one-unit detached single-family homes. The remaining housing units are mostly buildings containing two or more units and 6.6% are mobile homes. Most housing units are inhabited by the owners (70.0%) but still many are rented out (30.0%).

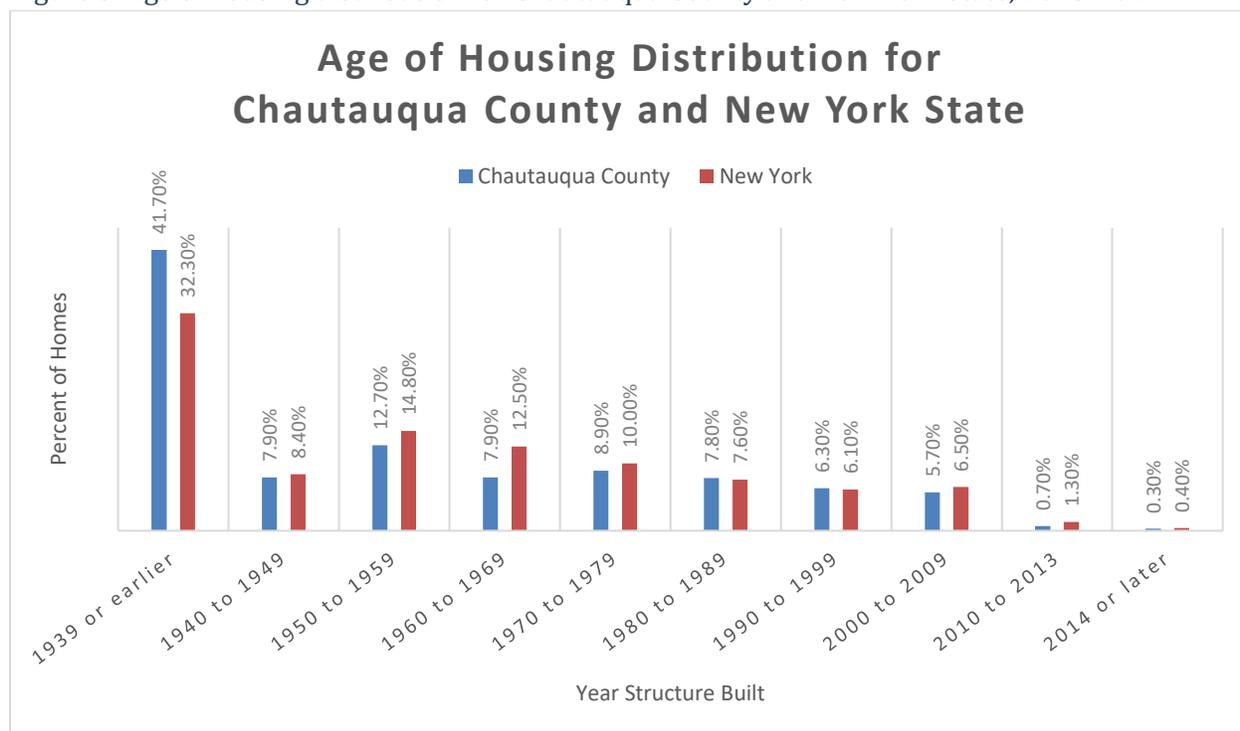
Table 7. Characteristics of housing units in Chautauqua County and New York State, 2013-2017

Housing Occupancy	Chautauqua County		New York	
	Number	Percent	Number	Percent
Total housing units	67,422	100.00%	8,255,911	100.00%
Occupied housing units	52,983	78.60%	7,302,710	88.50%
Vacant housing units	14,439	21.40%	953,201	11.50%
<b>Units in Structure</b>				
Total housing units	67,422	100.00%	8,255,911	100.00%
1-unit, detached	45,980	68.20%	3,466,614	42.00%
1-unit, attached	1,134	1.70%	413,868	5.00%
2 units	7,383	11.00%	859,648	10.40%
3 or 4 units	4,063	6.00%	592,719	7.20%
5 to 9 units	1,404	2.10%	428,067	5.20%
10 to 19 units	1,100	1.60%	341,453	4.10%
20 or more units	1,877	2.80%	1,955,765	23.70%
Mobile home	4,437	6.60%	194,410	2.40%
Boat, RV, van, etc.	44	0.10%	3,367	0.00%
<b>Housing Tenure</b>				
Occupied housing units	52,983	100.00%	7,302,710	100.00%
Owner-occupied	37,098	70.00%	3,942,483	54.00%
Renter-occupied	15,885	30.00%	3,360,227	46.00%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

Housing structures in the County are relatively old with 41.7% built in 1939 or earlier, compared to 33.7% in New York State. In Chautauqua County, 52.7% of homes were built prior to 1950, compared to 32.3% in New York State. This is of particular interest because lead paint was banned in 1978, but was rarely used after 1950. Many children in the County may be exposed to lead because of the high prevalence of old housing (70.2% of homes were built prior to 1970). The distribution of the age of housing for Chautauqua County and New York State is presented in Figure 5.

Figure 5. Age of housing distribution for Chautauqua County and New York State, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

Values of homes in Chautauqua County differ greatly than those of New York State as a whole. Of owner-occupied housing units, 17.4% were valued at less than \$50,000 in Chautauqua County, compared to 5.4% in New York State. The majority of owner-occupied units in the County were valued between \$50,000 and \$99,999 (42.6%). In New York State, most homes fell into the ranges of \$300,000 to \$499,999 (23.7%) and \$500,000 to \$999,999 (19.0%). Table 8 and Figure 6 present the disparity in home values between Chautauqua County and NYS.

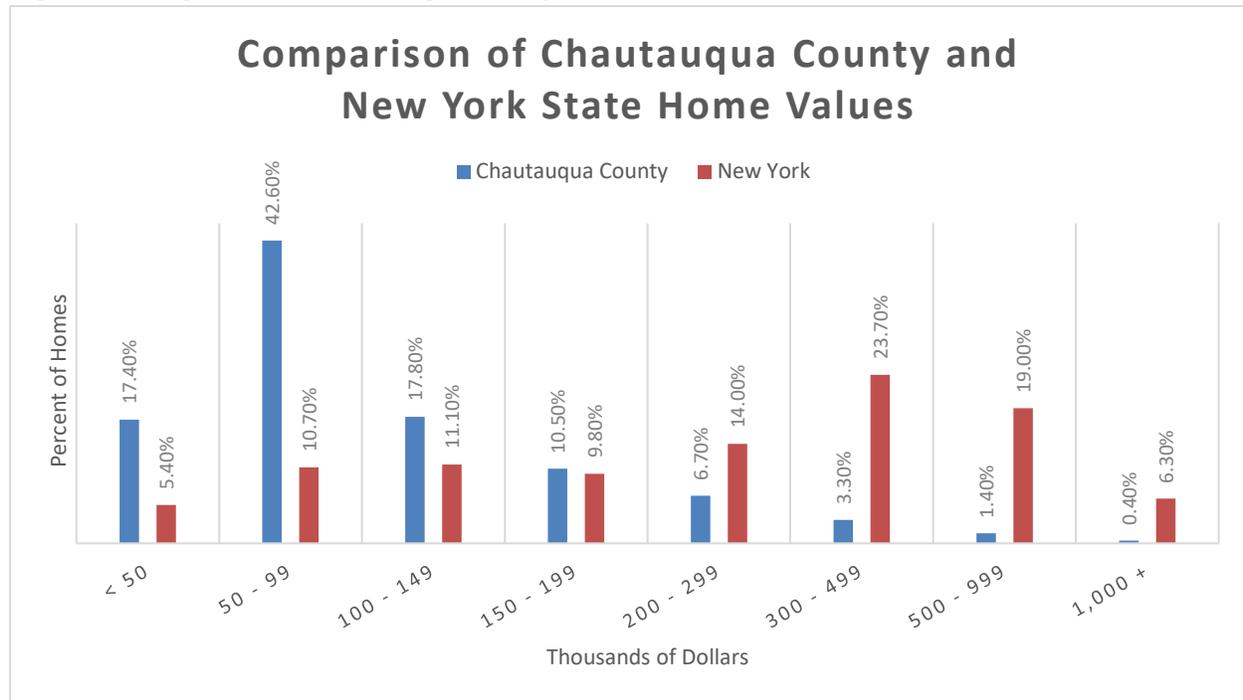
Table 8. Comparison of Chautauqua County and New York State housing values, 2013-2017

Value	Chautauqua County		New York	
	Number	Percent	Number	Percent
Owner-occupied units	37,098	100.00%	3,942,483	100.00%
Less than \$50,000	6,441	17.40%	211,369	5.40%
\$50,000 to \$99,999	15,791	42.60%	422,125	10.70%
\$100,000 to \$149,999	6,611	17.80%	439,347	11.10%
\$150,000 to \$199,999	3,907	10.50%	384,970	9.80%
\$200,000 to \$299,999	2,490	6.70%	550,098	14.00%
\$300,000 to \$499,999	1,213	3.30%	934,978	23.70%
\$500,000 to \$999,999	506	1.40%	749,626	19.00%
\$1,000,000 or more	139	0.40%	249,970	6.30%

Median (dollars)	85,800	(X)	293,000	(X)
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Source: U.S. Census Bureau, 2013-2017 American Community Survey

Figure 6. Comparison of Chautauqua County and New York State home values, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

## Transportation

Transportation is frequently recognized as a barrier to residents’ self-sufficiency in Chautauqua County. Individuals and families living in the 96% of land mass designated as rural sometimes face difficulty in traveling to urban centers for services. While residents in cities are generally closer to services, they are less likely to have access to a reliable vehicle for transportation. The 2013-2017 American Community Survey revealed that 10.9% of County households did not have access to a vehicle, compared to 16.3% in the City of Dunkirk, and 20.4% in the City of Jamestown. This figure is much greater for New York State at 29.0%, however, includes large population centers (New York City and vicinity, Buffalo, Syracuse, Albany, and Rochester for example) with many more options for public transportation. The only mass transit public transportation option in Chautauqua County is the bus system provided by the Chautauqua Area Regional Transportation System (CARTS).

Table 9. Vehicle availability by household for selected geographies, 2013-2017

Vehicles Available	City of Dunkirk		City of Jamestown		Chautauqua County		New York	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Occupied housing units</b>	5,185	100.0%	12,788	100.0%	52,983	100.0%	7,302,710	100.0%
<b>No vehicle available</b>	847	16.3%	2,605	20.4%	5,772	10.9%	2,117,366	29.0%
<b>1 vehicle available</b>	2,330	44.9%	5,861	45.8%	20,712	39.1%	2,396,244	32.8%
<b>2 vehicles available</b>	1,366	26.3%	3,372	26.4%	19,096	36.0%	1,915,582	26.2%
<b>3 + vehicles available</b>	517	10.0%	811	6.3%	5,645	10.7%	616,668	8.4%
<b>4 + vehicles available</b>	125	2.4%	139	1.1%	1,758	3.3%	256,850	3.5%

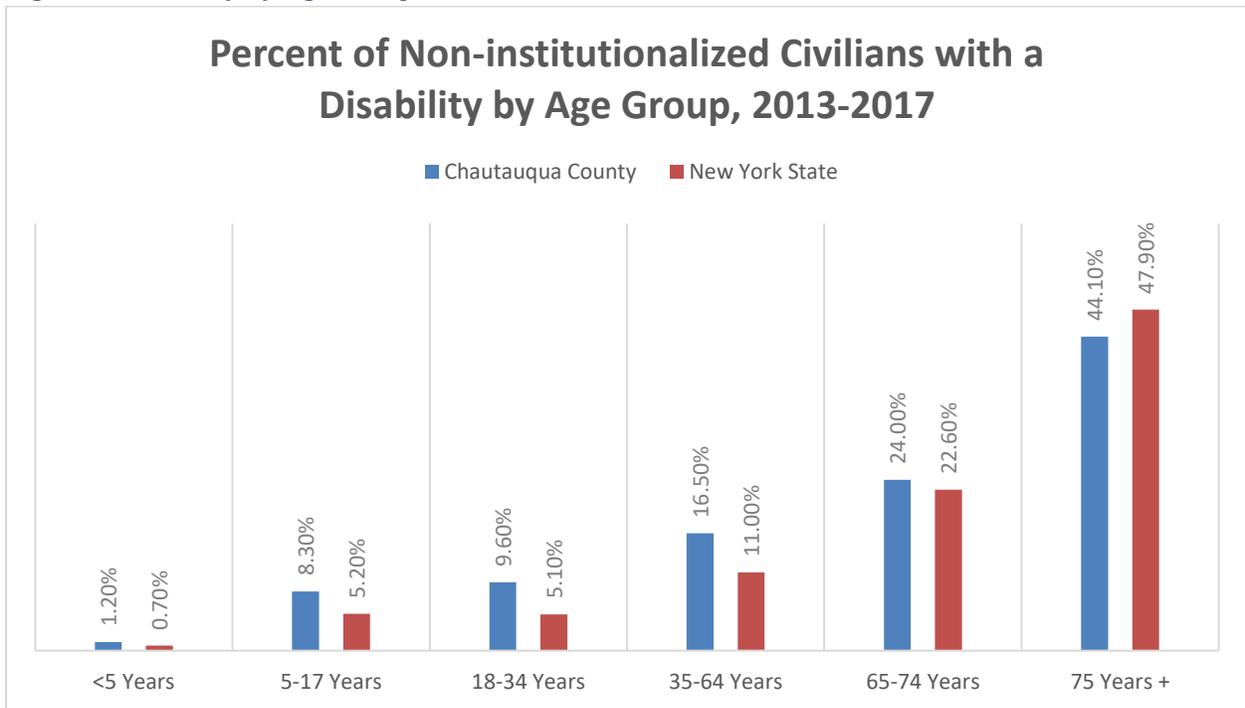
Source: U.S. Census Bureau, 2013-2017 American Community Survey

## Disability

According to the U.S. Census Bureau American Community Survey, 5-year estimates 2013-2017, there were 20,286 non-institutionalized civilian persons with disabilities living in Chautauqua County. This population subgroup accounted for 15.8% of the county population, which was greater than the state rate of 11.4%. Both the County and State rates have increased over time.

A look at disabilities by age group (Figure 7) shows that Chautauqua County rates exceeded those of New York State for all age groups except for 75 years and over. The most notable difference between the two geographies was observed in the 35 to 64 age group, with 16.5% of Chautauqua County and 11.0% of New York State residents having a disability.

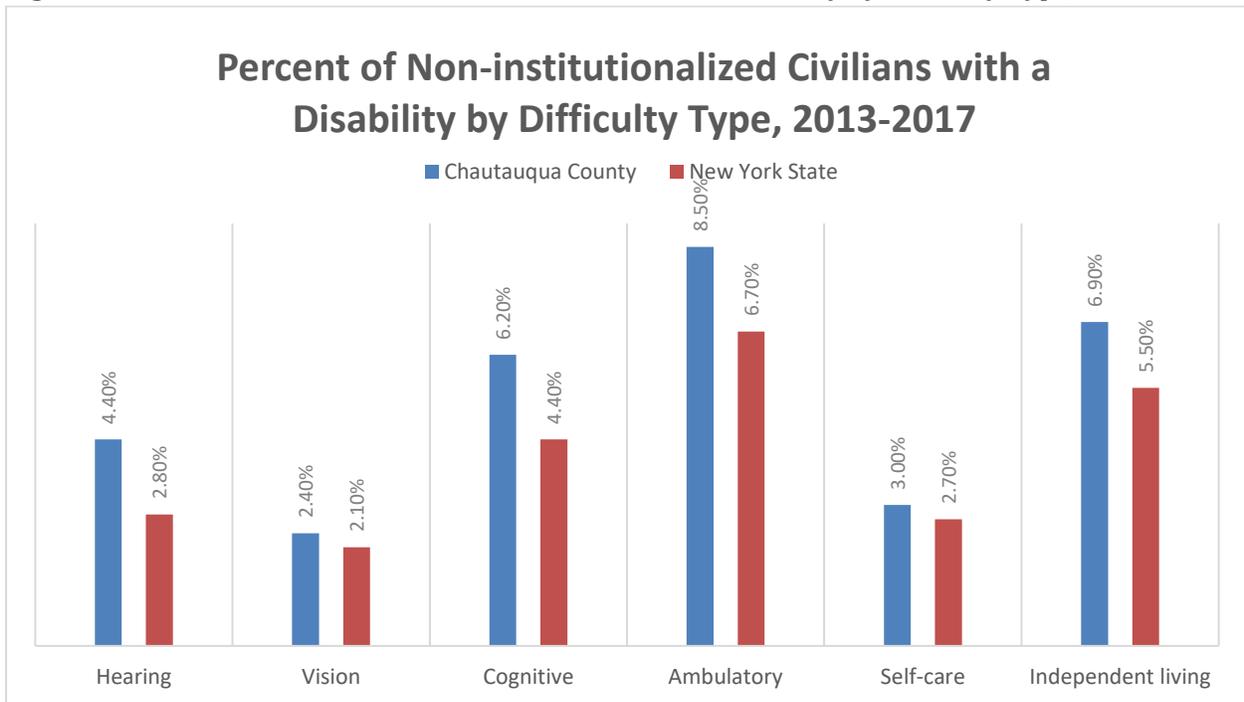
Figure 7. Disability by Age Group, 2013-2017



Source: US Census Bureau American Community Survey 5-year estimates, 2013-2017

Figure 8 provides a breakdown of types of disabilities for residents 2013-2017. Chautauqua County experienced higher rates for all categories included than New York State as a whole. The most common disability type was ambulatory difficulty at 8.5% of all residents compared to 6.7% in New York State as a whole.

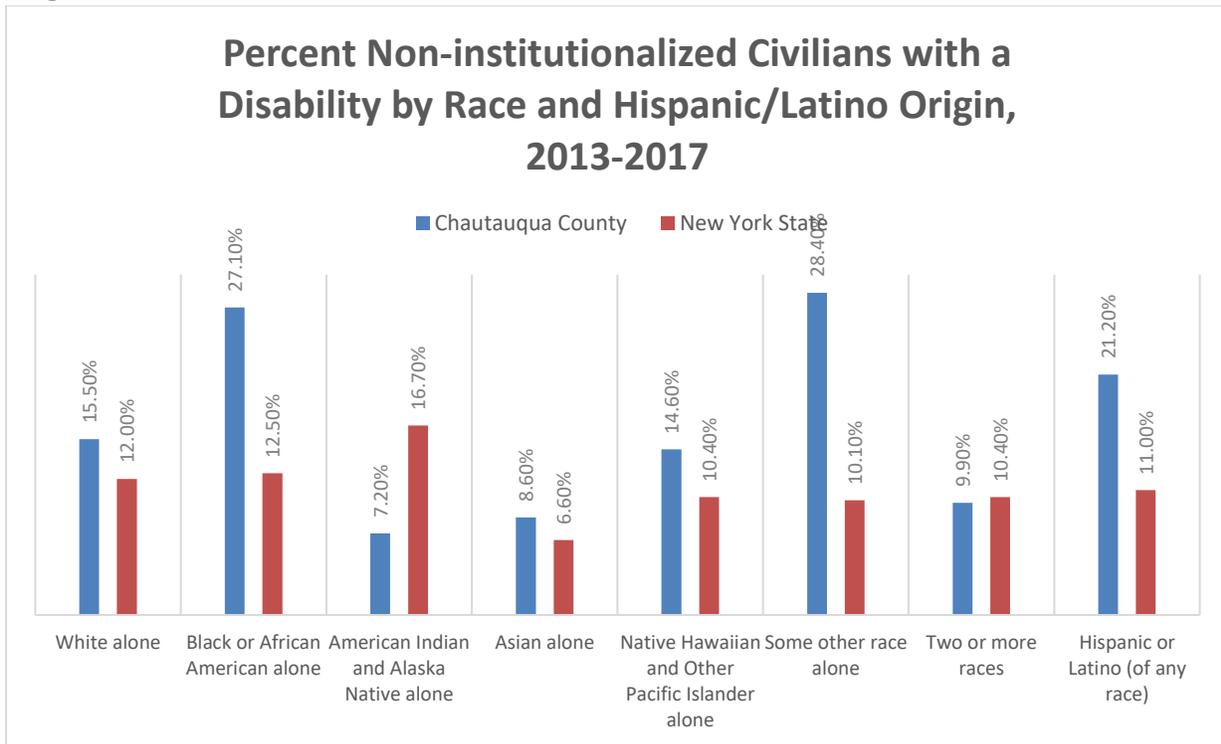
Figure 8. Percent of Non-institutionalized Civilians with a Disability by Difficulty Type, 2013-2017



Source: US Census Bureau American Community Survey, 2013-2017

A breakdown of total disabilities in Chautauqua County by race and ethnicity is provided in Figure 9. Of all racial and ethnic subgroups, residents self-identifying as “some other race, alone” experienced the greatest rate of disability at 28.4%, followed by Black or African American, alone at 27.1%, and then Hispanic or Latino (of any race) at 21.2%. In each of these three groups, rates were much higher in Chautauqua County than New York State as a whole. Rates of disability were lower for American Indian and Alaska Natives in Chautauqua County than New York State.

Figure 9. Percent of Non-institutionalized Civilians with a Disability by Race and Hispanic or Latino Origin, 2013-2017

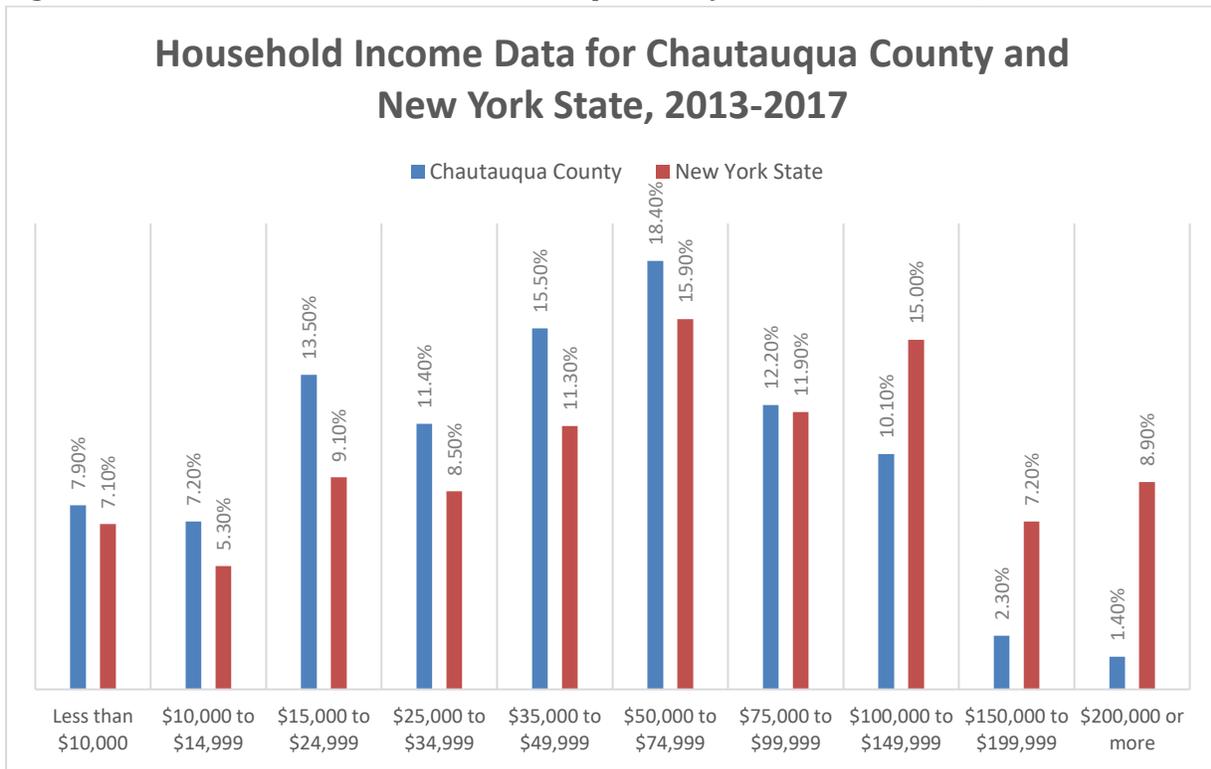


Source: US Census Bureau American Community Survey, 2013-2017

### Income Level

Based on income and poverty data, Chautauqua County is one of the poorest counties in the state. The 2013-2017 median income for Chautauqua County's 52,983 households was \$44,304, an increase from the 2007-2011 figure of \$41,432. Empire State Development indicated that the per capita personal income of Chautauqua County residents was \$30,543 in 2010, ranked 54 of the 62 New York State Counties (Empire State Development, 2012). Figure 10 presents the vast difference in earnings between Chautauqua County and New York State (American Community Survey 2013-2017).

Figure 10. Household income data for Chautauqua County and New York State, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

Table 10 lists the percentage and type of households by total income. It also displays the mean and median household income for each household category. The median family household income increased from \$51,614 in 2007-2011 to \$56,408 in 2013-2017. The median nonfamily household income increased from \$23,398 in 2007-2011 to \$26,048 in 2013-2017. Among all households in Chautauqua County, 7.9% had an income of less than \$10,000, a decline from 9.0% of households 2007-2011.

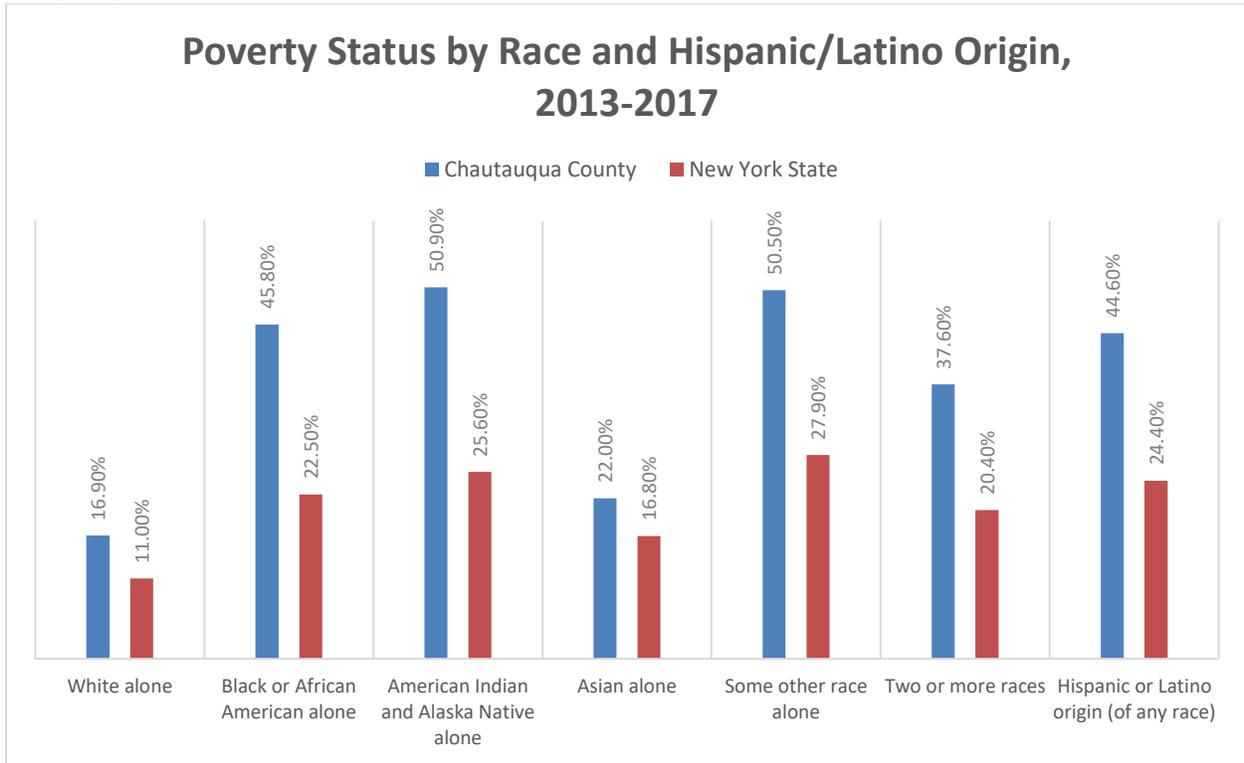
Table 10. Income in the past 12 months by household type, 2013-2017

	Chautauqua County, New York				New York			
	Households	Families	Married-couple families	Nonfamily households	Households	Families	Married-couple families	Nonfamily households
<b>Total</b>	52,983	32,986	24,110	19,997	7,302,710	4,633,030	3,223,907	2,669,680
<b>Less than \$10,000</b>	7.90%	5.40%	1.80%	13.30%	7.10%	4.50%	1.60%	12.60%
<b>\$10,000 to \$14,999</b>	7.20%	3.60%	1.10%	13.50%	5.30%	3.20%	1.70%	9.50%
<b>\$15,000 to \$24,999</b>	13.50%	9.40%	5.60%	21.50%	9.10%	6.90%	4.40%	13.60%
<b>\$25,000 to \$34,999</b>	11.40%	10.10%	8.60%	14.30%	8.50%	7.40%	5.60%	10.60%
<b>\$35,000 to \$49,999</b>	15.50%	14.90%	15.20%	15.60%	11.30%	10.70%	9.00%	12.50%
<b>\$50,000 to \$74,999</b>	18.40%	21.30%	23.50%	12.50%	15.90%	16.10%	15.60%	15.40%
<b>\$75,000 to \$99,999</b>	12.20%	15.70%	19.10%	5.60%	11.90%	13.10%	14.20%	9.10%
<b>\$100,000 to \$149,999</b>	10.10%	14.40%	18.50%	2.40%	15.00%	17.80%	21.30%	9.10%
<b>\$150,000 to \$199,999</b>	2.30%	3.40%	4.40%	0.40%	7.20%	9.00%	11.50%	3.50%
<b>\$200,000 or more</b>	1.40%	1.80%	2.20%	0.80%	8.90%	11.30%	15.10%	4.10%
<b>Median income (dollars)</b>	44,304	56,408	68,382	26,048	62,765	77,141	96,006	38,931
<b>Mean income (dollars)</b>	57,231	68,494	79,681	36,421	93,443	109,230	130,924	61,983

Source: U.S. Census Bureau, 2013-2017 American Community Survey; Amounts in 2017 inflation-adjusted dollars

Poverty status by race and ethnicity figures from 2013-2017 indicate that racial and ethnic minority populations were much more likely to live in poverty in Chautauqua County than in New York State as a whole. During the time frame, 50.9% of American Indian and Alaska Natives alone, 50.5% of individuals identify as some other race, 45.8% of Black or African Americans alone, 44.6% of Hispanic or Latino individuals, and 37.6% of people identifying as two or more races were living in poverty within the last 12 months. Data for Native Hawaiian and Other Pacific Islanders was excluded because of small numbers (<10 individuals).

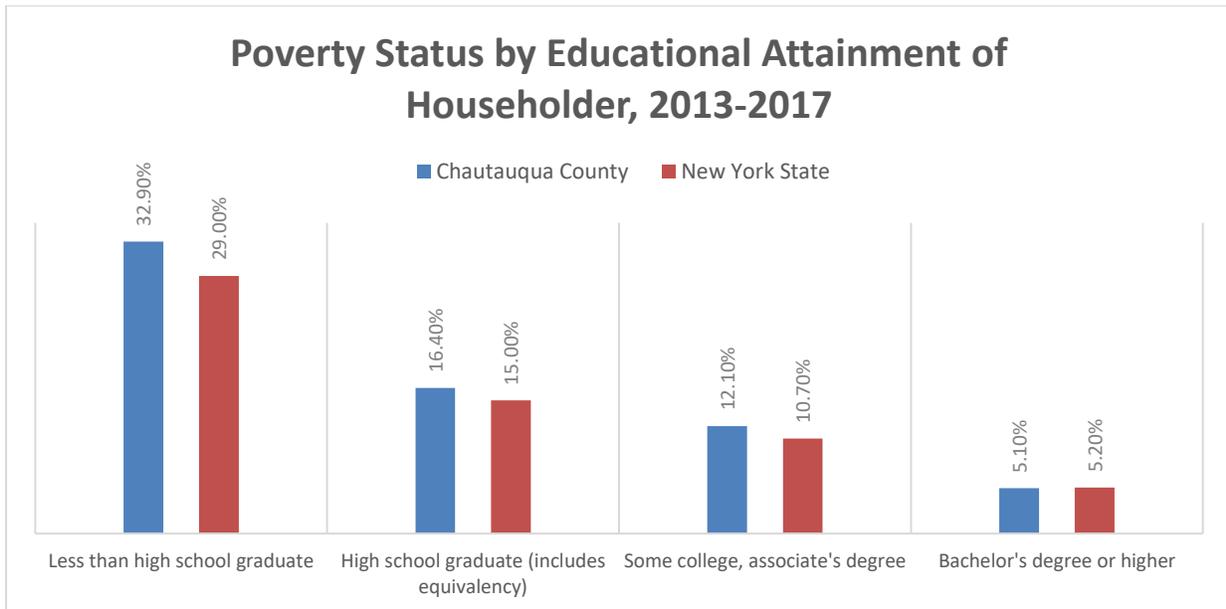
Figure 11. Percent of families living below the Federal Poverty Level in the last 12 months by ethnic subgroups, 2013-2017



Source: US Census Bureau American Community Survey 2013-2017  
 Poverty Status in the past 12 Months of Families

Poverty status of families in Chautauqua County was directly correlated with educational attainment of householder in 2013-2017. Of families in Chautauqua County with a householder having less than a high school diploma, 32.9% were living below the Federal Poverty Level within the past 12 months. Just 5.1% of families headed by householder with a bachelor’s degree or higher were living in poverty in the past twelve months. This trend was consistent in New York State as a whole.

Figure 12. Percent of families living below Federal Poverty Level by educational attainment of householder, 2013-2017



Source: US Census Bureau American Community Survey 2013-2017  
Poverty Status in the past 12 Months of Families

According to the U.S. Census Bureau American Community Survey poverty rates for 2013-2017, 18.5% of all Chautauqua County residents live below the federal poverty level. Approximately 28.6% of children ages 0 to 17 years old and 33.0% of related children less than five years old are living in poverty, compared to 8.3% of people aged 65 and over. The United States Department of Health and Human Services federal poverty guideline (2017) for a family of four was an income of \$24,600. Thirteen percent of all families, 5.9% of married-couple families and 37.7% of families with a female householder and no husband present had incomes below the poverty level.

Table 11. Percentage of families and people whose income in the past 12 months was below the Federal Poverty Level, 2013-2017

	Chautauqua County	New York State
<b>All families</b>	13.40%	11.30%
<b>With related children of the householder under 18 years</b>	24.70%	17.60%
<b>With related children of the householder under 5 years only</b>	25.10%	15.10%
<b>Married couple families</b>	5.90%	5.90%
<b>With related children of the householder under 18 years</b>	10.80%	8.50%
<b>With related children of the householder under 5 years only</b>	14.60%	6.50%
<b>Families with female householder, no husband present</b>	37.70%	26.90%
<b>With related children of the householder under 18 years</b>	50.70%	37.40%
<b>With related children of the householder under 5 years only</b>	45.50%	37.70%
<b>All people</b>	18.50%	15.10%
<b>Under 18 years</b>	28.60%	21.30%
<b>Related children of the householder under 18 years</b>	27.90%	21.00%
<b>Related children of the householder under 5 years</b>	33.00%	22.60%
<b>Related children of the householder 5 to 17 years</b>	26.10%	20.30%
<b>18 years and over</b>	15.80%	13.40%
<b>18 to 64 years</b>	18.10%	13.90%
<b>65 years and over</b>	8.30%	11.50%
<b>People in families</b>	15.00%	12.40%
<b>Unrelated individuals 15 years and over</b>	30.60%	25.30%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

## Employment

The American Community Survey estimates that from 2013 to 2017 there were on average 61,111 (57.1%) Chautauqua County residents aged 16 years and older in the civilian labor force and 61 (0.1%) in the armed forces. The unemployment rate among those in the labor force during this period was 7.7%, a decline from the rate of 8.1% in 2007-2011.

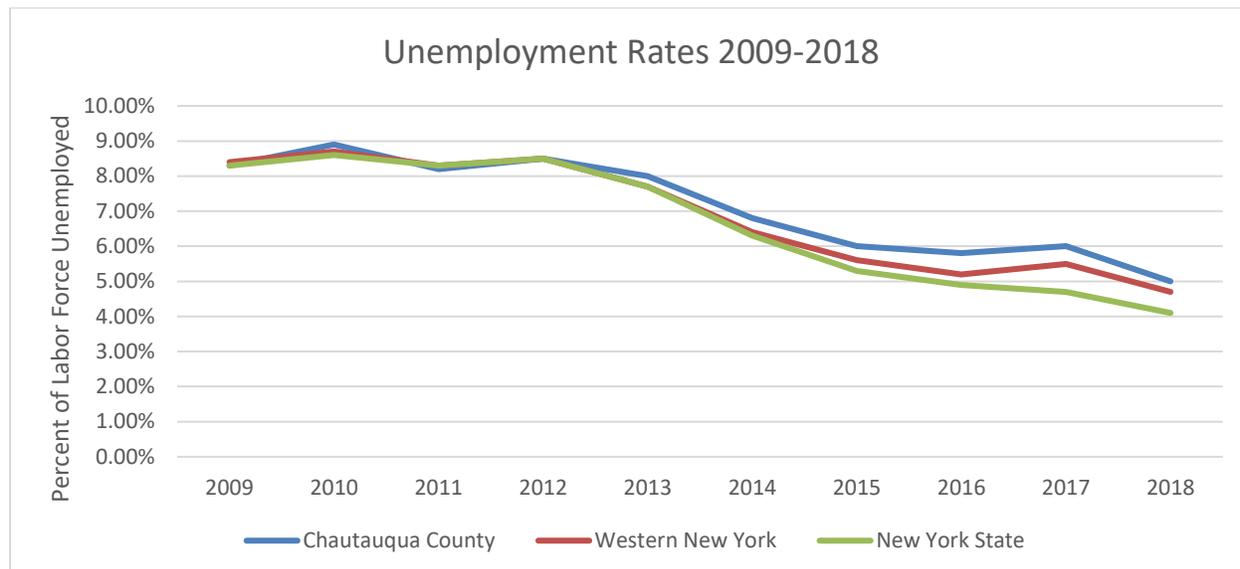
Table 12. Employment status of Chautauqua County residents, 2013-2017

	Chautauqua County		New York	
	Number	Percent	Number	Percent
<b>Population 16 years and over</b>	106,962	106,962	16,080,981	16,080,981
<b>In labor force</b>	61,172	57.20%	10,176,202	63.30%
<b>Civilian labor force</b>	61,111	57.10%	10,152,999	63.10%
<b>Employed</b>	56,416	52.70%	9,467,631	58.90%
<b>Unemployed</b>	4,695	4.40%	685,368	4.30%
<b>Armed Forces</b>	61	0.10%	23,203	0.10%
<b>Not in labor force</b>	45,790	42.80%	5,904,779	36.70%
<b>Civilian labor force</b>	61,111	61,111	10,152,999	10,152,999
<b>Unemployment Rate</b>	(X)	7.70%	(X)	6.80%
<b>Females 16 years and over</b>	54,354	54,354	8,376,770	8,376,770
<b>In labor force</b>	29,086	53.50%	4,911,303	58.60%
<b>Civilian labor force</b>	29,073	53.50%	4,908,607	58.60%
<b>Employed</b>	27,220	50.10%	4,594,459	54.80%
<b>Own children of the householder under 6 years</b>	8,140	8,140	1,347,880	1,347,880
<b>All parents in family in labor force</b>	5,054	62.10%	879,105	65.20%
<b>Own children of the householder 6 to 17 years</b>	17,443	17,443	2,659,014	2,659,014
<b>All parents in family in labor force</b>	11,576	66.40%	1,850,985	69.60%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

New York State Department of Labor statistics show that unemployment figures vary by month, with the highest rates occurring in January and February. Annual averages demonstrate changes over time. The county annual average unemployment rate was 5.0% in 2018, which was slightly greater than the Western New York and New York State rates of 4.7% and 4.1%, respectively. Figure 13 shows unemployment rates from 2009 to 2018.

Figure 13. Unemployment rates for Chautauqua County, Western New York, and New York State, 2009-2018



Source: NYS Department of Labor Local Area Unemployment Statistics Program Unemployment Rates <https://labor.ny.gov/stats/LSLAUS.shtm>

The most prevalent occupation category among employed civilians over the age of 16 included management, professional, and related occupations (29.9%). The next most common occupation categories were sales and office occupations (22.0%), and service occupations (19.4%). These top three occupations were consistent with those of New York State. Production, transportation, and material moving occupations are also very important to Chautauqua County, employing 18.8% of employed persons, compared to 9.3% of New York State employees.

Table 13. Occupations of Chautauqua County and New York State residents, 2013-2017

	Chautauqua County		New York	
	Number	Percent	Number	Percent
<b>Civilian employed population 16 years and over</b>	56,416	56,416	9,467,631	9,467,631
<b>Management, business, science, and arts occupations</b>	16,855	29.90%	3,803,745	40.20%
<b>Service occupations</b>	10,963	19.40%	1,905,936	20.10%
<b>Sales and office occupations</b>	12,438	22.00%	2,194,508	23.20%
<b>Natural resources, construction, and maintenance occupations</b>	5,527	9.80%	682,459	7.20%
<b>Production, transportation, and material moving occupations</b>	10,633	18.80%	880,983	9.30%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

Private wage and salary workers made up the majority of the workforce with 42,429 employees (75.2%), followed by government workers (17.0%). At the state level, there was a slightly higher percentage of the population that were private wage and salary workers, and a slightly lower percentage of government workers.

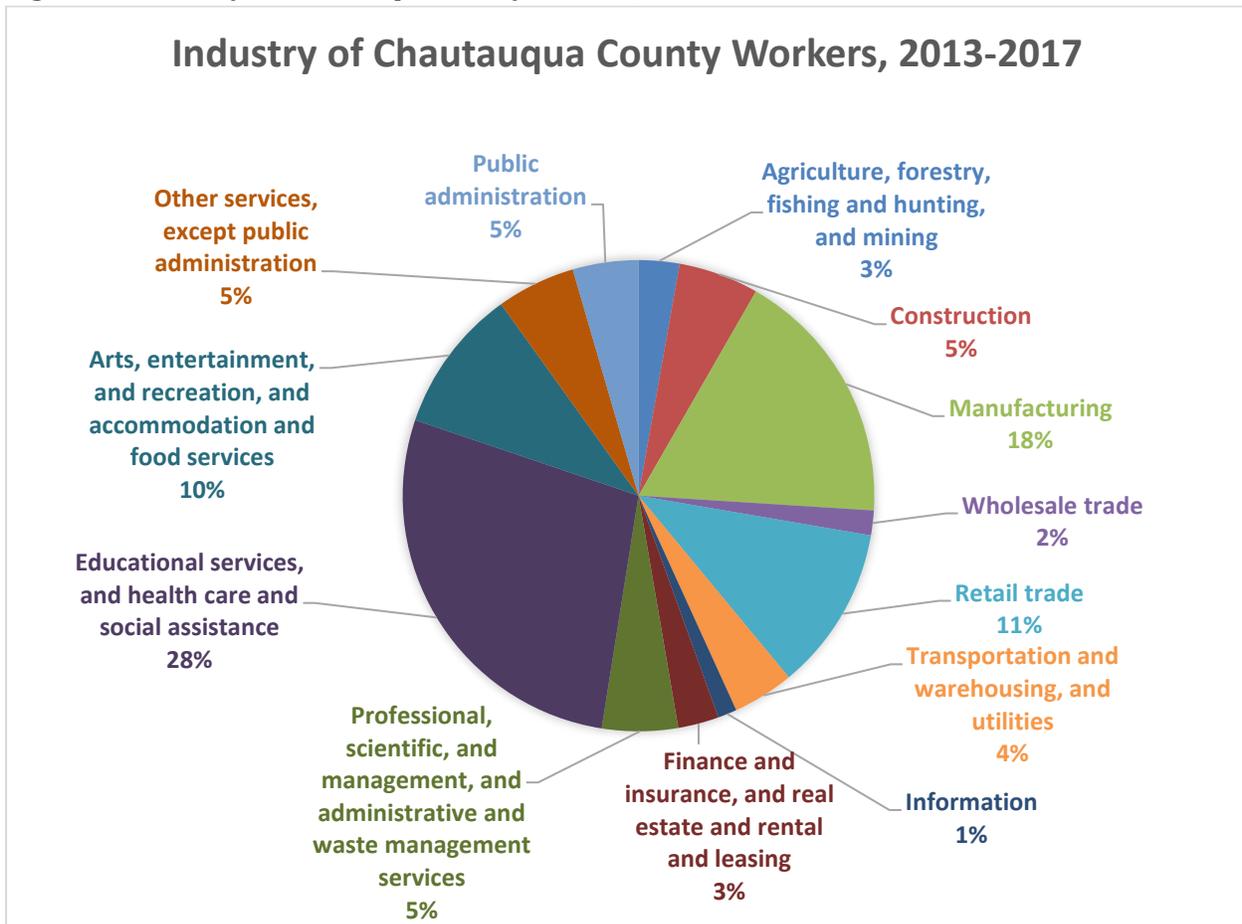
Table 14. Class of worker for Chautauqua County and New York State, 2013-2017

	Chautauqua County		New York	
	Number	Percent	Number	Percent
<b>Civilian employed population 16 years and over</b>	56,416	56,416	9,467,631	9,467,631
<b>Private wage and salary workers</b>	42,429	75.20%	7,453,044	78.70%
<b>Government workers</b>	9,568	17.00%	1,448,673	15.30%
<b>Self-employed in own not incorporated business workers</b>	4,246	7.50%	552,037	5.80%
<b>Unpaid family workers</b>	173	0.30%	13,877	0.10%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

The educational services, and health care and social assistance industry employs the most residents of all industries in the County with 27.7%, similar to the state percentage of 27.5%. Manufacturing (17.7%), retail trade (11.3%), and arts, entertainment, and recreation, and accommodation and food services (9.9%) industries were the closest followers according to the 2013-2017 American Community Survey. The manufacturing (17.7%) and agricultural, forestry, fishing, hunting, and mining (2.8%) industries employ a greater proportion of the population in the County than in the state (6.2% and 0.6%, respectively). While only a small fraction of the County works in the agricultural industry, agriculture continues to contribute to the County's economy. The professional, scientific, and management, and administrative and waste management services industry employs a much lower proportion of county residents (5.2%) than state residents (11.8%). Figure 14 shows the distribution of industries for Chautauqua County workers.

Figure 14. Industry of Chautauqua County workers, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

With \$5.1 billion in manufacturer's shipments in 2012, the manufacturing sector provides the base for the County's economy (US Census Quickfacts). Retail sales at \$1.4 billion and merchant wholesaler sales at \$693 million are also major contributors to the local economy. Farming continues to contribute to the County's economy, as well as the associated food processing industry. With 1,228 farms (USDA Census of Agriculture 2017), approximately 16,953 acres of grapes, and eleven wineries, Chautauqua County has more farms and produces more grapes than any other county in New York State. In fact, Chautauqua County is the largest grape-producing county in the United States outside of California. Other popular crops grown in the County include hay and corn. Dairy farming is also common.

## Education

For a county of its size and geographic location, Chautauqua is home to an array of high quality and unique educational opportunities. The Chautauqua County Visitor's Bureau branded the County as "The World's Learning Center" in 2010.

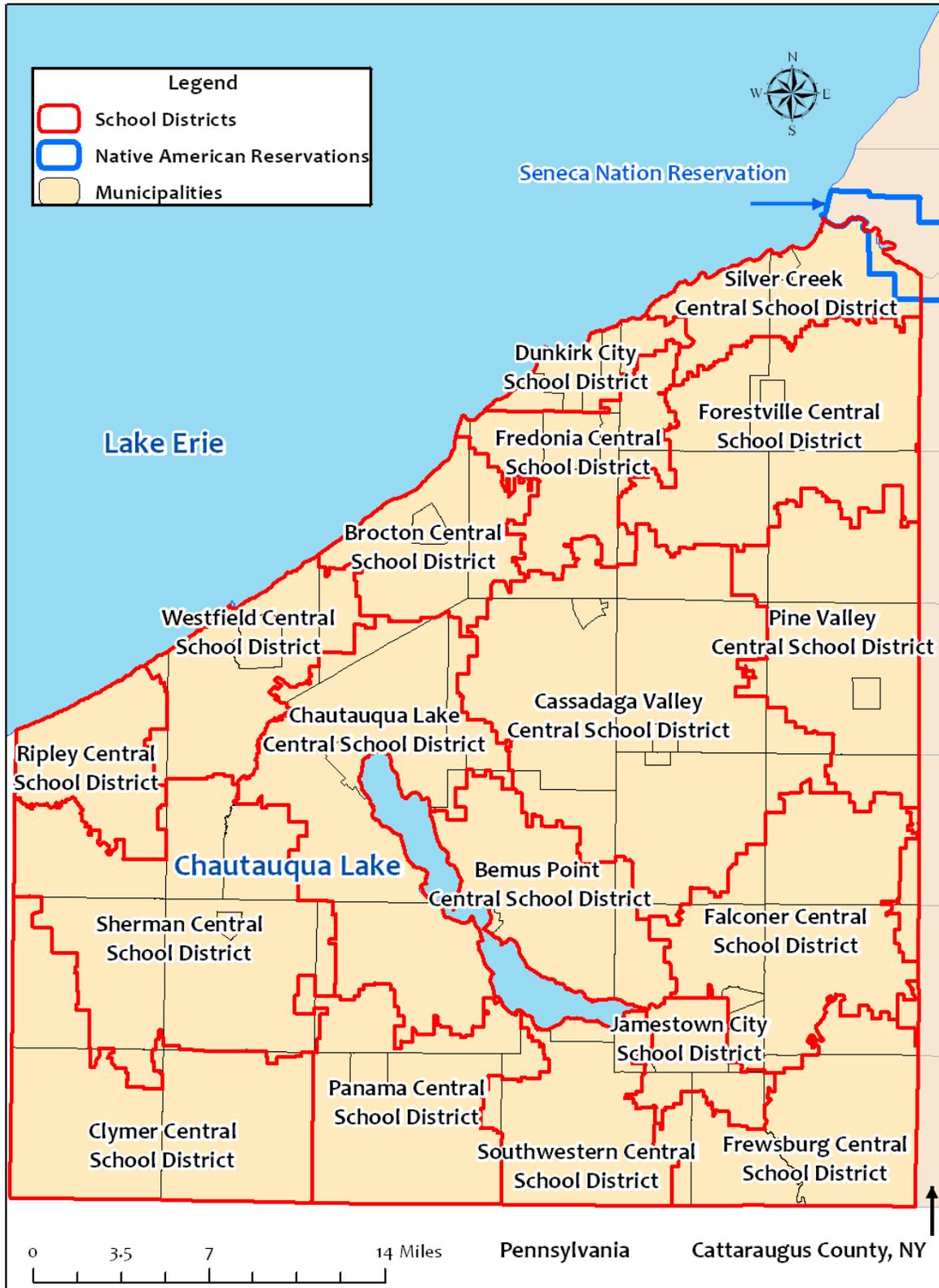
### *Educational Resources*

The County's educational system includes the State University of New York at Fredonia (SUNY Fredonia), Jamestown Business College (JBC), and Jamestown Community College (JCC), the first community college in New York State. JCC was founded in 1950 and has grown to include two campuses and two satellite branches: Dunkirk (Chautauqua County) and Olean (Cattaraugus County). The famous Chautauqua Institution, founded in 1874 and located on Chautauqua Lake, hosts educational and cultural programs each summer. Other educational opportunities exist at Lily Dale Assembly, the world center of the Universal Religion of Modern Spiritualism, and the Roger Tory Peterson Institute, a national center for nature education and teacher enhancement.

While also popular with Chautauqua County residents, each of these educational institutions draws non-native students and tourists into the County seasonally and year-round. During 2013-2017, there were 8,348 housing units designated for seasonal, recreational, or occasional use, according to the US Census Bureau's American Community Survey 5-year estimates (Vacancy Status Table). With an average household size of owner-occupied units being 2.44 in 2013-2017, the seasonal population of Chautauqua County is estimated at 20,370 people. This population flux stimulates the local economy and can affect health status by facilitating the importation and exportation of infectious diseases.

Public education is offered by 18 school districts in Chautauqua County. School Districts are displayed in Map 2 below. Additionally, several Catholic and Christian schools offer private education. Enrollment, racial and ethnic, as well as economic diversity in the County's public schools varies greatly from rural to urban areas.

Map 2. Chautauqua County School Districts



Source: Chautauqua County GIS Maps

*School Populations and Risk Indicators*

Table 15 lists the Need/Resource Capacity level, total enrollment, and racial distribution of students in all public school districts in Chautauqua County. The total 2018-2019 public school population for Chautauqua County was 18,032 (elementary, middle, and high schools), a decrease from 19,616 students in the 2011-2012 school year.

Decreases in the school student populations, in addition to the total population, have presented new challenges to our school districts. Schools are more frequently exploring the concepts of regional school programs, sports teams, and complete school mergers.

Table 15. Public school enrollment and racial distribution of students, 2018-2019

School District	Need/Resource Capacity (N/RC) level	Enrollment 2018-2019						
		Total	% White	% Black	% Hispanic	% Multiracial	Asian, Hawaiian, or Pacific Islander%	Amer Indian or Alaska Native %
Bemus Point	Average	679	96%	1%	1.20%	0.60%	1.20%	-
Brocton	High	501	84.20%	0.40%	11.20%	3.60%	-	0.40%
Cassadaga Valley	High	809	94.10%	0.70%	2.80%	1.90%	0.40%	-
Chautauqua Lake	Average	769	94.90%	-	2.20%	2.30%	-	0.30%
Clymer	Average	431	91.90%	0.90%	2.60%	3.90%	0.70%	-
Dunkirk	High	2,020	35.90%	5.20%	54.50%	3.50%	-	0.50%
Falconer	Average	1,120	93.80%	1.50%	3.50%	0.30%	0.50%	-
Forestville	Average	440	87.30%	1.40%	5.70%	4.80%	0.20%	0.70%
Fredonia	Average	1,479	80.30%	0.80%	14.40%	3.20%	1.10%	-
Frewsburg	Average	767	94.50%	0.70%	2%	1.40%	0.80%	0.70%
Jamestown	High	4,572	64.30%	3.90%	20.80%	10.40%	0.30%	-
Panama	Average	456	95.20%	0.40%	2.90%	1.30%	-	-
Pine Valley	High	507	92.70%	0.20%	3.70%	2.60%	-	0.80%
Ripley	High	124	96.80%	-	2.40%	-	-	0.80%
Sherman	High	394	95.90%	1%	1.80%	-	0.80%	0.50%
Silver Creek	High	1,008	71.80%	0.40%	8.10%	6.60%	0.40%	12.60%
Southwestern	Average	1,303	88.10%	0.40%	4.10%	4.60%	2.50%	-
Westfield	High	653	90.80%	0.90%	6.70%	0.20%	0.90%	0.50%

Source: NYS Education Department School Report Cards 2018-2019; NYSED Need/Resource Capacity Index 2009-2010

Compared to prior academic years, schools in Chautauqua County are becoming more racially and ethnically diverse. Dunkirk, Jamestown, and Silver Creek school districts were the most racially and ethnically diverse during the 2018-2019 school year. Of Dunkirk students, 54.5% were Hispanic and 5.2% were black or African American. Of Jamestown students, 20.8% were

Hispanic and 3.9% identified as black or African American. Silver Creek students were 12.6% Native American or Alaskan Native, due to its close proximity to the Cattaraugus Indian Reservation in Irving, NY. Schools educating more Hispanic/Latino students are presented with more language barriers that can prevent students from learning and require additional school resources.

The New York State Education Department’s need/resource capacity index indicates that all districts qualified as either "average need" or "high need" based on the Need/Resource Capacity (N/RC) index. The N/RC index is a measure of a school district's ability to meet the needs of its students with local resources. It is a ratio of the estimated poverty percentage to the combined wealth ratio of residents within the school district. That none of the districts were listed as "low" need is a reflection of the region's relatively poor economic state.

Table 16 displays the number and percentage of students in each type of school for Chautauqua County and New York State residents aged three years and older who are enrolled in school.

Table 16. School enrollment for population ages 3 and older, 2013-2017

	Chautauqua County		New York State	
	Total	Percent	Total	Percent
<b>Population 3 years and over Enrolled in school</b>	30,183	(X)	4,869,327	(X)
<b>Enrolled in nursery school, preschool</b>	1,495	5.0%	301,038	6.2%
<b>Enrolled in kindergarten</b>	1,259	4.2%	234,104	4.8%
<b>Enrolled in grade 1 to grade 4</b>	5,484	18.2%	918,175	18.9%
<b>Enrolled in grade 5 to grade 8</b>	6,468	21.4%	925,198	19.0%
<b>Enrolled in grade 9 to grade 12</b>	6,492	21.5%	991,029	20.4%
<b>Enrolled in college, undergraduate years</b>	8,257	27.4%	1,188,151	24.4%
<b>Graduate or professional school</b>	728	2.4%	311,632	6.4%

Source: U.S. Census Bureau, 2013-2017 American Community Survey

The greatest proportion of Chautauqua County and New York State residents enrolled in school are elementary students in grades Kindergarten-12 (65.3%). New York State has a greater proportion of students in nursery or preschool and college or graduate school than Chautauqua County.

*Post-secondary Educational Opportunities*

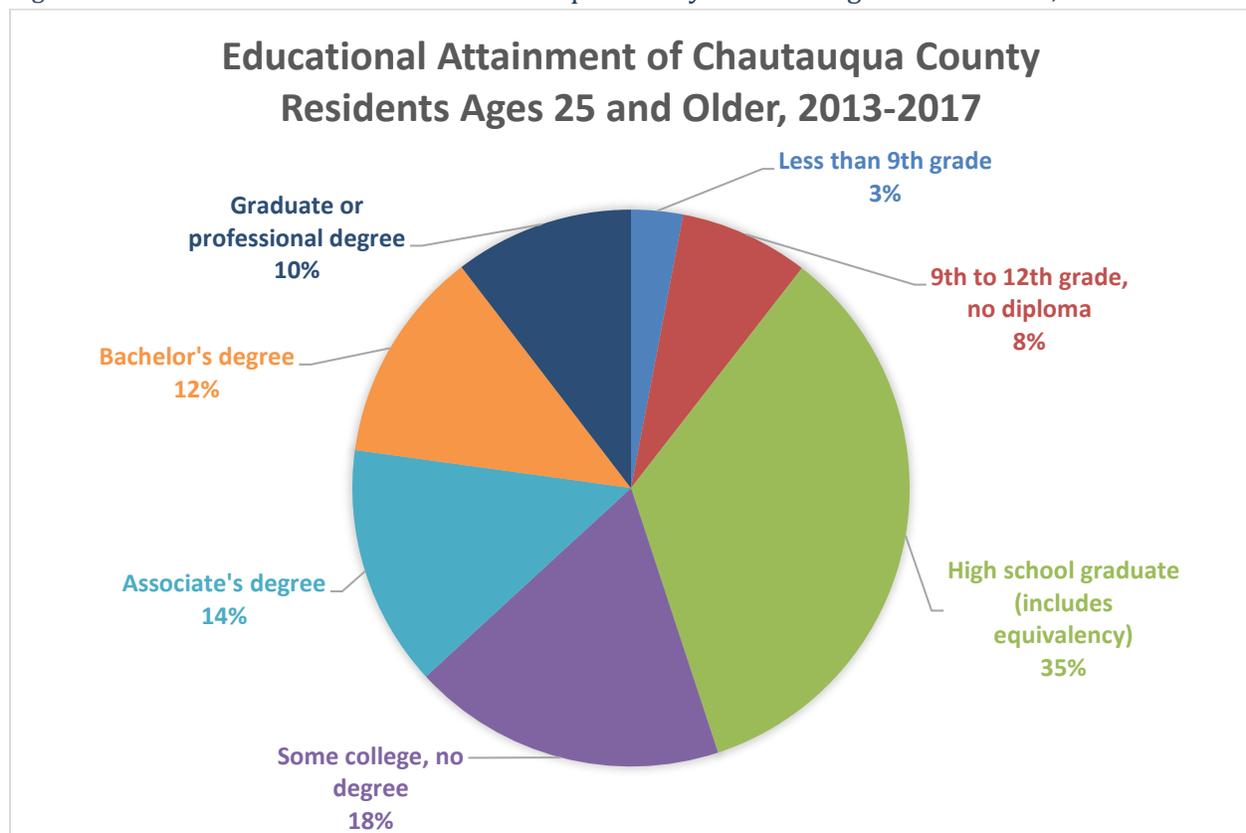
Post-secondary educational opportunities in Chautauqua County include three State University of New York (SUNY) colleges. SUNY Fredonia is a liberal arts university offering Bachelor and Graduate degrees in the northern part of Chautauqua County that served 4,226 undergraduate and 237 graduate students in Fall 2019. About half of students enrolled at the university are from Western New York. Two satellite offices for SUNY Empire State College are located in

Chautauqua County- one in Lakewood, and the other in Dunkirk. Empire State is an arts and sciences college offering Associate, Bachelor, and Graduate degrees on-line and on-site at thirty-four locations throughout the state. SUNY Jamestown Community College is a two-year college with two campuses in Chautauqua County (Dunkirk and Jamestown), and one in Cattaraugus County (Olean). During the 2019-2020 academic year, there were 2,484 students enrolled in JCC programs at the three campuses. Jamestown Business College is a private 4-year institution that offers Associate, Bachelor, and Certificate programs that serves about 300 students.

### Academic Achievement

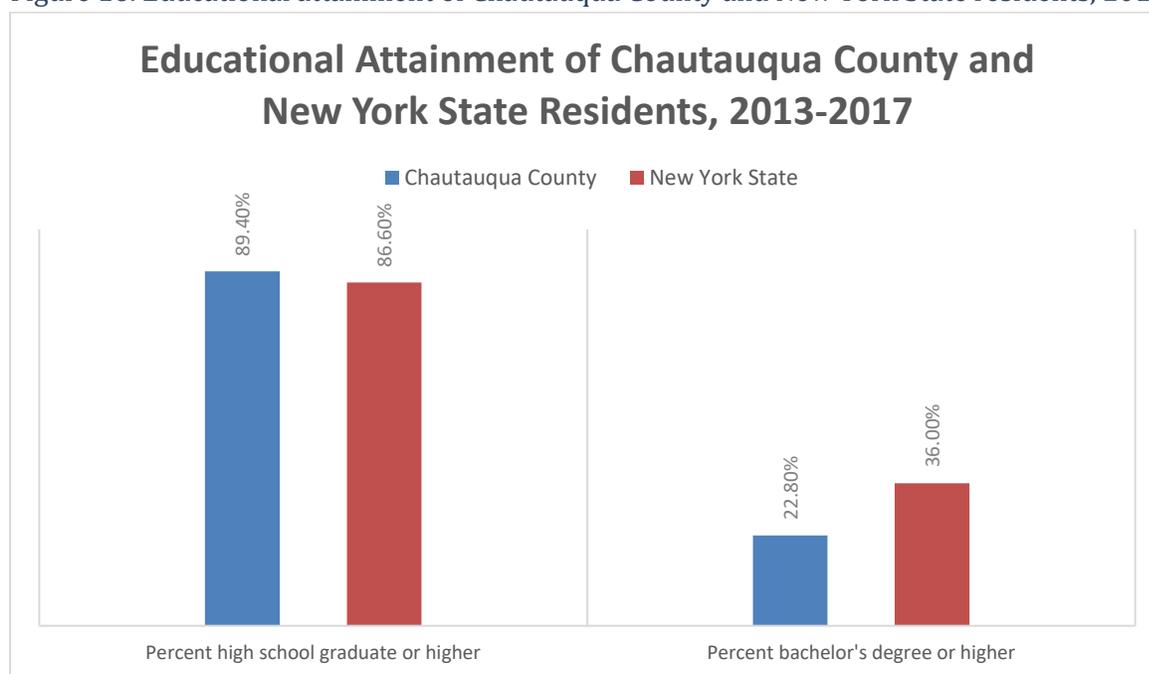
Highest level of educational attainment is used as a measure of a person or area's socioeconomic status, which can greatly influence health outcomes. Figure 15 presents the distribution of educational attainment of Chautauqua County residents ages 25 and older. Figure 16 compares and provides educational attainment data for Chautauqua County and New York State residents.

Figure 15. Educational attainment of Chautauqua County residents ages 25 and older, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

Figure 16. Educational attainment of Chautauqua County and New York State residents, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

The majority of County residents claim that high school or GED is their highest level of educational attainment (34.4%). Chautauqua County has proportionately fewer residents over the age of 25 with less than a 9<sup>th</sup> grade education than New York State. The percentage of residents who have a bachelor's or graduate or professional degree is much higher for New York State (20.2%, 15.8%) than Chautauqua County (12.4%, 10.4%). As seen in Figure 16, the percent of residents over 25 who completed high school in Chautauqua County is comparable to that of New York State. However, New York State noticeably exceeds Chautauqua County in the proportion of residents that hold a bachelor's degree or higher.

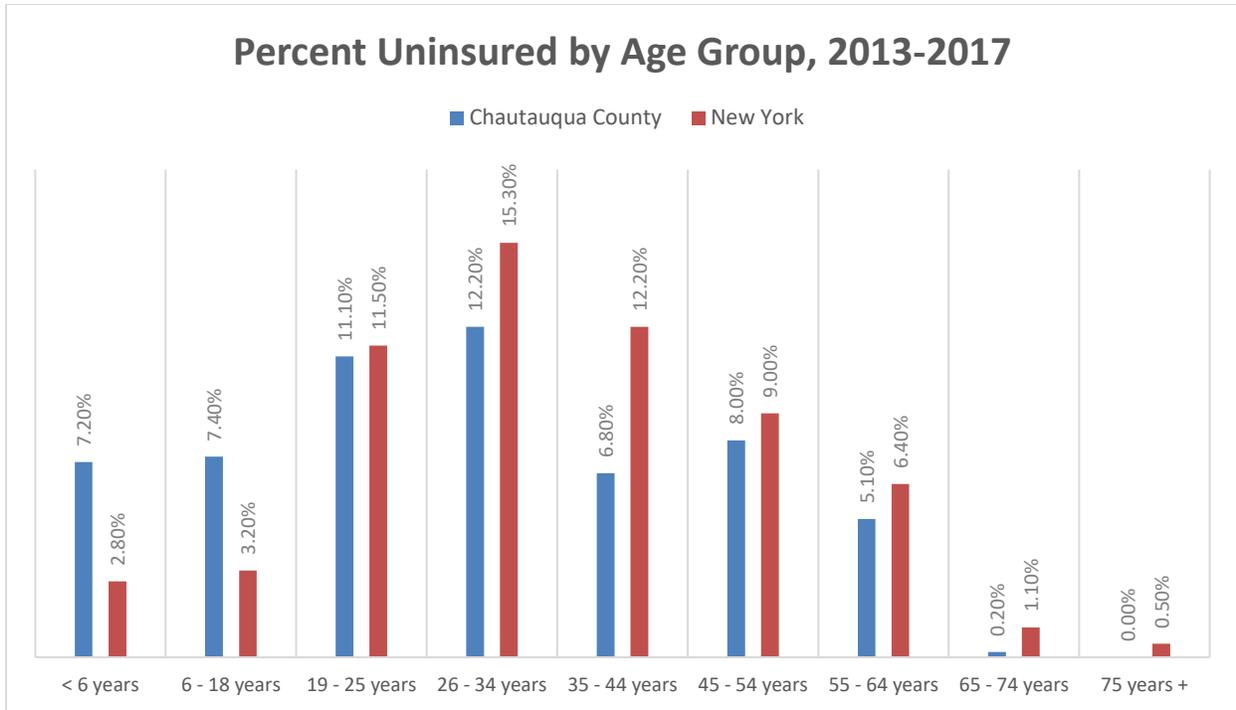
### Health Insurance and Access to Care

The United States Census Bureau American Community Survey five-year estimates for 2013-2017 indicated that 93.4% of civilian non-institutionalized residents of Chautauqua County had health insurance coverage, slightly higher than the New York State rate of 92.4%.

In both Chautauqua County and New York State, seniors ages 65 and up were the least likely to be uninsured. Persons ages 19-34 were the most likely to be uninsured in Chautauqua County. Children in Chautauqua County under the age of 18 were more likely to be lack health insurance coverage than children in New York State as a whole. From 2013 to 2017, 7.2% of children less than six years and 7.4% of children ages six to eighteen years did not have insurance, compared to 2.8% and 3.2% at the state level. Chautauqua County experienced more

favorable insurance rates for the 26-34 and 35-44 age groups than New York State; these figures are presented in Figure 17.

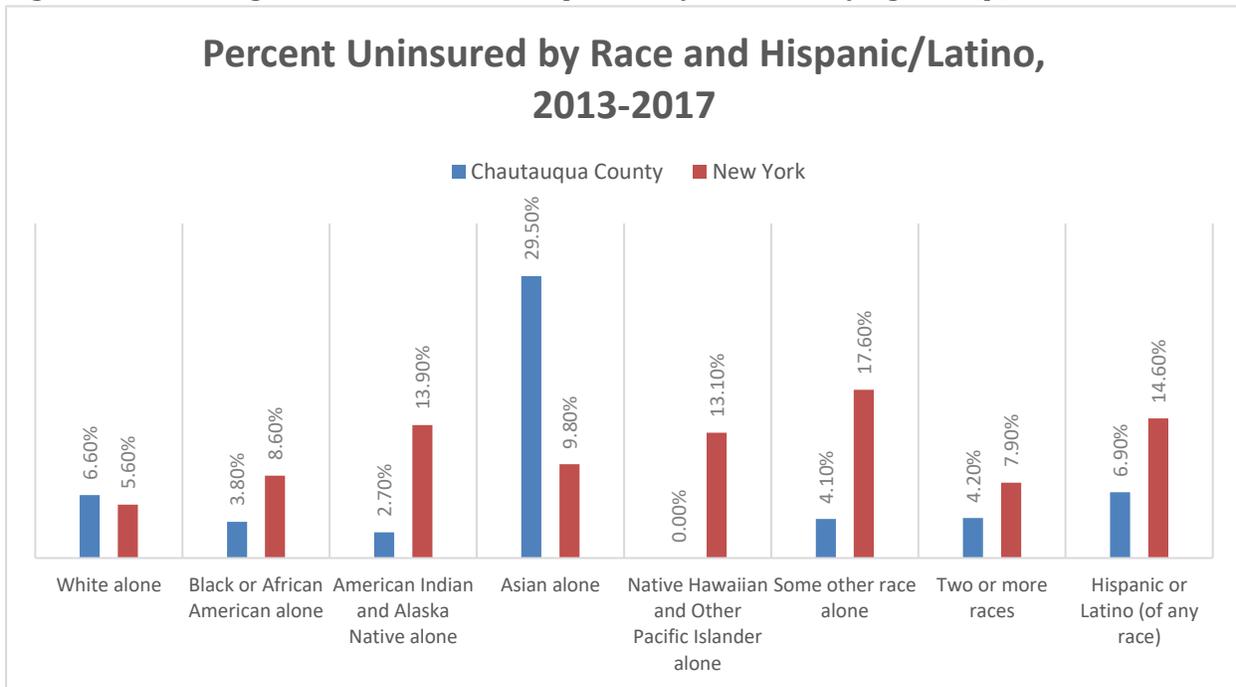
Figure 17. Percentage of Uninsured Chautauqua County Residents by Age Group, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

The racial group that was least likely to have health insurance coverage in Chautauqua County in 2013-2017 were Asians, with 29.5% of residents being uninsured- three times greater than the state rate of 9.8%. For all other racial and ethnic groups, Chautauqua County experienced a greater rate of insured individuals with the exception of those classified as white alone, who had an uninsured rate of 6.6% compared to 5.6% in New York State.

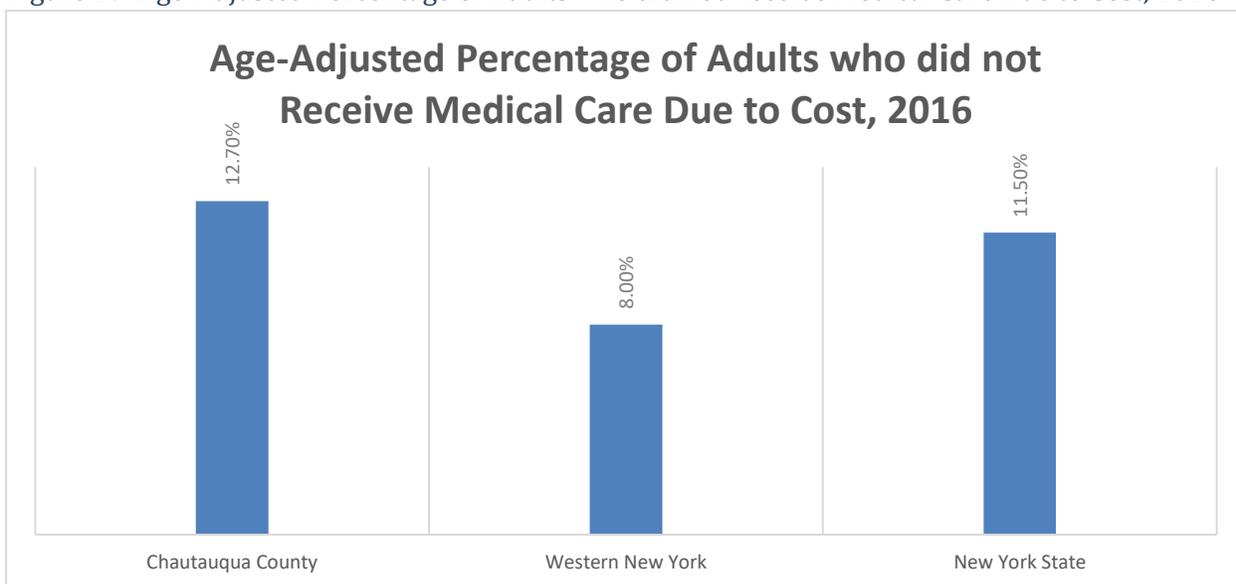
Figure 18. Percentage of Uninsured Chautauqua County Residents by Age Group, 2013-2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey

The New York State eBRFSS indicates that in 2016, 12.7% of Chautauqua County adults self-reported that they did not receive medical care because of cost; this rate exceeds the regional rate of 8.0%, and the NYS rate of 11.5%. During the same period, 86.7% of adults in Chautauqua County reported that they have a regular health care provider, compared to 87.9% in Western New York and 82.6% in New York State.

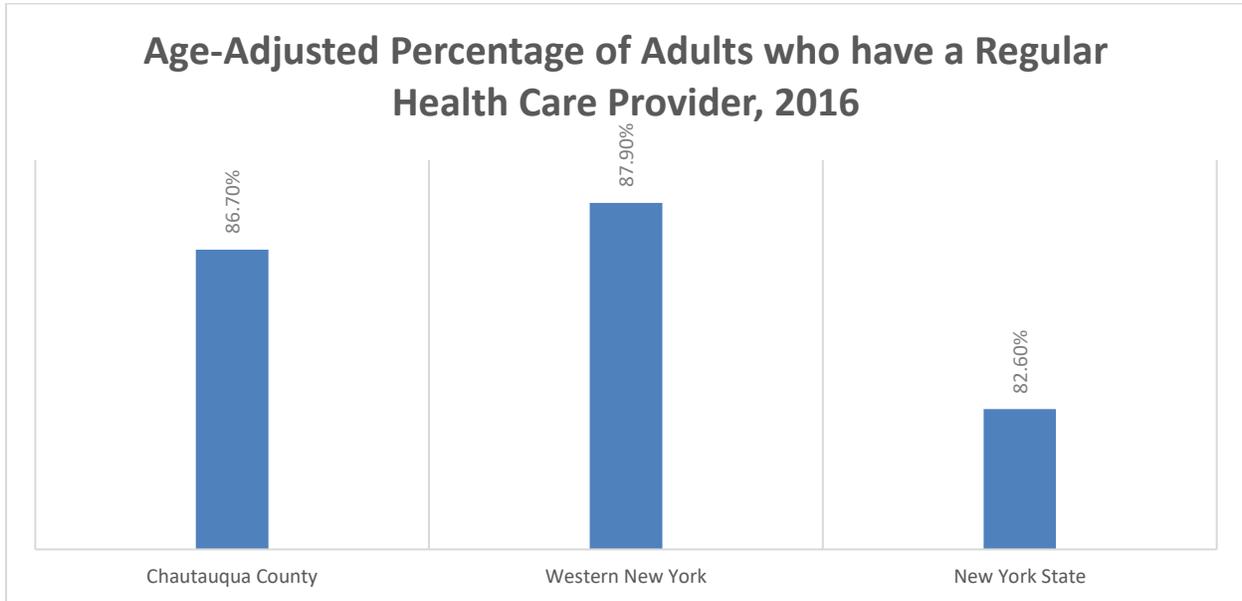
Figure 19. Age-Adjusted Percentage of Adults who did not Receive Medical Care Due to Cost, 2016



Source: NYS eBRFSS, 2016

Chautauqua County adults were more likely to have a regular health care provider (86.7%) than New York State adults (82.6%), but slightly less likely than adults in Western New York (87.9%).

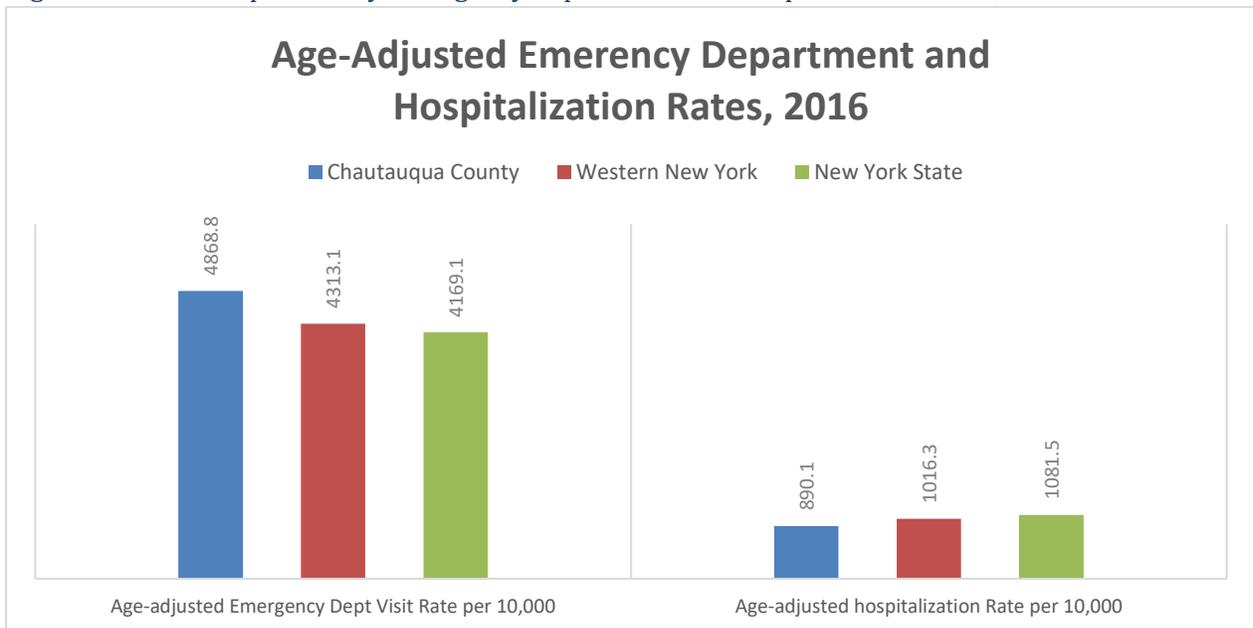
Figure 20. Age-Adjusted Percentage of Adults who have a regular Health Care Provider, 2016



Source: NYS eBRFSS, 2016

Age-adjusted hospitalization rates for Chautauqua County were lower than both Western New York State and New York State in 2016. However, age-adjusted emergency department visit rates were noticeably higher in Chautauqua County than comparison geographies.

Figure 21. Chautauqua County emergency department and hospitalization rates, 2016



Source: NYS Community Health Indicator Reports; SPARCS data 2016

## Health Profile

### Prevent Chronic Diseases

“Chronic diseases such as cancer, diabetes, heart disease, stroke, asthma and arthritis are among the leading causes of death, disability and rising health care costs in New York State (NYS). However, chronic diseases are also among the most preventable. Three modifiable risk behaviors - unhealthy eating, lack of physical activity, and tobacco use - are largely responsible for the incidence, severity and adverse outcomes of chronic disease.”

-New York State Prevention Agenda 2019-2024, Prevent Chronic Diseases Action Plan

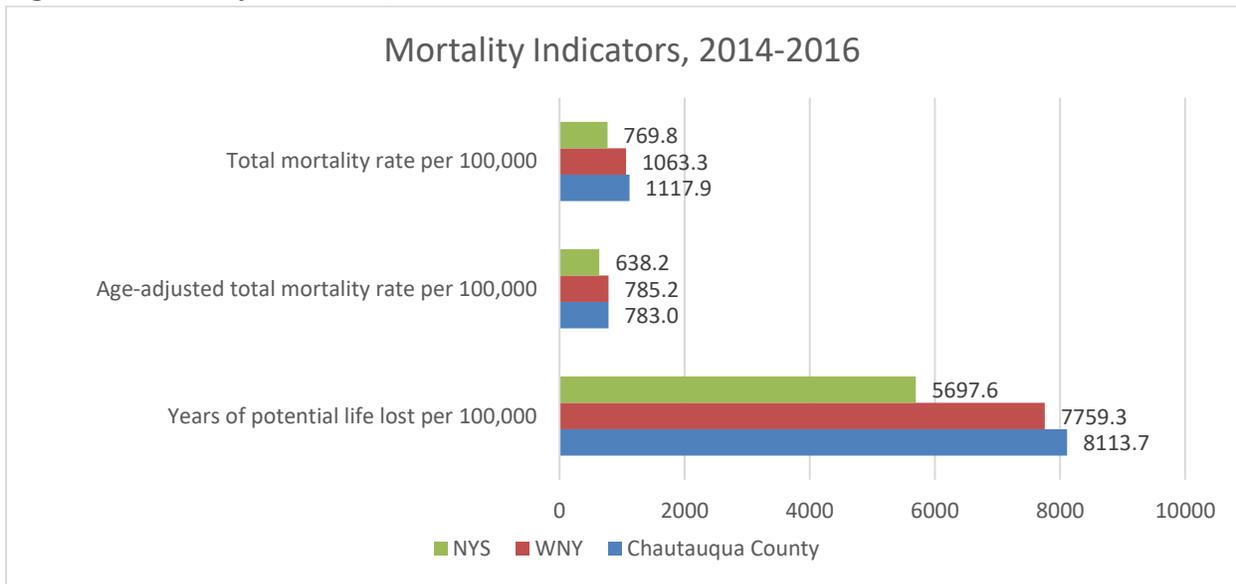
In this assessment narrative, for the purpose of comparison, WNY Counties include Cattaraugus, Allegany, Erie, Wyoming, Genesee, Orleans, Niagara, and Chautauqua.

### Leading Causes of Death

From 2014 to 2016, there were 4,386 deaths to Chautauqua County residents. The resulting total mortality rate was 1,117.9 deaths per 100,000 residents, and when adjusted for age the rate dropped to 783. Even when adjusted for age, the mortality rate in Chautauqua County was significantly higher than New York State and just slightly lower than WNY.

Of all deaths 2014-2016, 40.4% were to residents less than 75 years of age in Chautauqua County, compared to 40.7 in New York State and 39.9 in WNY. Years of potential life lost (prior to age 75) per 100,000 residents totaled 8,113.7.

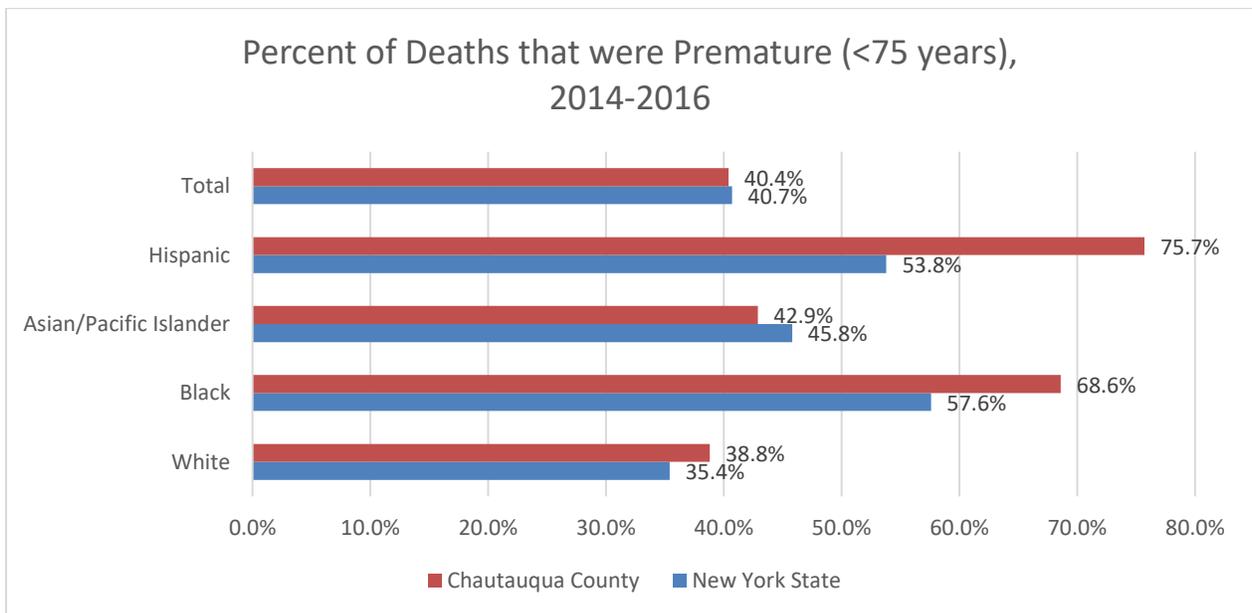
Figure 22. Mortality indicators, 2014-2016



Source: NYS Community Health Indicator Reports, Health Status and Social Determinants of Health Indicators, 2014-2016

From 2014 to 2016, 40.4% of deaths in Chautauqua County were to residents less than 75 years of age. Premature deaths were more common among Hispanics and Black, non-Hispanics. The percentage of premature deaths was nearly twice as great among Hispanics and Black, non-Hispanics over White, non-Hispanics. The discrepancy for these minority groups was not as great for New York State.

Figure 23. Percentage of premature death (death prior to 75 years) by Race/Ethnicity, 2014-2016



Source: NYSDOH Health Indicators by Race/Ethnicity, 2014-2016

The leading causes of death in Chautauqua County, as of 2016, were consistent with those of New York State as a whole. Chronic diseases accounted for the four leading causes of death: heart disease, cancer, chronic lower respiratory diseases, and stroke, respectively. Of the 1,516 deaths in Chautauqua County in 2016, 899 or 59.3% were attributable to these four causes.

Table 17. Leading causes of death, 2016

Geography and Total Deaths	Rank				
	1	2	3	4	5
<b>Chautauqua</b>	Heart Disease	Cancer	Chronic Lower Respiratory Diseases (CLRD)	Stroke	Unintentional Injury
<b>Total: 1,516</b>	417 215 per 100,000	330 176 per 100,000	82 44 per 100,000	70 37 per 100,000	68 51 per 100,000
<b>New York State excluding NYC</b>	Heart Disease	Cancer	Chronic Lower Respiratory Diseases (CLRD)	Unintentional Injury	Stroke
<b>Total: 99,793</b>	26,569 173 per 100,000	22,422 152 per 100,000	5,137 34 per 100,000	5,041 42 per 100,000	4,290 28 per 100,000
<b>New York State</b>	Heart Disease	Cancer	Unintentional Injury	Chronic Lower Respiratory Diseases (CLRD)	Stroke
<b>Total: 153,684</b>	43,869 177 per 100,000	35,170 147 per 100,000	7,334 34 per 100,000	6,808 28 per 100,000	6,197 25 per 100,000

Source: NYS Vital Statistics Leading Causes of Death by County, New York State, 2018

## Chronic Disease Risk Factors

### Overweight and Obesity

The Student Weight Status Category Reporting System (SWSCR) collects weight status category data (underweight, healthy weight, overweight or obese, based on BMI-for-age percentile). The dataset includes separate estimates of the percent of students overweight, obese and overweight or obese for all reportable grades within the county and/or region and by grade groups (elementary and middle/high).

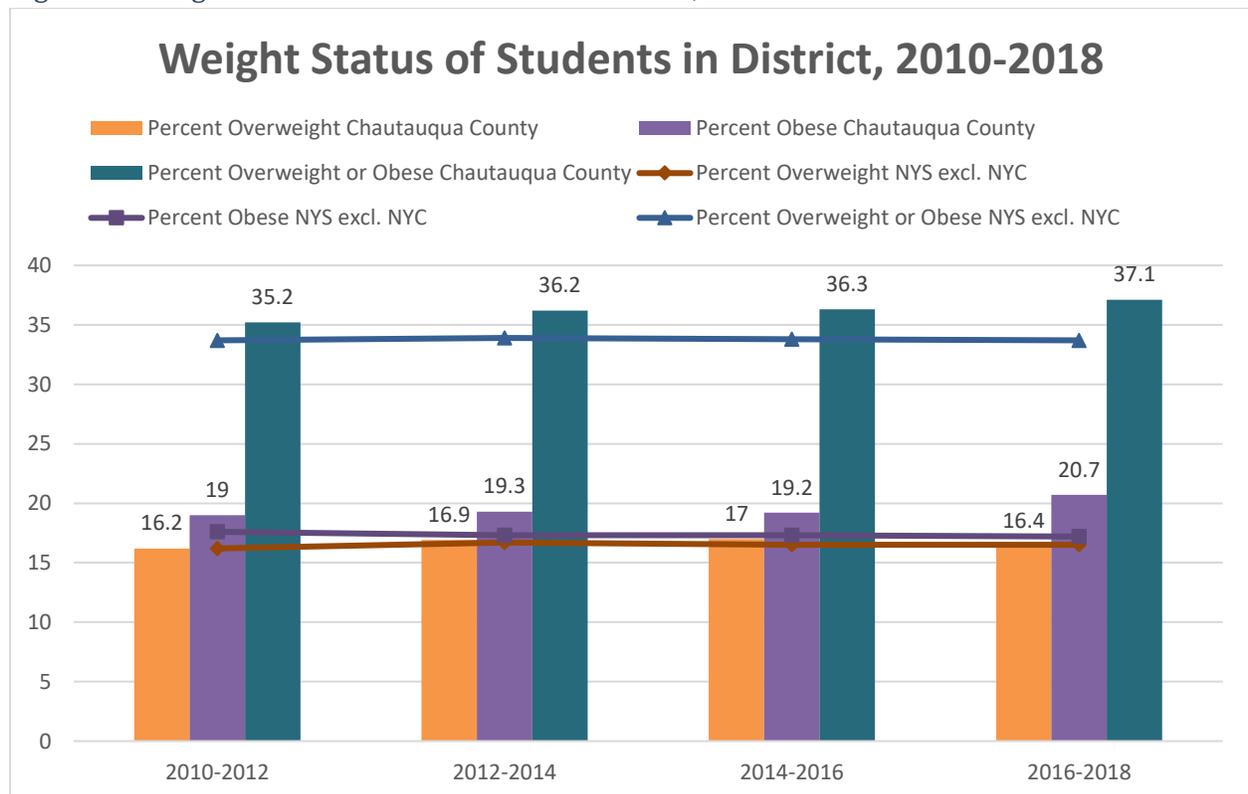
A summary of data for school districts in Chautauqua County compared to NYS are shown below for schools years 2010-2012, 2012-2014, 2014-2016, and 2016-2018. Comparisons are shown for district wide students in Figure 24, elementary students in Figure 25 and middle high school students in Figure 26.

District wide overweight percentage measurements demonstrate a very slight elevation over time for both Chautauqua County and NYS (both 16.2 in 2010-2012). Chautauqua County percentage of overweight, 16.4, in 2016-2018 is comparable to the NYS figure at 16.5.

Chautauqua County district wide obesity percentage measurements were higher than NYS in 2010-2012, 19 and 17.6 respectively. By 2016-2018, Chautauqua County’s rate rose to 20.7, and NYS fell to 17.2.

Chautauqua County district wide overweight or obese level measurements were also higher than NYS in 2010-2012, 35.2 and 33.7 respectively. By 2016-2018, Chautauqua County’s rate rose to 37.1, and the NYS rate remained the same (33.7).

Figure 24. Weight Status of Students in School Districts, 2010-2018



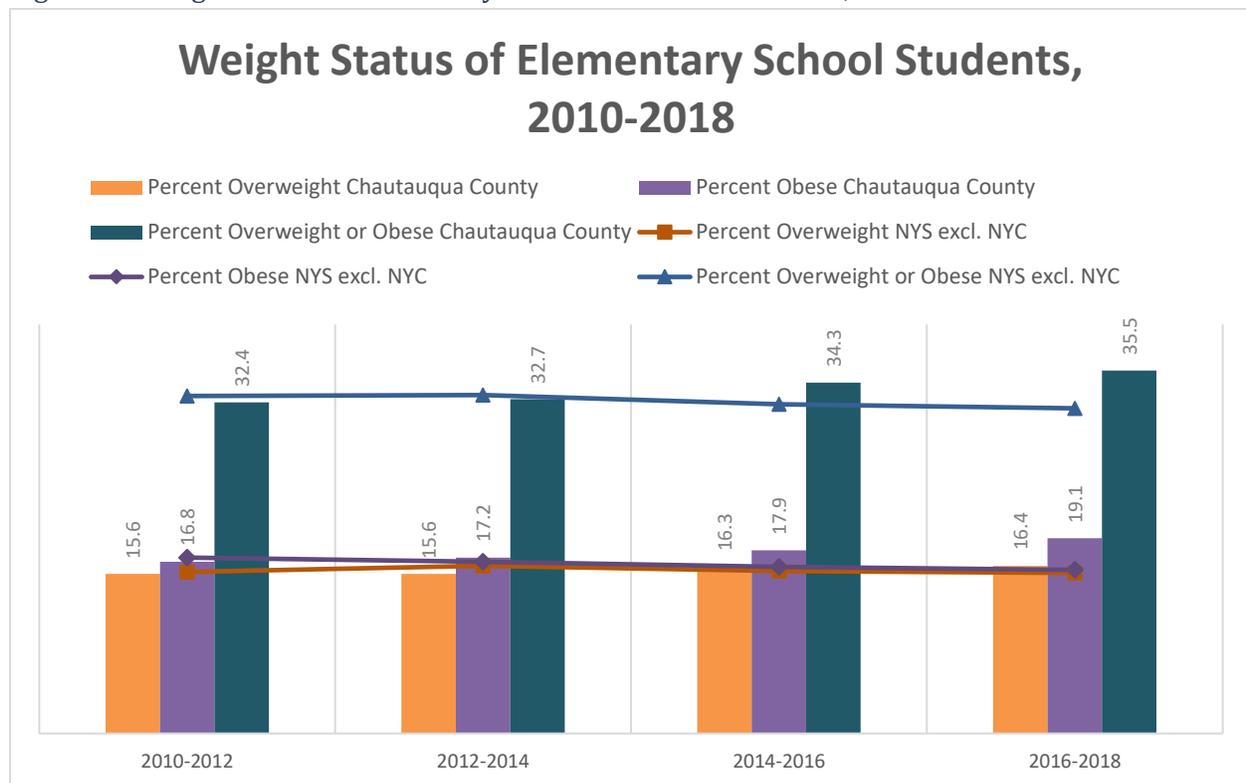
Source: Student Weight Status Category Reporting System, 2010-2018

Elementary overweight percentage measurements demonstrate an increase over time for Chautauqua County (15.6 in 2010-2012 to 16.4 in 2016-2018). NYS percentage of overweight remained steady over the same time frame (15.8 to 15.7)

Chautauqua County elementary obesity percentage measurements were lower than NYS in 2010-2012, 16.8 and 17.2 respectively. By 2016-2018, Chautauqua County's rate rose to 19.1, and NYS fell to 16.

Chautauqua County elementary overweight or obese level measurements were also lower than NYS in 2010-2012, 32.4 and 33 respectively. By 2016-2018, Chautauqua County's rate rose to 35.5, and the NYS rate dropped (31.8).

Figure 25. Weight Status of Elementary Students in School Districts, 2010-2018



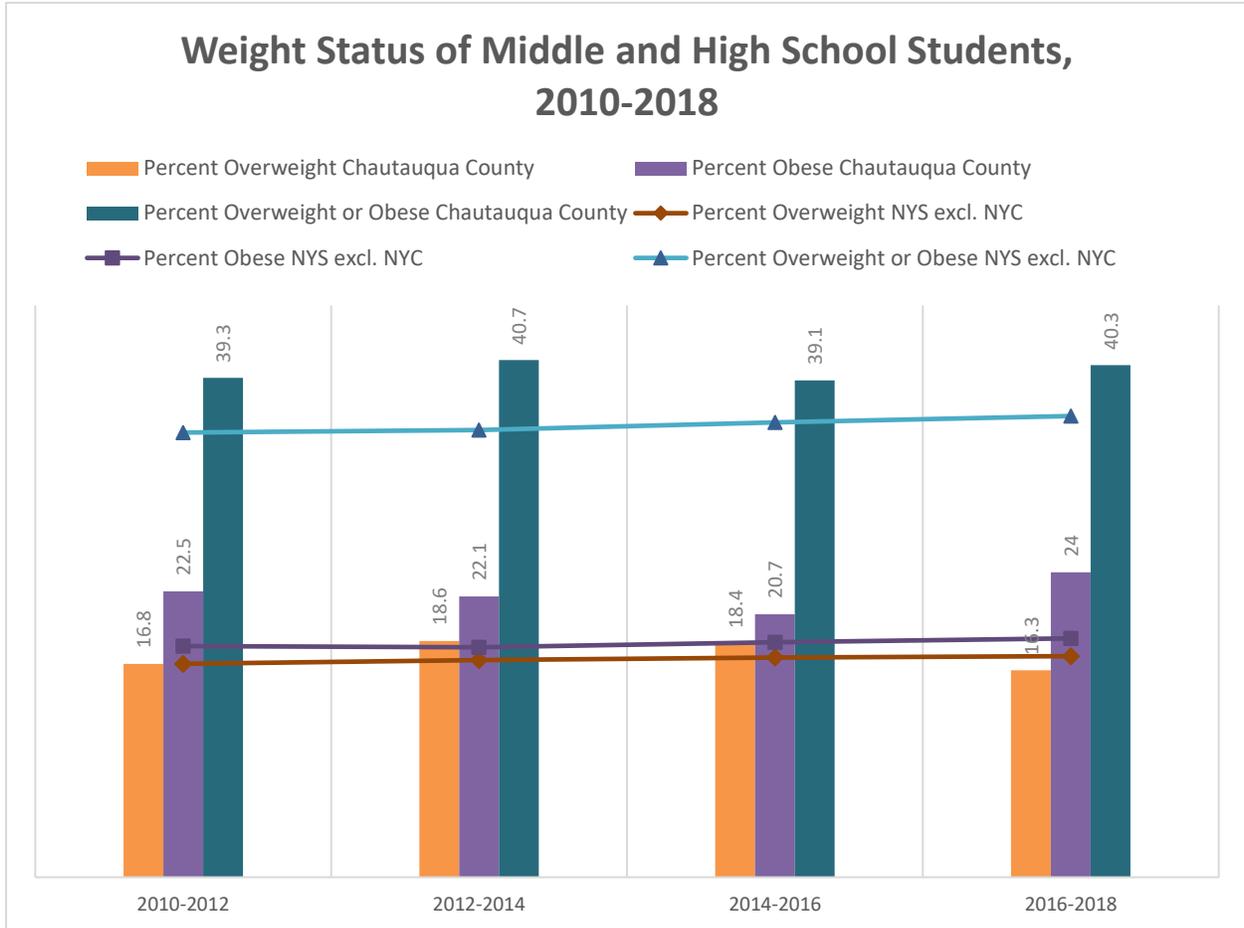
Source: Student Weight Status Category Reporting System, 2010-2018

Middle/high school overweight percentage measurements demonstrate a decrease over time for Chautauqua County (16.8 in 2010-2012 to 16.3 in 2016-2018). NYS percentage of overweight increased over the same time frame (16.8 to 17.4).

Chautauqua County middle/high school obesity percentage measurements were higher than NYS in 2010-2012, 22.5 and 18.2 respectively. By 2016-2018, Chautauqua County's rate rose to 24, and NYS rose to 18.8.

Chautauqua County middle/high school overweight or obese level measurements were also higher than NYS in 2010-2012, 39.3 and 35 respectively. By 2016-2018, Chautauqua County's rate rose to 40.3, and the NYS rate rose to 36.3.

Figure 26. Weight Status of Middle and High School Students in School Districts, 2010-2018

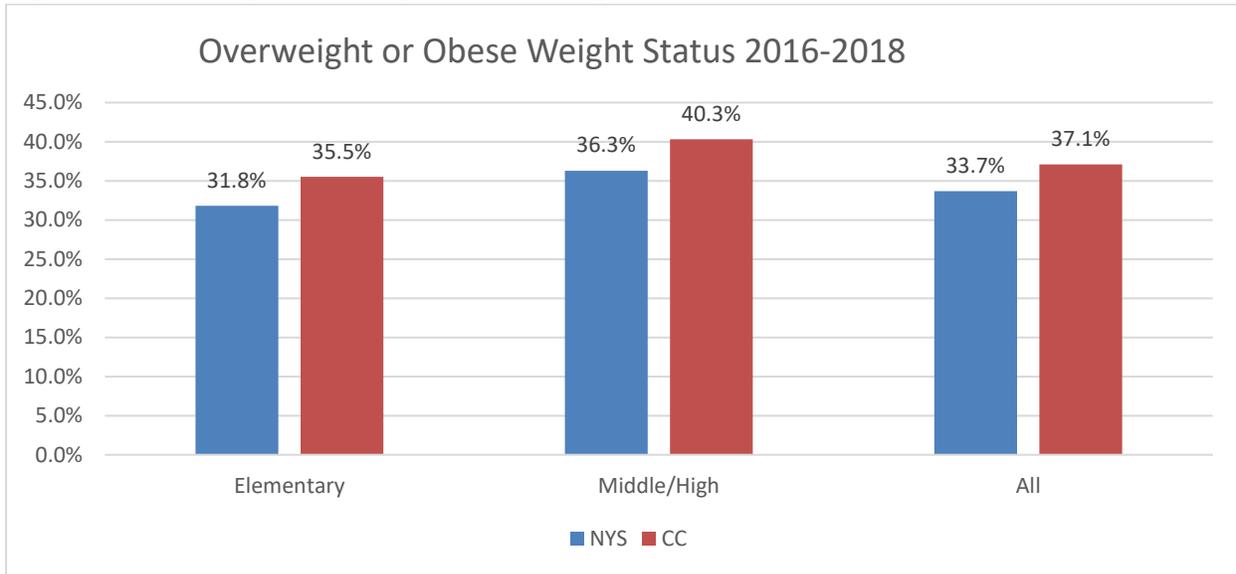


Source: Student Weight Status Category Reporting System, 2010-2018

Among all students measured in Chautauqua County, 2016-2018, 37.1% were classified as overweight or obese. The rate of overweight or obese was higher than the state comparison rate of 33.7%.

The combined total for overweight and obesity was greater among middle and high school students (40.3%) in Chautauqua County than elementary students (35.5%). The risk of unhealthy weight status increased with age during the specified time period.

Figure 27. Overweight or obesity indicators for public school students, 2016-2018



Source: Student Weight Status Category Reporting System for school years 2016-2018

Self-reported adult weight statuses, along with related behaviors, are provided by the New York State Expanded Behavioral Risk Factor Surveillance System. According to the 2016 Expanded Behavioral Risk Factor Surveillance System (eBRFSS), adult obesity and overweight are currently the second leading cause of preventable death in the United States and may soon overtake tobacco as the leading preventable cause of death.

Chautauqua County, with an adult obesity rate of 29.8%, has the second lowest rate of adult obesity in the eight counties of Western New York (WNY), but is still higher than the WNY rate of 28.6% and the NYS rate of 25.5%.

Map 3. Age-Adjusted Rate of Adults who are Obese, 2016

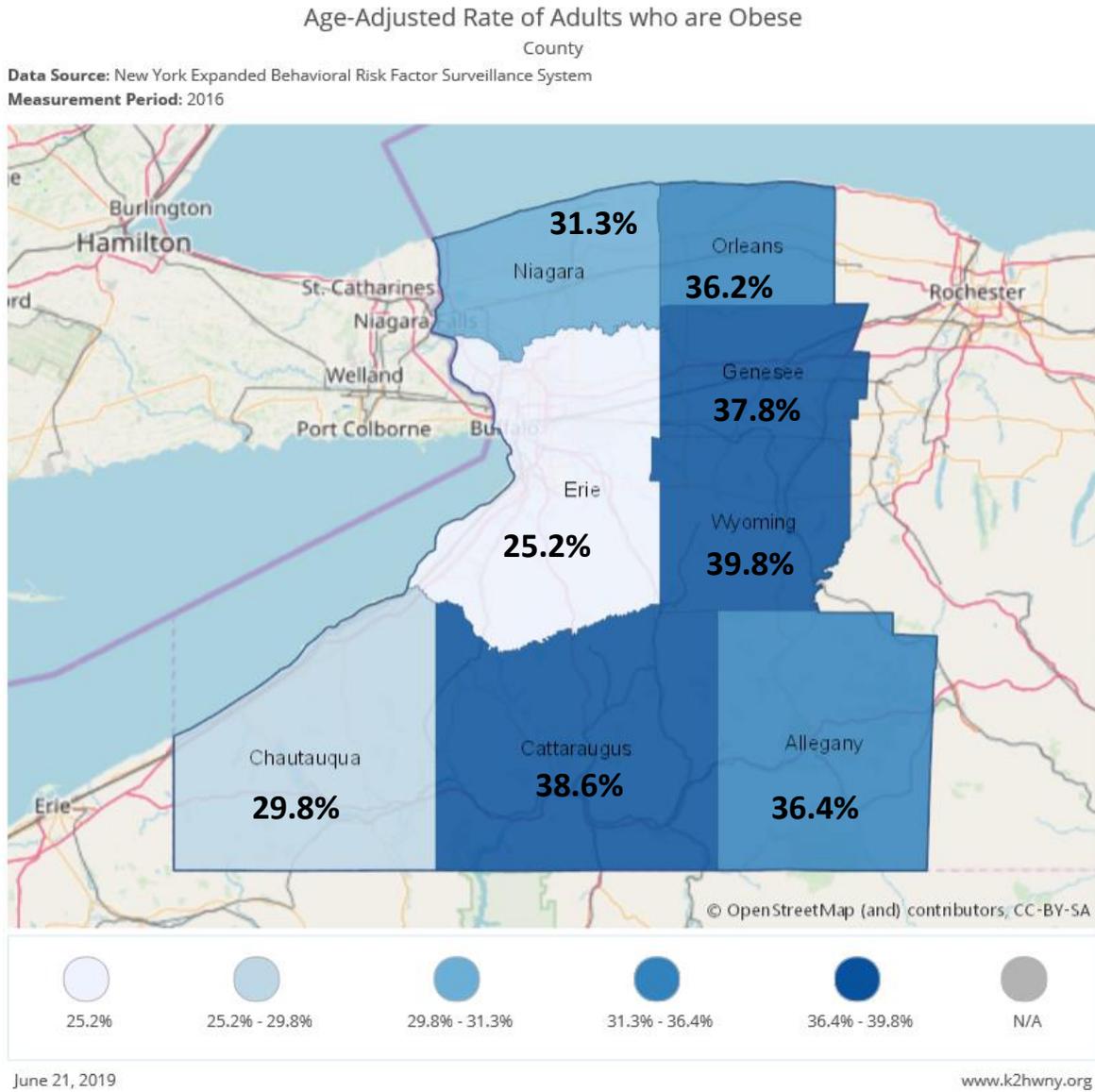
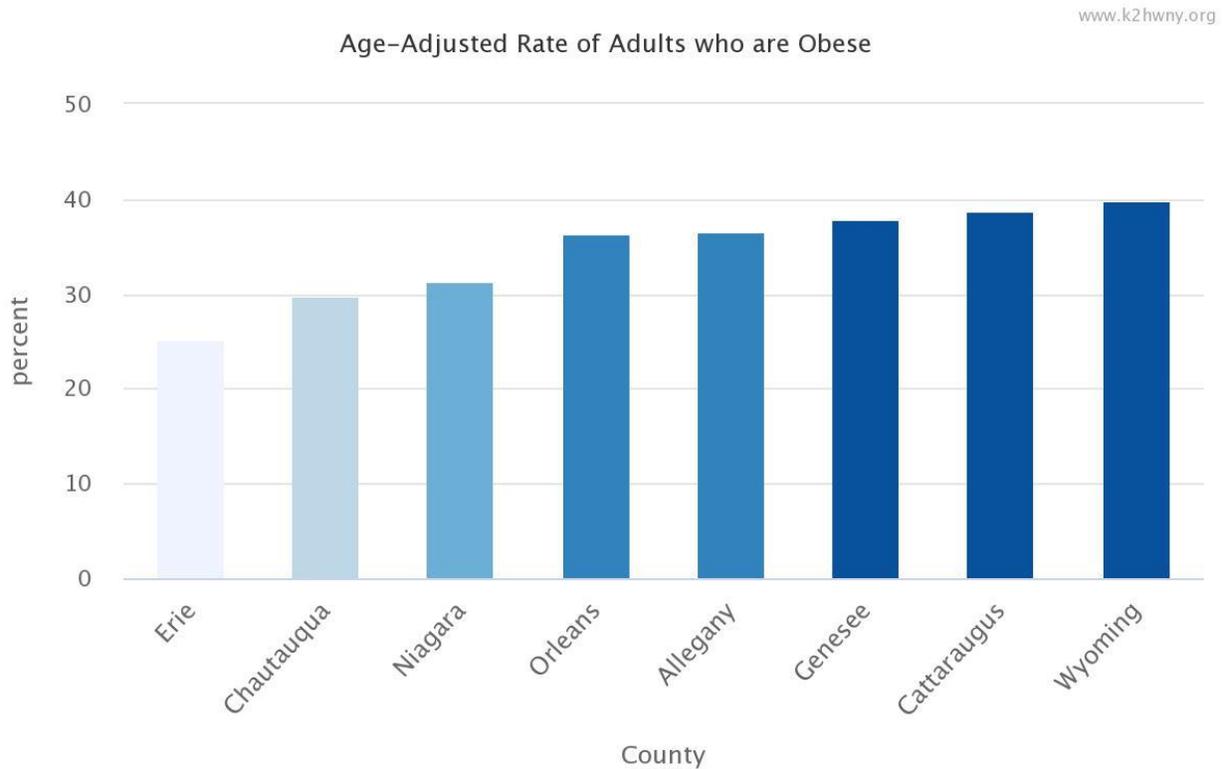


Figure 28. Age-Adjusted Rate of Adults who are Obese, 2016



Source: New York Expanded Behavioral Risk Factor Surveillance System (2016)

Chautauqua County’s adult overweight or obesity rate, at 63.9%, is the lowest of the WNY counties, WNY as a whole, and the US rate. However, our rate remains higher than the NYS rate of 60.5%. Chautauqua County has proportionately more people at a healthy weight than WNY adults as a whole. However, because about one-third of adults are obese and one-third are overweight, weight status is still a concern affecting the majority of adults in Chautauqua County.

Map 4. Age-Adjusted Rate of Adults who are Overweight or Obese, 2016

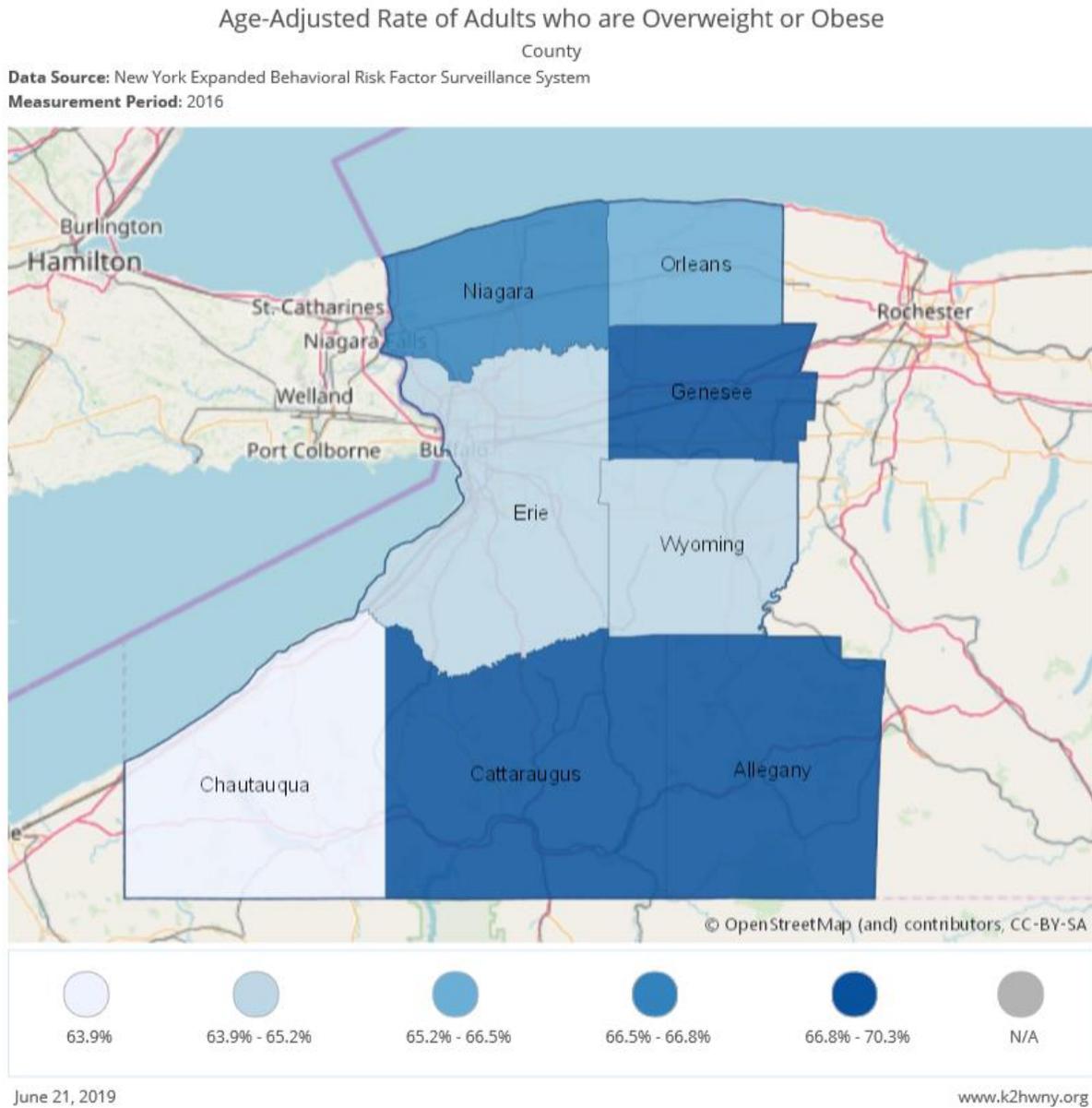


Figure 29. Age-adjusted adult obesity or overweight, 2016

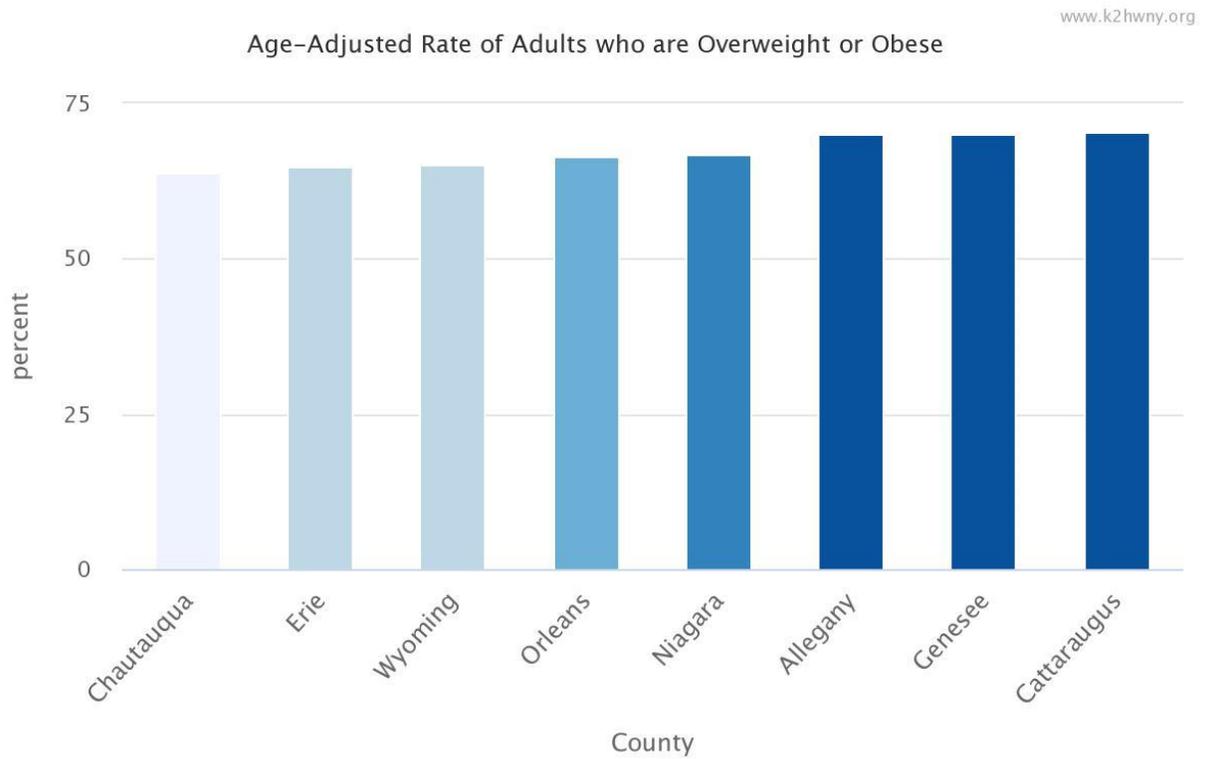
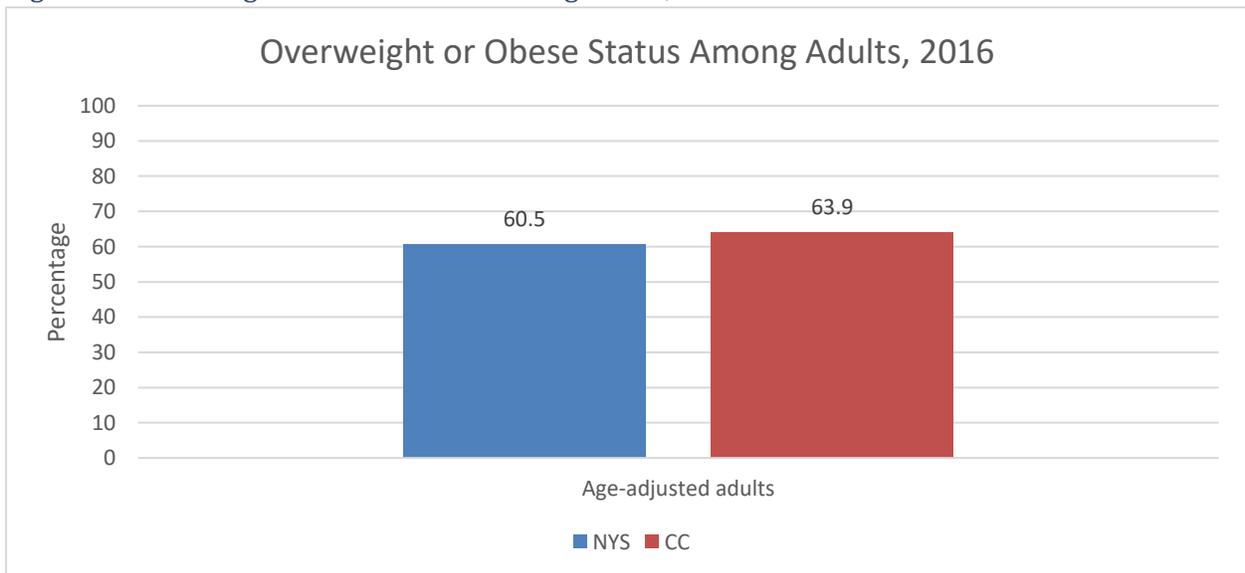


Figure 30. Overweight or Obese Status Among Adults, 2016



Source: NYS Expanded Behavioral Risk Factor Surveillance System, data as of January 2019

Despite the fact that Chautauqua County has a lower rate of adult overweight or obesity (63.9%) than Western NY as a whole (65.9%) and the US as a whole (65.2%), the percentage has increased slightly over time, from 61.6% in 2009.

In 2009, the age-adjusted rate of adults who are obese in Chautauqua County was 27.4%; the percentage increased to 32.1 in 2014, but is trending downward at 29.8% in 2016. A methodology change in 2014 also influences these figures, and limits their ability for comparison.

Nationally and statewide, overweight and obesity are increasing. The obesity rate for Chautauqua County adults has decreased, and the overweight or obese figures have increased. While the overweight/obese figures are increasing- they are doing so at a slower rate than the rest of the state.

Figure 31. Age-Adjusted Rate of Adults who are Obese

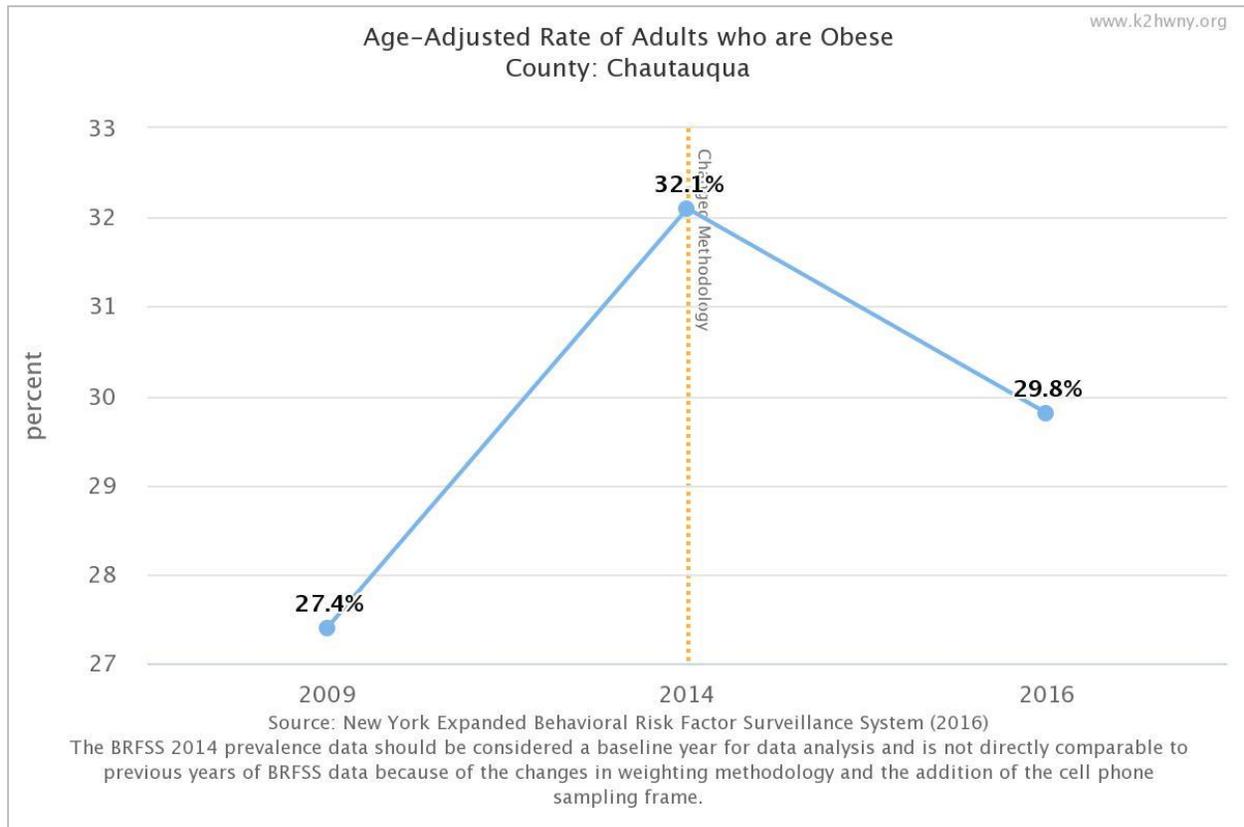
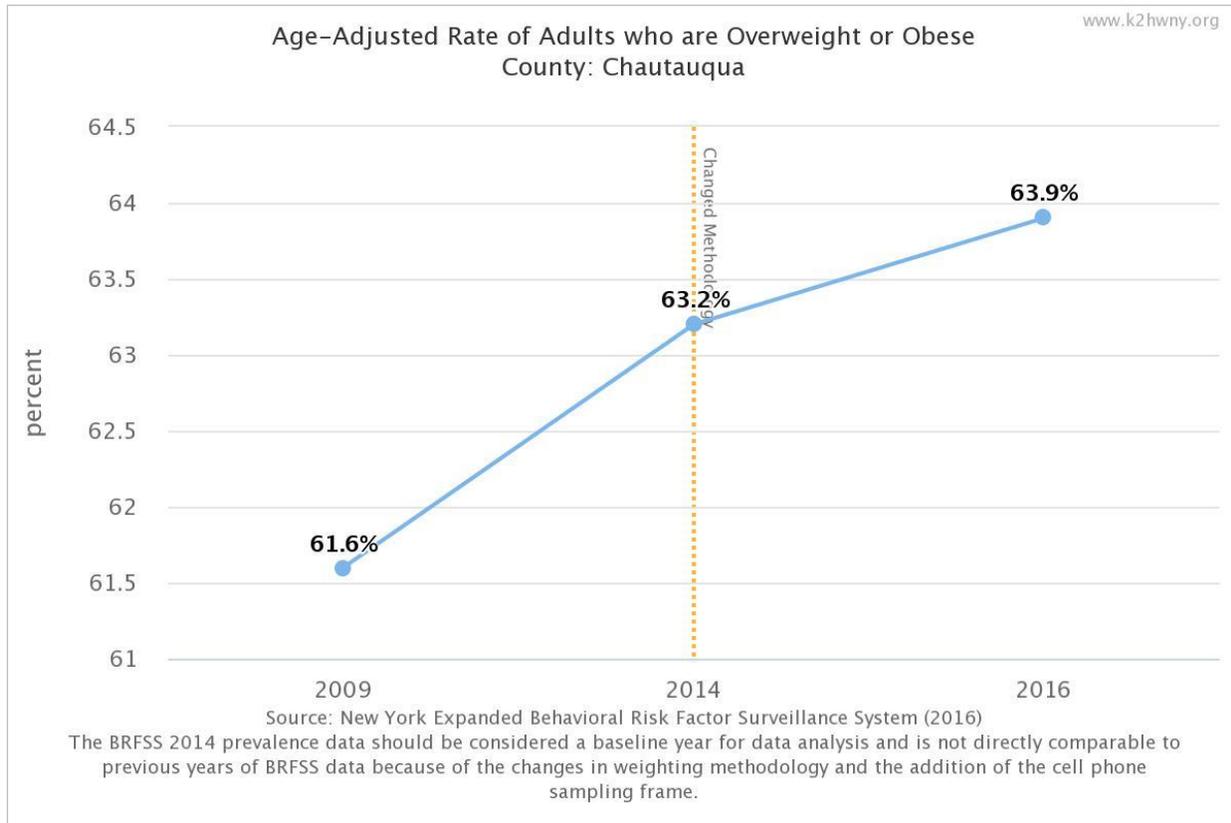


Figure 32. Age-Adjusted Rate of Adults who are Overweight or Obese



Adults in Chautauqua County do not eat the recommended amount of fruits and vegetables. The NY Expanded Behavioral Risk Factor Surveillance System (2009) reports that the percentage of adults who eat five or more servings of fruits and vegetables per day in Chautauqua County is 24.9%. This is higher than the US average (23.4%), but lower than the NYS rate of 27.1%. Of the eight Western NY Counties, Chautauqua ranks in the middle, with Wyoming reporting nearly 20%, and Niagara reporting around 27%.

Map 5. Adult Fruit and Vegetable Consumption, 2009

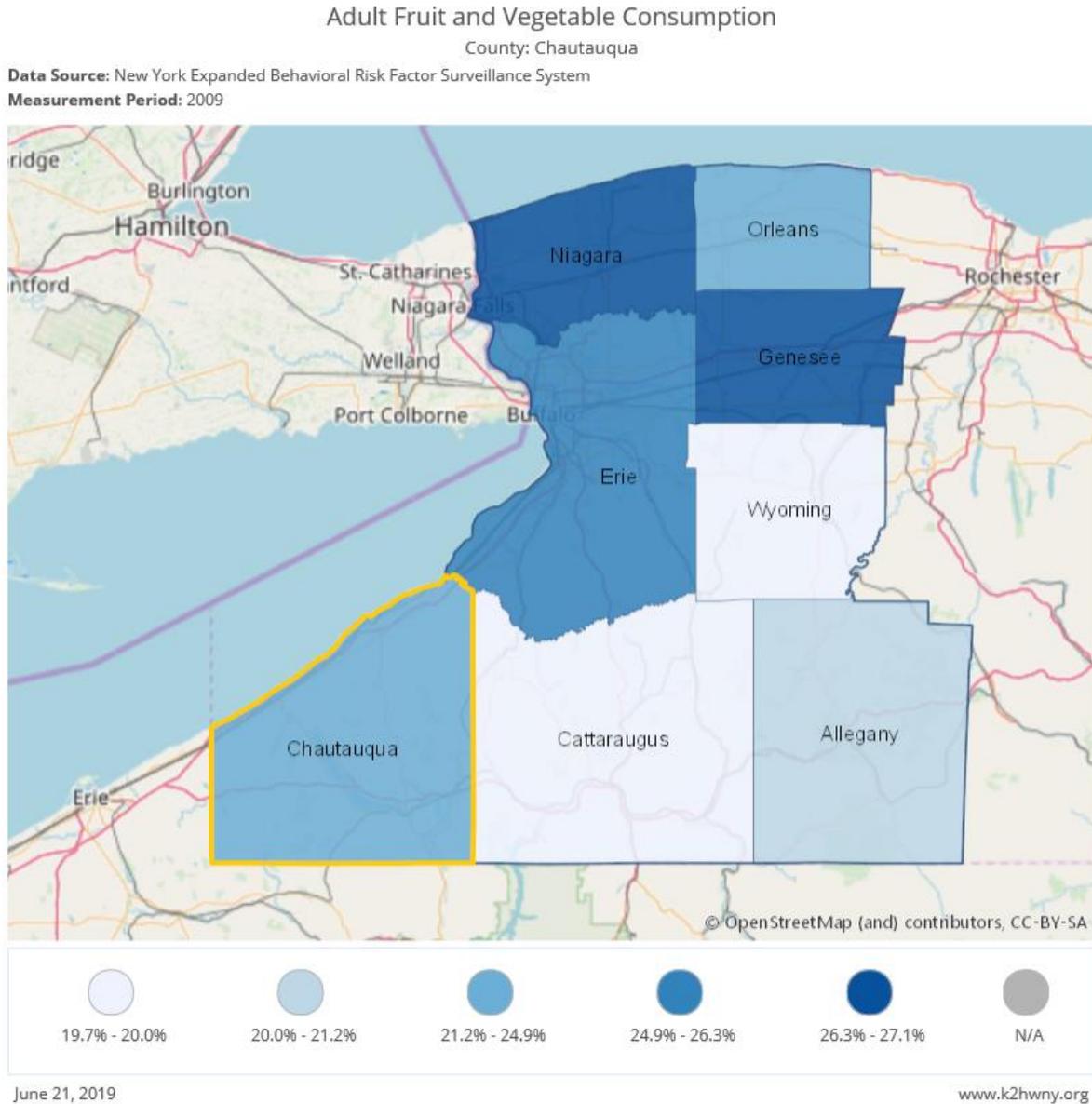
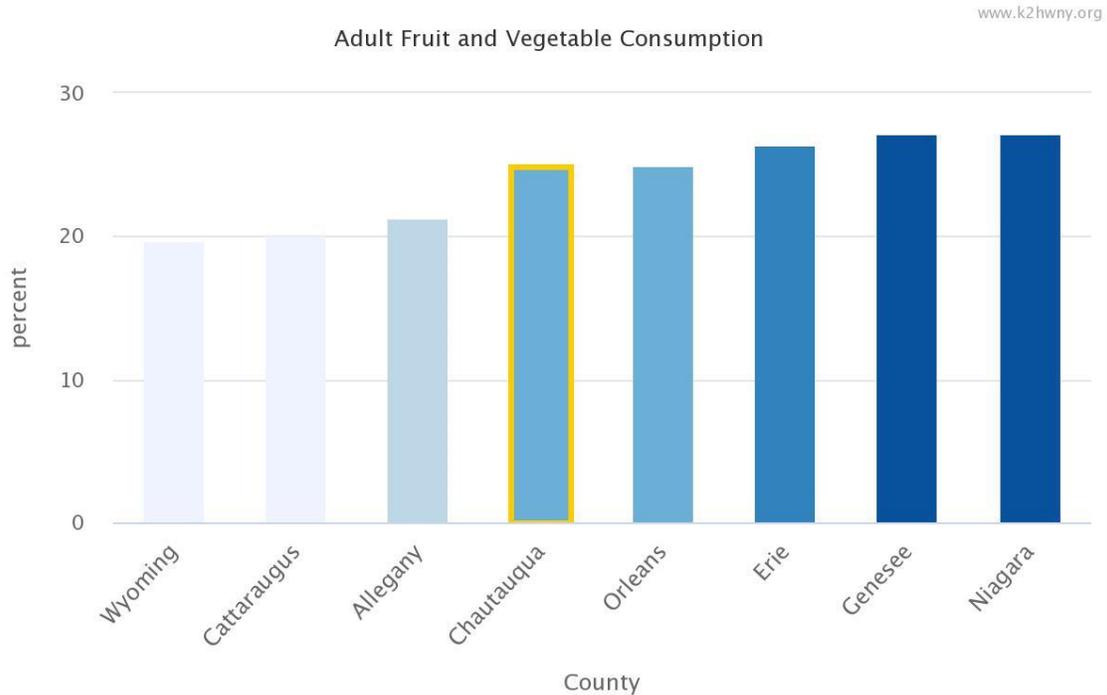


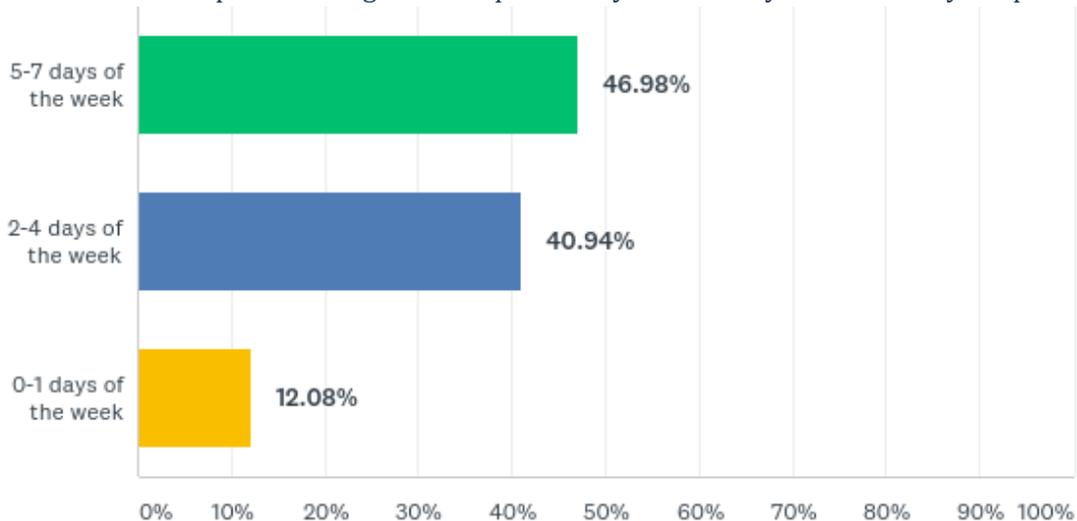
Figure 33. Adult Fruit and Vegetable Consumption, 2009



Source: New York Expanded Behavioral Risk Factor Surveillance System (2009)

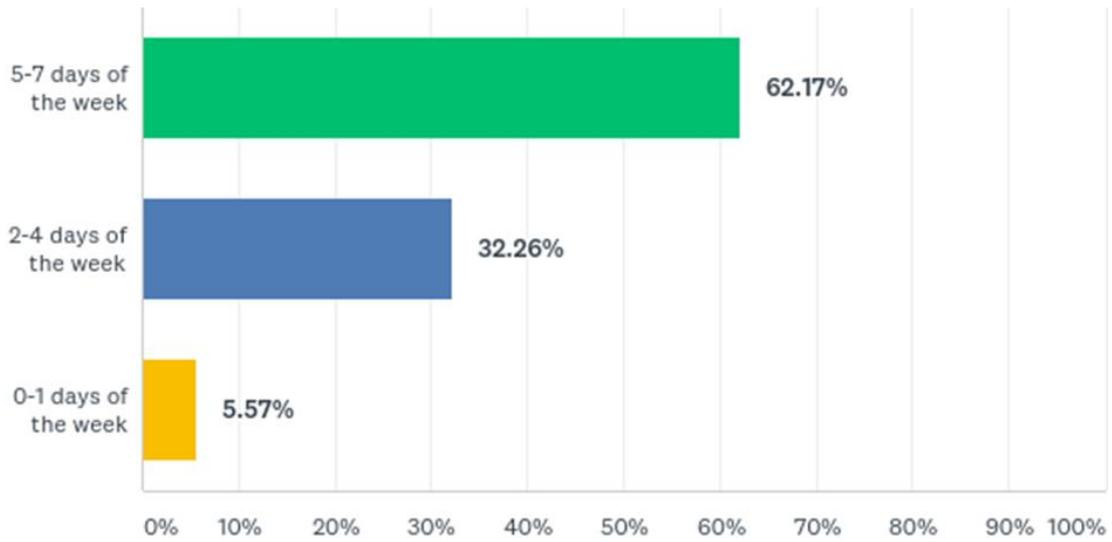
When asked about fruit and vegetable consumption during the 2019 Chautauqua County Community Health Survey, 46.98% of respondents (1,920 responses) report they eat fruit 5 – 7 days of the week; 62.17% or respondents (1,922 responses) report they eat vegetables 5 – 7 days of the week.

Figure 34. Fruit Consumption Among Chautauqua County Community Health Survey Responders



Source: Chautauqua County Community Health Survey, 2019

Figure 35. Vegetable Consumption Among Chautauqua County Community Health Survey Responders



Source: Chautauqua County Community Health Survey, 2019

According to the US Department of Agriculture, 2017 statistics, Chautauqua County ranks 3rd in NYS for number of farms (1,228), 6th in NYS for farm acreage (223,634), 18th for farmland as a share of total land area (33%), and 13th for total sales in thousands (160,967).

Table 18. A Profile of Agriculture in New York State, 2017, Prepared by the Office of Budget and Policy Analysis

**Selected New York State Farm Statistics by County, 2017**

	Farms	Farm Acreage	Farmland as a Share of Total Land Area	Total Sales (thousands)		Farms	Farm Acreage	Farmland as a Share of Total Land Area	Total Sales (thousands)
Albany	440	59,564	17.8%	\$47,329	Niagara	690	140,259	42.0%	118,617
Allegany	789	161,713	24.5%	69,316	Oneida	967	192,767	24.8%	100,455
Bronx	0	0	0	0	Onondaga	623	160,717	32.3%	178,409
Broome	494	62,467	13.8%	32,087	Ontario	833	200,089	48.5%	205,160
Cattaraugus	956	166,240	19.9%	93,412	Orange	621	81,192	15.6%	87,915
Cayuga	842	225,204	50.9%	287,853	Orleans	498	129,573	51.7%	155,282
Chautauqua	1,228	223,634	33.0%	160,967	Oswego	612	86,167	14.1%	41,230
Chemung	398	66,904	25.7%	19,012	Otsego	880	154,634	24.1%	56,180
Chenango	770	148,982	26.1%	67,923	Putnam	89	7,472	5.1%	3,145
Clinton	588	161,605	24.3%	167,789	Queens	4	N/A	N/A	94
Columbia	518	99,179	24.4%	88,432	Rensselaer	470	82,766	19.8%	41,010
Cortland	536	113,519	35.6%	69,506	Richmond	6	N/A	N/A	N/A
Delaware	689	140,225	15.2%	45,705	Rockland	14	576	0.5%	2,142
Dutchess	620	101,948	20.0%	43,906	Saratoga	591	342,595	13.8%	76,810
Erie	940	143,081	21.4%	130,973	Schenectady	185	71,604	13.3%	5,462
Essex	285	57,622	5.0%	13,178	Schoharie	541	17,360	25.1%	47,927
Franklin	636	140,717	13.5%	86,384	Schuyler	408	99,819	37.5%	45,753
Fulton	207	22,181	7.0%	10,268	Seneca	516	78,805	57.2%	90,843
Genesee	485	176,943	56.1%	234,935	St. Lawrence	1,253	118,545	20.0%	191,077
Greene	206	34,979	8.4%	19,761	Steuben	1,542	397,157	44.6%	195,950
Hamilton	14	932	0.1%	N/A	Suffolk	560	30,032	5.1%	225,578
Herkimer	596	117,780	13.0%	57,977	Sullivan	366	59,942	9.7%	28,383
Jefferson	792	247,456	30.5%	165,056	Tioga	535	113,182	34.1%	40,857
Kings	19	23	0.1%	6,809	Tompkins	523	91,277	30.0%	64,702
Lewis	625	182,457	22.4%	153,073	Ulster	421	58,932	8.2%	54,346
Livingston	661	189,488	46.9%	183,695	Warren	80	10,086	1.8%	1,916
Madison	691	171,865	41.0%	113,630	Washington	915	185,291	34.8%	135,813
Monroe	527	106,778	25.4%	76,643	Wayne	829	159,093	41.2%	221,295
Montgomery	564	114,990	44.6%	74,959	Westchester	115	6,977	2.5%	6,956
Nassau	32	910	0.5%	2,732	Wyoming	729	234,861	61.9%	307,521
New York	7	11	0.1%	45	Yates	867	114,922	53.1%	114,657
					<b>New York State</b>	<b>33,438</b>	<b>6,866,171</b>	<b>22.8%</b>	<b>\$5,369,212</b>

Source: U.S. Department of Agriculture

Note: The county-by-county figures for farm acreage and total sales do not sum to the total for New York State due to rules which prohibit the disclosure of certain county-level data. N/A indicates that data is not available.

The NYSDOH eBRFSS (2016) reports that the percentage of Chautauqua County adults (age-adjusted) who did not participate in any leisure-time activities (physical activities other than their regular job) during the past month was 25.6%. This is slightly less than the NYS rate of 26% and higher than the US rate of 23.2%. Rates in WNY range from 23.6% to 29.3%.

Map 6. Age-Adjusted Rate of Adults who are Sedentary, 2016

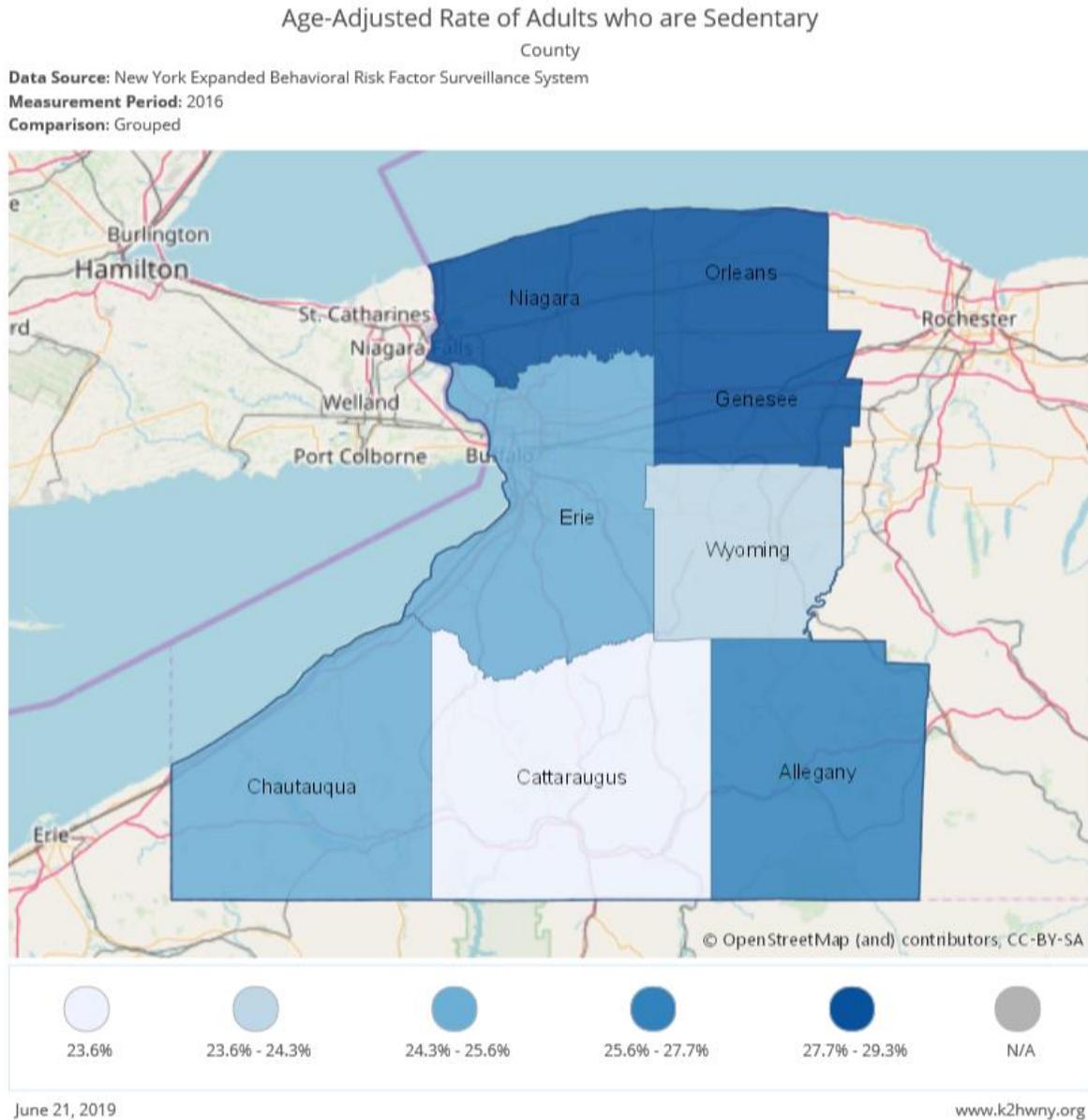
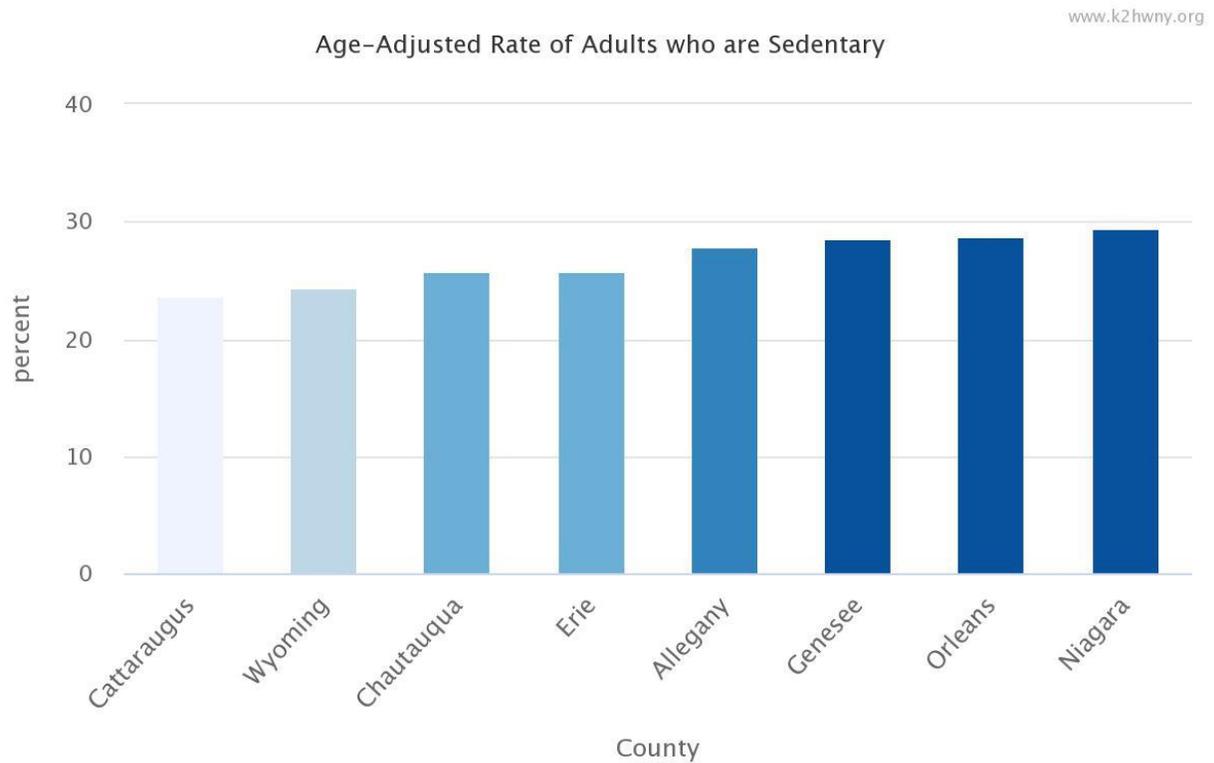


Figure 36. Age-Adjusted Rate of Adults who are Sedentary, 2016



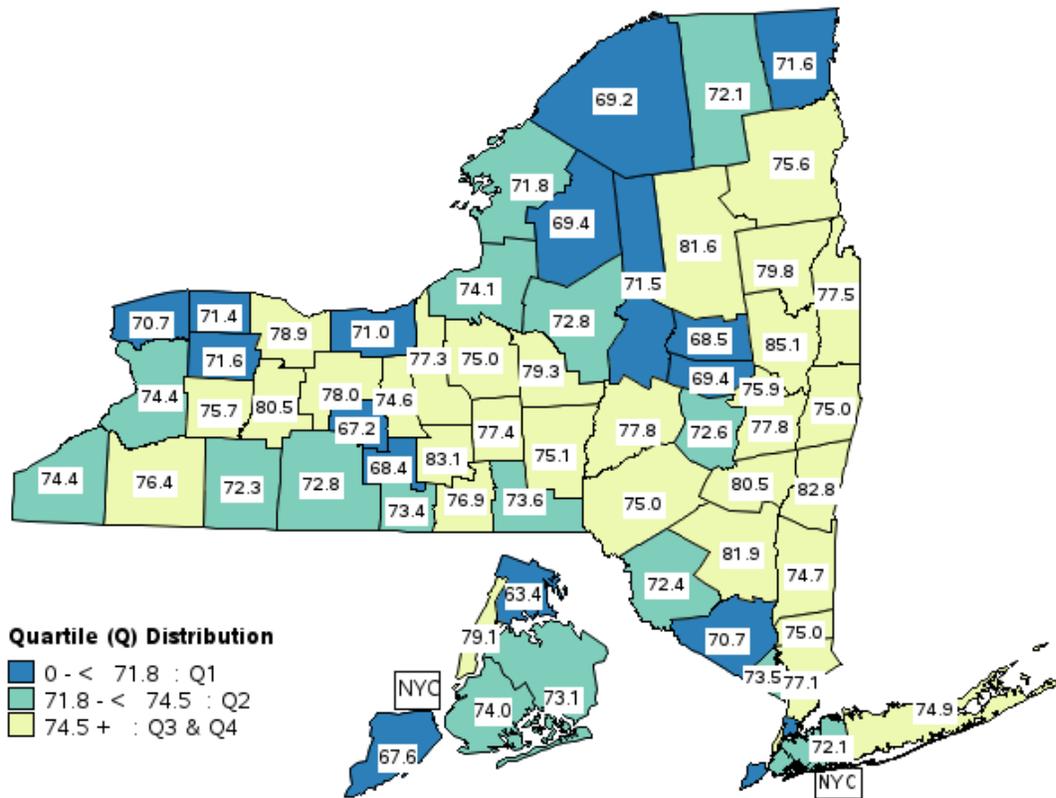
Source: New York Expanded Behavioral Risk Factor Surveillance System (2016)

According to the NYS eBRFSS, in 2016 the age-adjusted percentage of Chautauqua County adults who did participate in leisure time physical activity in the past 30 days was 74.4. Among New York State Counties, Chautauqua County’s leisure time physical activity falls in the second quartile.

Map 7. Age-Adjusted Percentage of Adults who Participated in Leisure Time Physical Activity in the past 30 days, 2016

**Age-adjusted percentage of adults who participated in leisure time physical activity in the past 30 days, 2016**

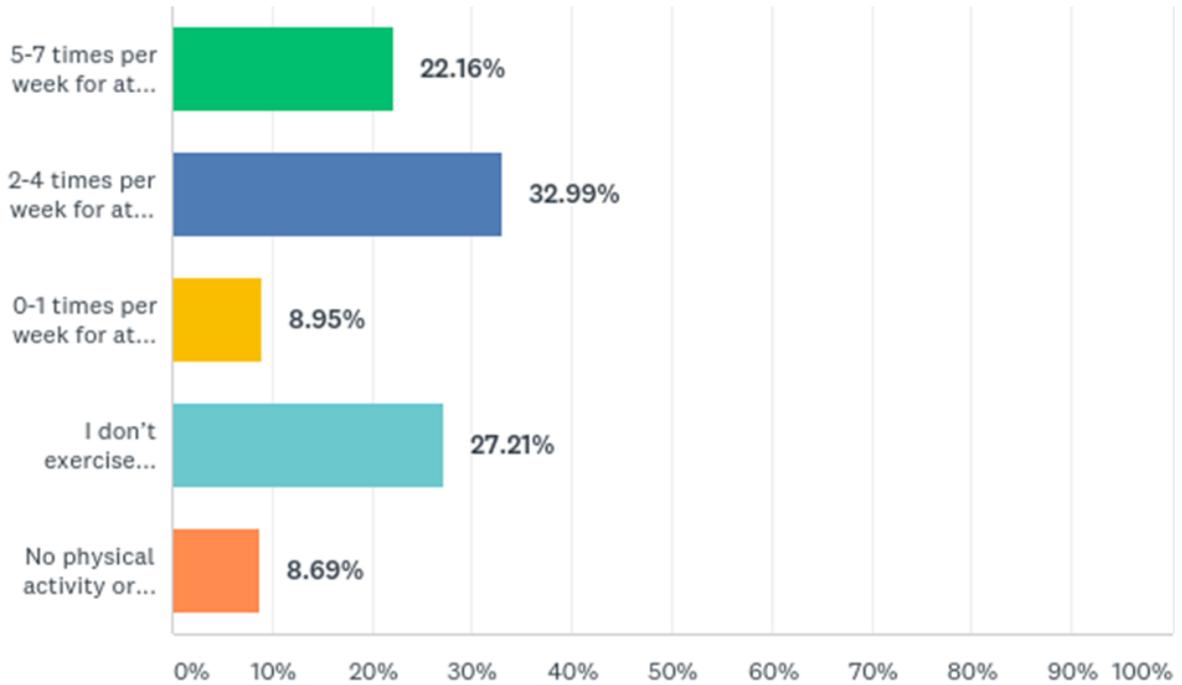
MAP TABLE CHART



Data Source: NYS Expanded Behavioral Risk Factor Surveillance System, data as of November 2018

The Chautauqua County Community Health Survey inquired about participation in physical activity or exercise (beyond regular daily activity). Of the 1,922 who replied to the question, 32.99% exercise 2-4 times per week for at least 30 minutes each time; 27.21% do not exercise regularly but try to add physical activity when possible; 22.16% exercise 5-7 times per week for at least 30 minutes each time; 8.95% exercise 0-1 times per week for at least 30 minutes each time; and 8.69% get no physical activity or exercise beyond regular daily activities.

Figure 37. Participation in Physical Activity or Exercise Among Chautauqua County Community Health Survey Responders



Source: Chautauqua County Community Health Survey, 2019

### Alcohol and Tobacco Use

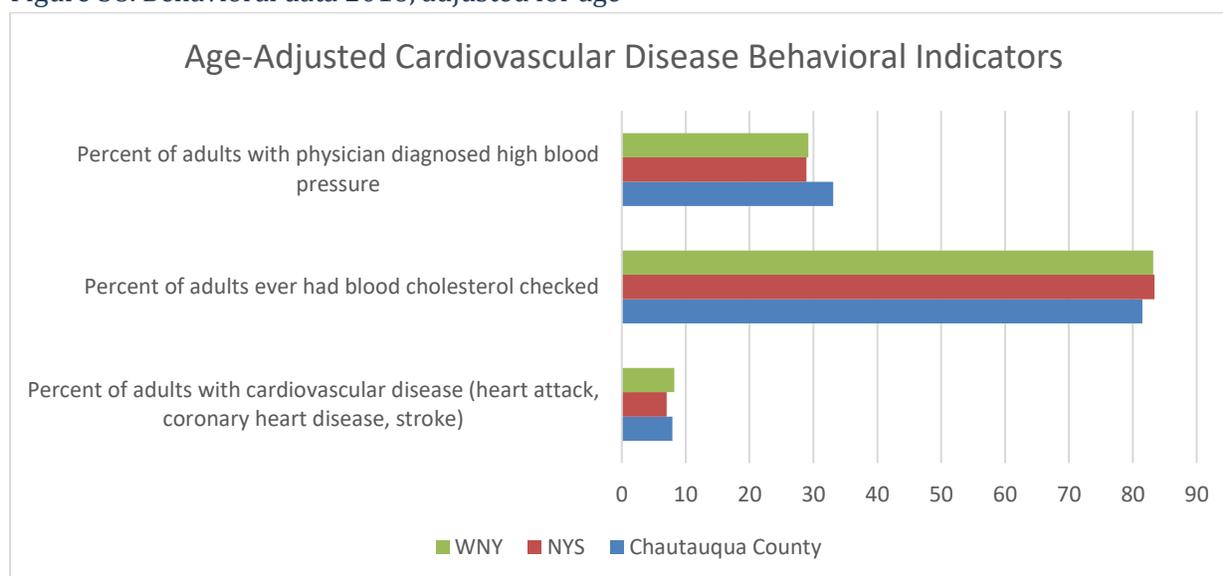
Tobacco dependence and chronic diseases are highly prevalent in Chautauqua County. Tobacco use is also modifiable risk factor for many chronic diseases including cardiovascular disease, diabetes, and inflammatory diseases. Alcohol and tobacco are among the top causes of preventable deaths in the United States. Moreover, these substances often are used together: Studies have found that people who smoke are much more likely to drink, and people who drink are much more likely to smoke. (US Dept. of Health and Human Services, National Institute of Health, National Institute on Alcohol Abuse and Alcoholism, Alcohol Alert, Number 71, January 2007.)

A complete profile of Alcohol and Tobacco Use in Chautauqua County is in this document beginning on page 100.

## Cardiovascular Disease

Data from the New York State Department of Health’s 2016 Expanded Behavioral Risk Factor Surveillance System (eBRFSS) that relates to cardiovascular disease is presented in Figure 38. In Chautauqua County (when adjusted for age), 33.1% of adults have ever had a physician diagnose them with high blood pressure, 81.5% of adults have ever had their cholesterol checked, and 33.1% of adults have cardiovascular disease (heart attack, coronary heart disease, stroke). Figures at the state and WNY level were slightly more favorable than Chautauqua County for high blood pressure diagnosis and cholesterol check, but WNY was higher, and NYS lower when measuring cardiovascular disease diagnosis.

Figure 38. Behavioral data 2016, adjusted for age



Source: NYSDOH Community Health Indicator Reports: Cardiovascular Disease Indicators, 2016

Consistent with New York State as a whole, statistics from the NYSDOH Vital Statistics indicated that in 2016, the leading cause of death in Chautauqua County was heart disease. There were 417 deaths to heart disease in Chautauqua County, resulting in a rate of 215 per 100,000 residents. (NYS Vital Statistics Leading Causes of Death by County, NYS, 2016)

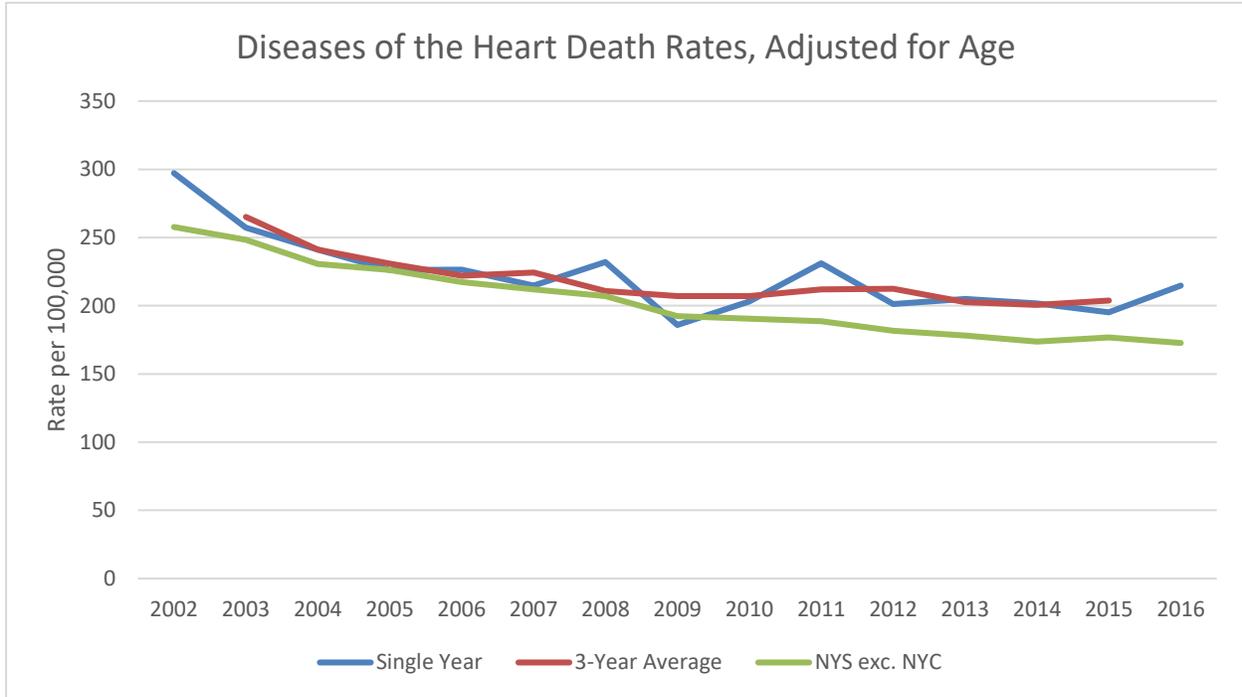
Stroke, or cerebrovascular disease, was the fourth leading cause of death in Chautauqua County in 2016. In total, 70 deaths were caused by stroke, with a rate of 70 deaths per 100,000 residents. (NYS Vital Statistics Leading Causes of Death by County, NYS, 2016)

Capturing two of the five leading causes of death in Chautauqua County, cardiovascular disease is a major burden on the health care system and quality of life for residents.

Figure 39 shows the death rates for diseases of the heart 2002-2016, adjusted for age. With slightly more fluctuation than New York State and New York State excluding New York City,

trends for heart disease are relatively similar across the geographies. The time trend for diseases of the heart death rates shows a very gradual decrease over time for Chautauqua County, New York State excluding New York City and New York State from 2002 to 2016.

Figure 39. Diseases of the heart death rates, adjusted for age, 2014-2016

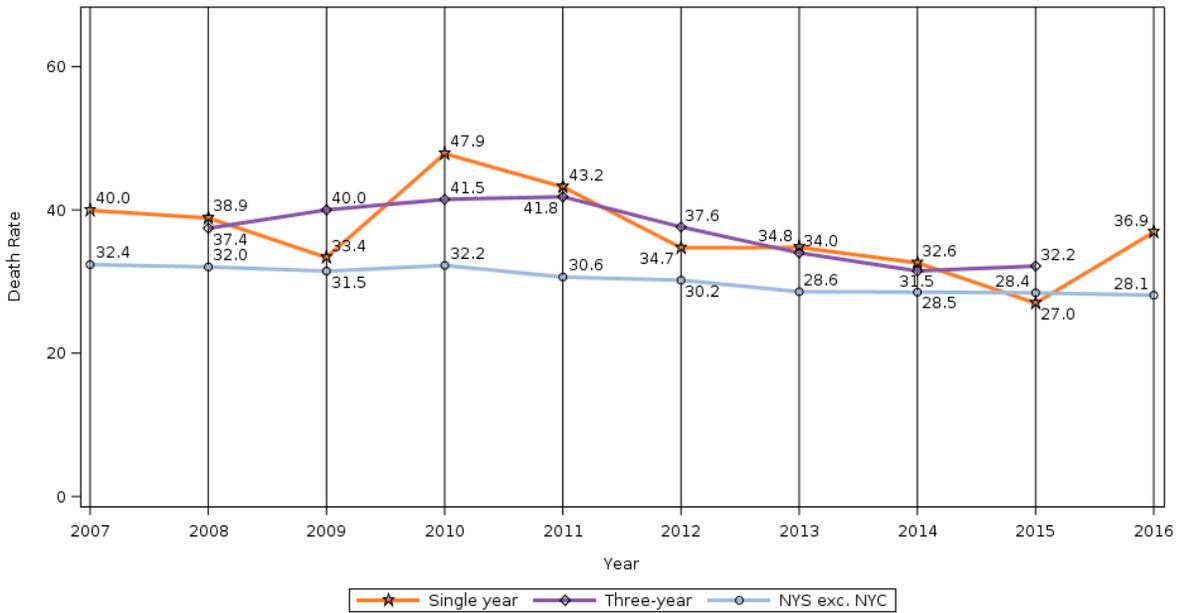


Source: NYSDOH Vital Statistics, 2014-2016

The 2007-2016 time trend for cerebrovascular disease death rates shows a gradual decrease for New York State excluding New York City (32.4 to 28.1). The trend for Chautauqua County shows more fluctuation, with figures from 2007 to 2014 higher than the comparison geography, then there was a marked drop in 2015 (27) and a large uptick in 2016 (36.9).

Figure 17. Cerebrovascular disease death rates, adjusted for age

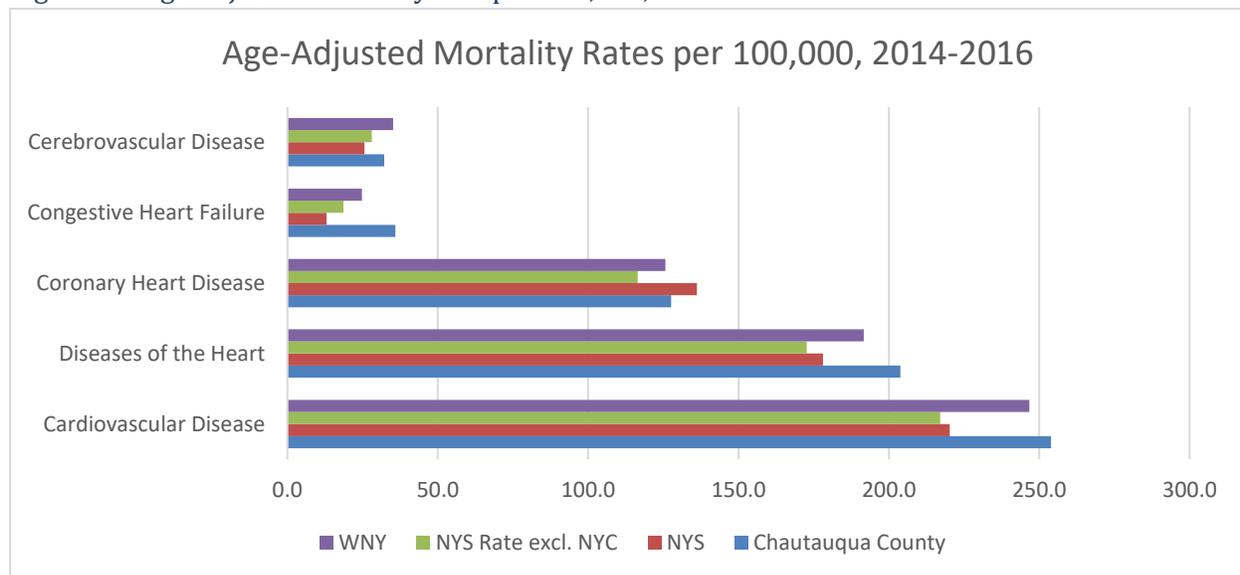
**Chautauqua County - Age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000**



Source: NYSDOH Vital Statistics, 2002-2016

Figure 41 shows the age-adjusted mortality rate per 100,000 for specified types of cardiovascular disease from 2014 to 2016. For all of the rates displayed in Figure 41, Chautauqua County had significantly higher values than NYS excluding NYC, NYS, and WNY except for cerebrovascular disease, (Chautauqua County’s rate is only exceeded by WNY), and coronary heart disease (WNY and NYS rates exceed the county rate).

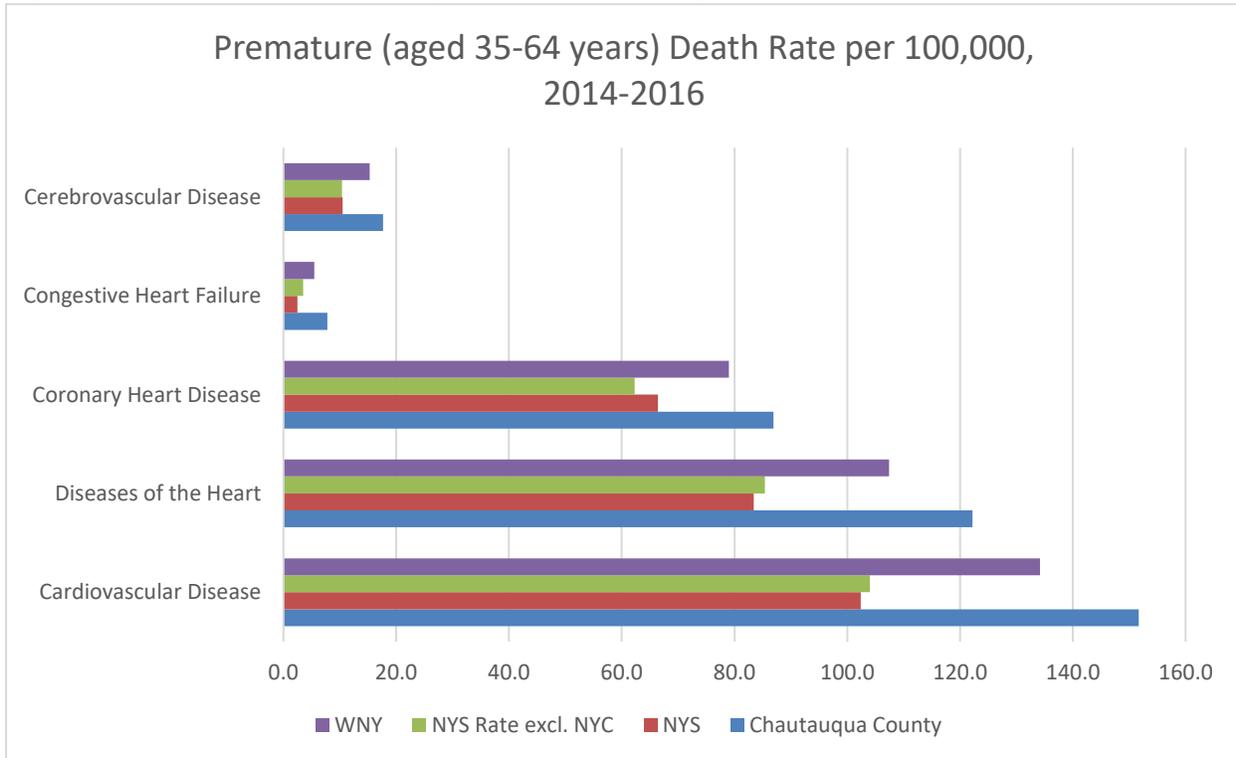
Figure 18. Age-adjusted mortality rate per 100,000, 2014-2016



Source: NYSDOH Community Health Indicator Reports: Cardiovascular Disease Indicators, 2014-2016

Premature mortality rates, which account for deaths to residents aged 35 to 64 years, were significantly higher in Chautauqua County and WNY than both New York State excluding New York City and New York State for cardiovascular disease, diseases of the heart and coronary heart disease. For all subgroups, the rates in Chautauqua County were greater than the regional and state comparison groups.

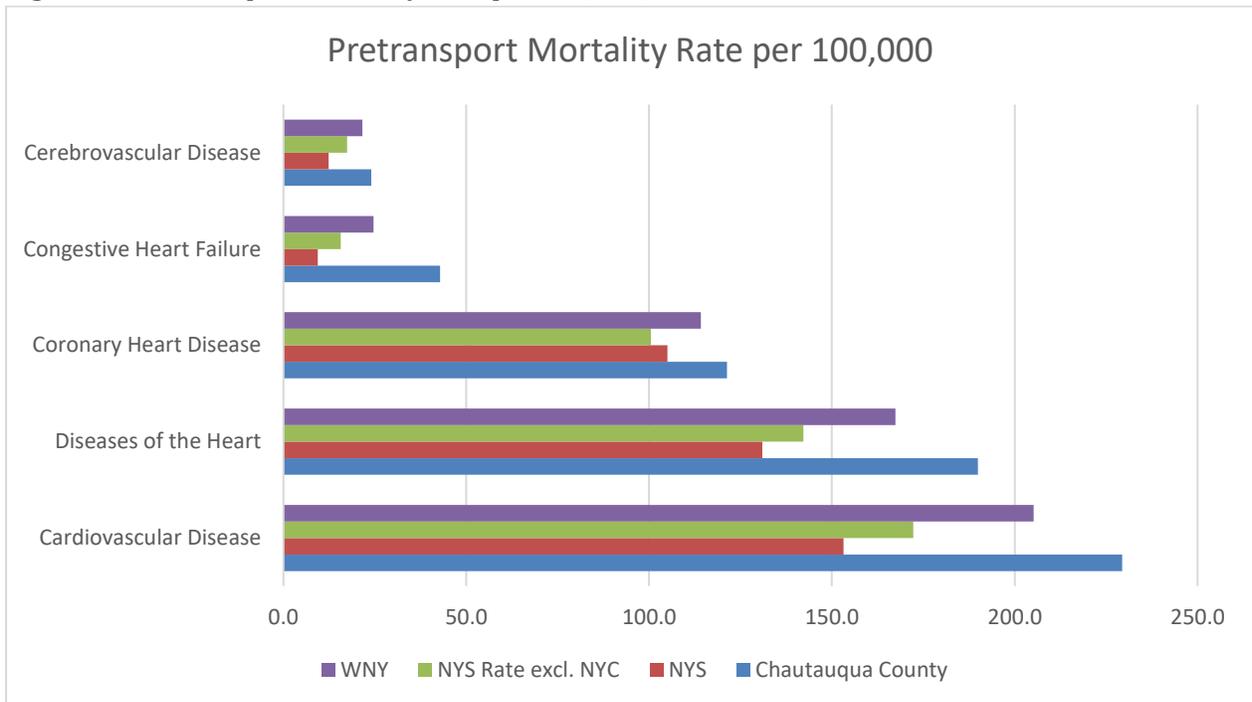
Figure 42. Premature mortality (ages 35-64 years) rate per 100,000, 2014-2016



Source: NYSDOH Community Health Indicator Reports: Cardiovascular Disease Indicators, 2014-2016

Pretransport mortality rates for all cardiovascular disease subgroups were higher than New York State excluding New York City, New York State and WNY in Chautauqua County from 2014 to 2016. WNY rates, although lower than Chautauqua County, were higher than New York State excluding New York City, New York State

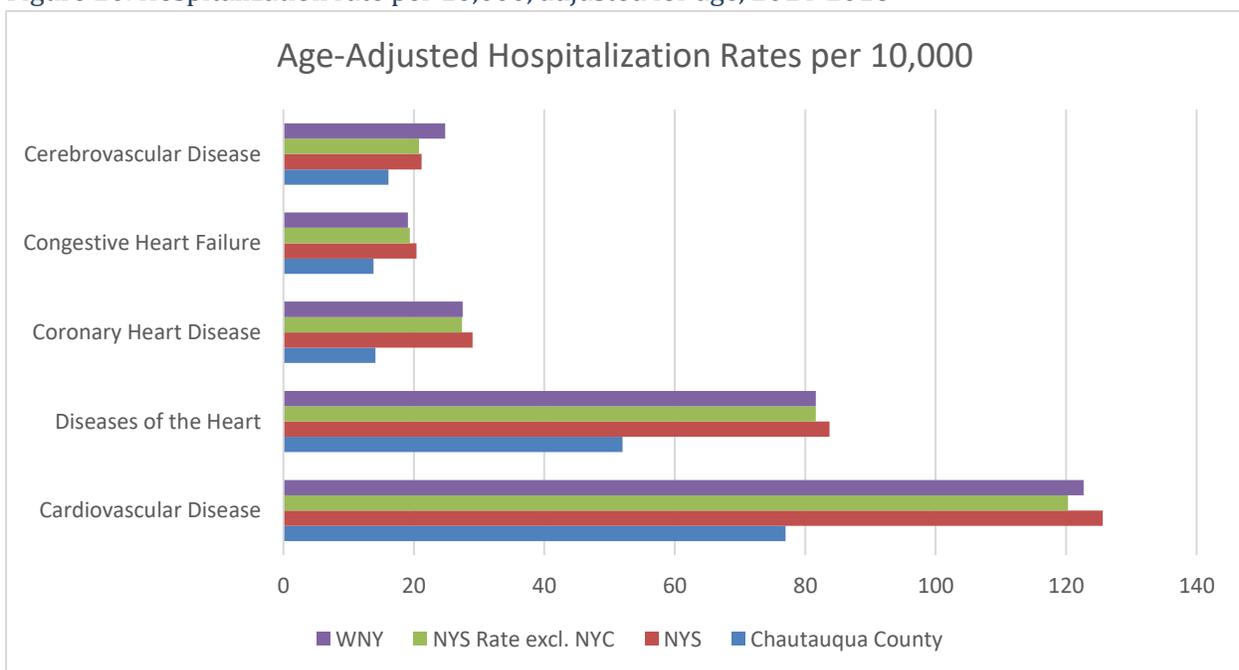
Figure 19. Pretransport Mortality Rate per 100,000, 2014-2016



Source: NYSDOH Community Health Indicator Reports: Cardiovascular Disease Indicators, 2009-2011

In contrast to cardiovascular disease mortality rates, hospitalization rates were statistically significantly lower in Chautauqua County compared to New York State excluding New York City, New York State as a whole and WNY.

Figure 20. Hospitalization rate per 10,000, adjusted for age, 2014-2016



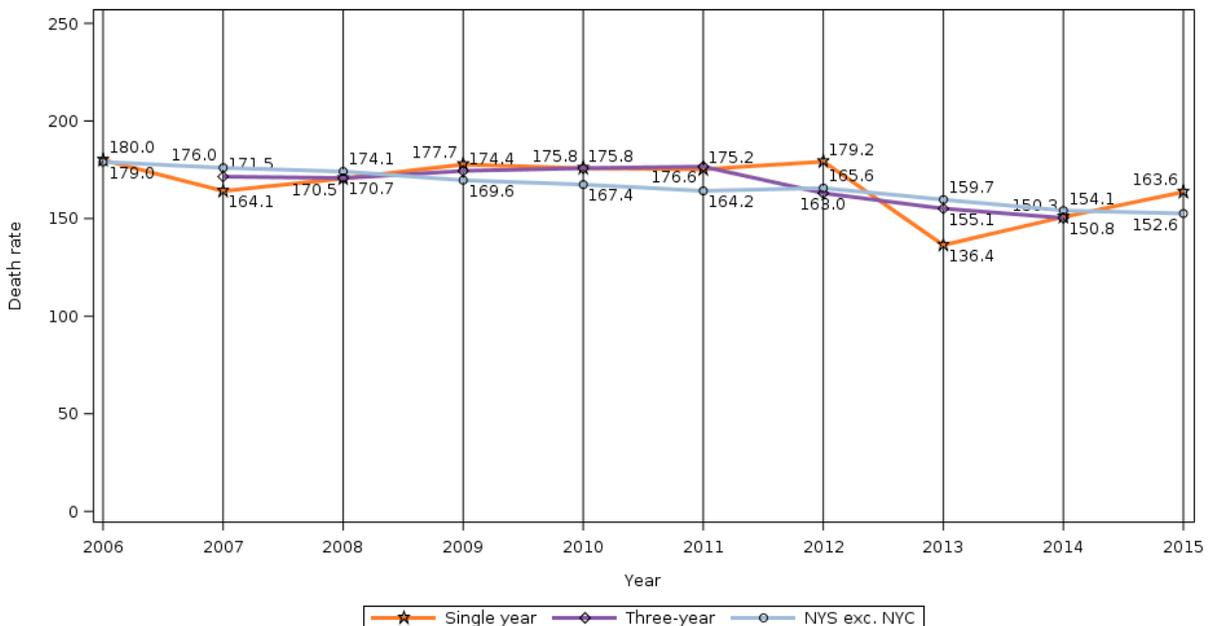
Source: NYSDOH Community Health Indicator Reports: Cardiovascular Disease Indicators, 2014-2016

## Cancer

As of 2016, cancer was the second leading cause of death in Chautauqua County with 330 total deaths resulting in a rate of 176 per 100,000 population.

A time trend of cancer death rate data from NYSDOH Vital Statistics indicates that the Chautauqua County cancer death rate has gradually decreased from 2006 to 2015 similarly with state figures, although Chautauqua County saw a marked drop from 2012 to 2013 and then a steady rise through 2015 (although still lower than 2006).

Figure 45. Cancer death rates, adjusted for age, 2013-2015  
**Chautauqua County - Age-adjusted all cancer mortality rate per 100,000**



Source: NYSDOH Vital Statistics, 2013-2015

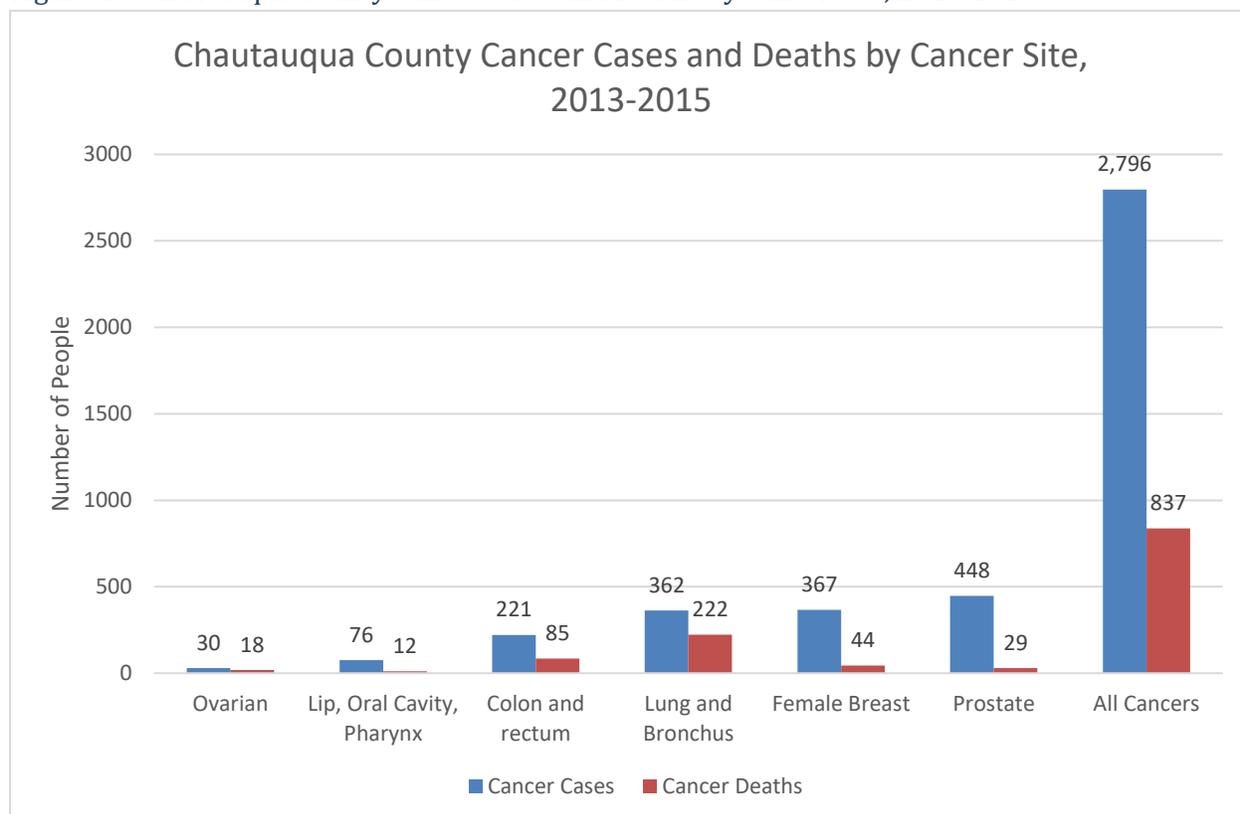
From 2013 to 2015, 2,796 new cases of cancer occurred in Chautauqua County, resulting in a crude rate of 706.4 cases per 100,000 residents. The age-adjusted rate of all cancers during the same time period was 528 cases per 100,000, significantly higher than the New York State rate of 485.6 cases.

During the same time period, 837 cancer deaths occurred, resulting in a crude mortality rate of 211.5 deaths per 100,000 residents. When adjusted for age, the cancer death rate decreased to 150.3 deaths per 100,000, which was not significantly different from the NYS rate of 149.2.

The most common types of cancer in Chautauqua County from 2013-2015 were prostate (448 cases, 29 deaths), female breast (367 cases, 44 deaths), lung and bronchus (362 cases, 222 deaths), and colon and rectum (221 cases, 85 deaths). Although there was high number of

female breast and prostate cancers, the deaths were comparatively low, with an age-adjusted death rate of 22% and 11.8%, respectively. Deaths in comparison to cases of lung and bronchus cancers are not as favorable, with an age-adjusted death rate of 40.4%

Figure 46. Chautauqua County Cancer Cases and Deaths by Cancer Site, 2013-2015



Source: NYSDOH Vital Statistics, 2013-2015

Table 17. Incidence and mortality rate for all cancers, and specified sites, 2013-2015

Indicator	3 Year Total (2014)	County Rate	WNY	NYS
<b>All cancers</b>				
Crude incidence per 100,000	706	706.4	689.5	564.4
Age-adjusted incidence per 100,000	528	528	536.4	485.6
Crude mortality rate per 100,000	211.5	211.5	232.8	176.2
Age-adjusted mortality rate per 100,000	150.3	150.3	174.3	149.2
<b>Lip, oral cavity and pharynx cancer</b>				
Crude incidence per 100,000	19.2	19.2	16.8	12.9
Age-adjusted incidence per 100,000	13.8	13.8	12.9	10.9
Crude mortality rate per 100,000	3	3	3.9	2.5
Age-adjusted mortality rate per 100,000	2.2	2.2	3	2.1

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Indicator	3 Year Total (2014)	County Rate	WNY	NYS
<b>Colon and rectum cancer</b>				
Crude incidence per 100,000	55.8	55.8	51.8	45.7
Age-adjusted incidence per 100,000	41	41	40.4	39.3
Crude mortality rate per 100,000	21.5	21.5	18.4	15.6
Age-adjusted mortality rate per 100,000	15.5	15.5	13.8	13.1
<b>Lung and bronchus cancer</b>				
Crude incidence per 100,000	91.5	91.5	99.3	69.7
Age-adjusted incidence per 100,000	66.5	66.5	74.5	59.2
Crude mortality rate per 100,000	56.1	56.1	68	43.5
Age-adjusted mortality rate per 100,000	40.4	40.4	51.2	36.9
<b>Female breast cancer</b>				
Crude incidence per 100,000	183.9	183.9	186	158.6
Age-adjusted incidence per 100,000	136.8	136.8	143.5	132.8
Crude mortality rate per 100,000	22	22	30.1	24.7
Age-adjusted mortality rate per 100,000	15.3	15.3	21.2	19.2
Crude late stage incidence per 100,000	56.6	56.6	56	50.7
Age-adjusted late stage incidence per 100,000	43.9	43.9	44.6	43.4
<b>Ovarian cancer</b>				
Crude incidence per 100,000	15	15	16.8	14.8
Age-adjusted incidence per 100,000	11	11	12.9	12.2
Crude mortality rate per 100,000	9	9	10.3	9.1
Age-adjusted mortality rate per 100,000	6.8	6.8	7.5	7.1
<b>Prostate cancer</b>				
Crude incidence per 100,000	228.4	228.4	180.2	141.2
Age-adjusted incidence per 100,000	166	166	139.6	123.4
Crude mortality rate per 100,000	14.8	14.8	19.1	17.2
Age-adjusted mortality rate per 100,000	11.8	11.8	17	17.8
Crude late stage incidence per 100,000	19.9	19.9	22.9	25.2
Age-adjusted late stage incidence per 100,000	13.6	13.6	17.5	22.1

Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2013-2015

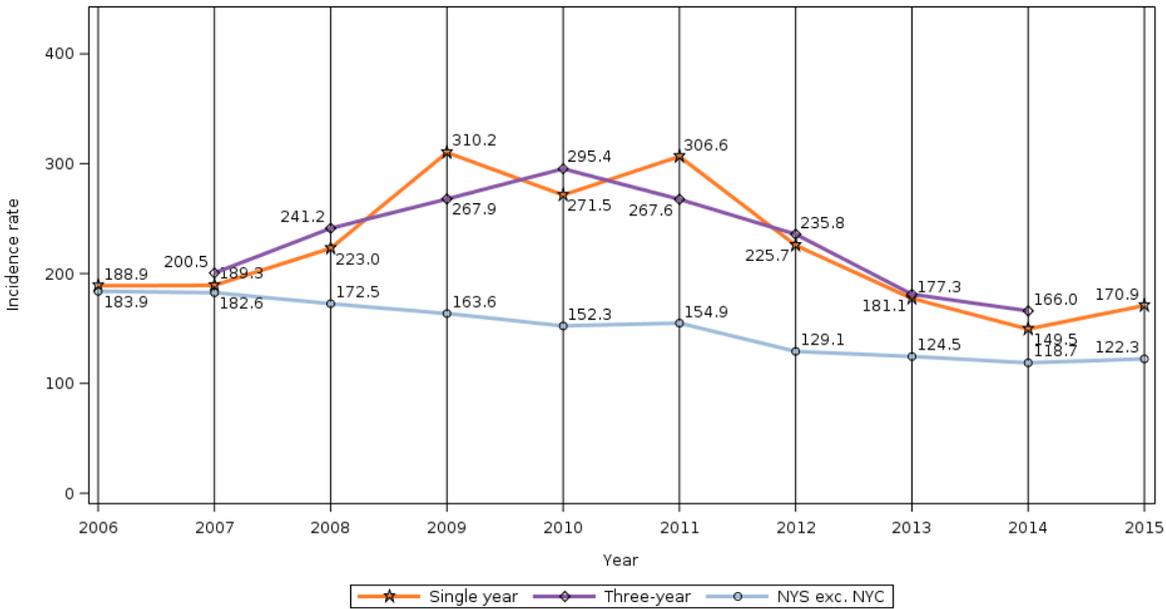
Time trends for age-adjusted prostate cancer incidence per rate per 100,000 show an increase from 2006 (188.9) through 2011 (306.6), and then a steady decline 2012-2014 (149.5). There was an increase in 2015 (170.9), but the rate remains lower than the 2006 measurement. Despite this improvement, Chautauqua County's age-adjusted prostate cancer incident rate in 2016 (166) remains higher than WNY (139.6) and NYS (123.4).

Chautauqua County Community Health Assessment 2019-2021

The age-adjusted prostate cancer mortality rates per 100,000 in Chautauqua County (11.8) are lower than WNY (17) and NYS (17.8). Trends over time show Chautauqua County having a drastic decrease from 25.8 (2006) to 10.3 (2015).

Figure 47. Chautauqua County age-adjusted prostate cancer incident rate 2013-2015

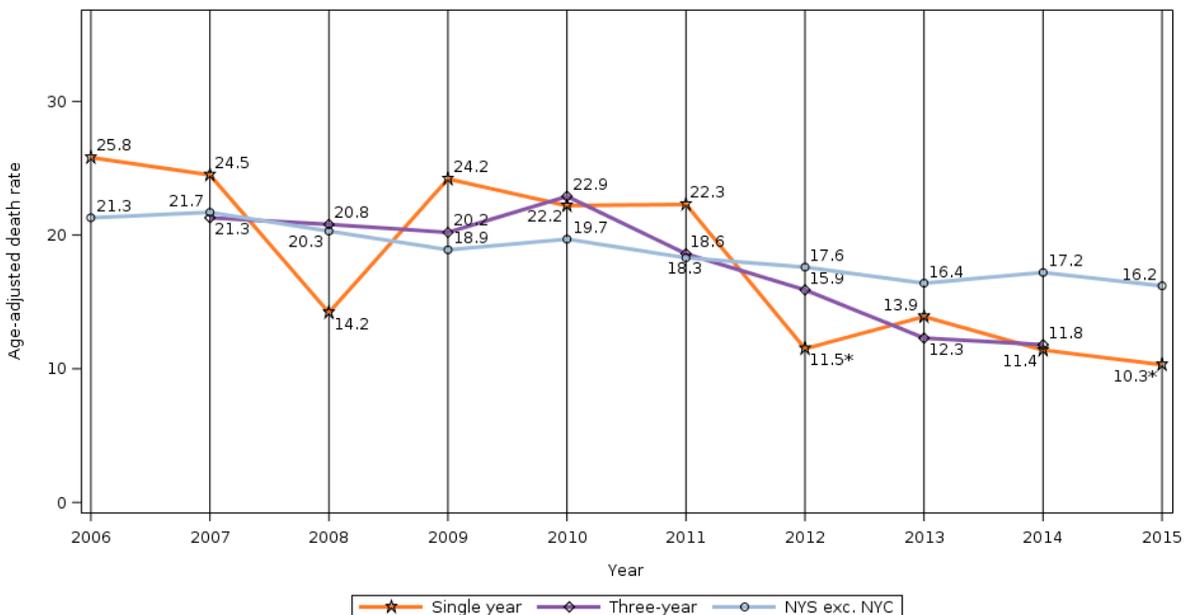
**Chautauqua County - Age-adjusted prostate cancer incidence rate per 100,000**



Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2013-2015

Figure 48. Chautauqua County age-adjusted prostate cancer mortality rate 2013-2015

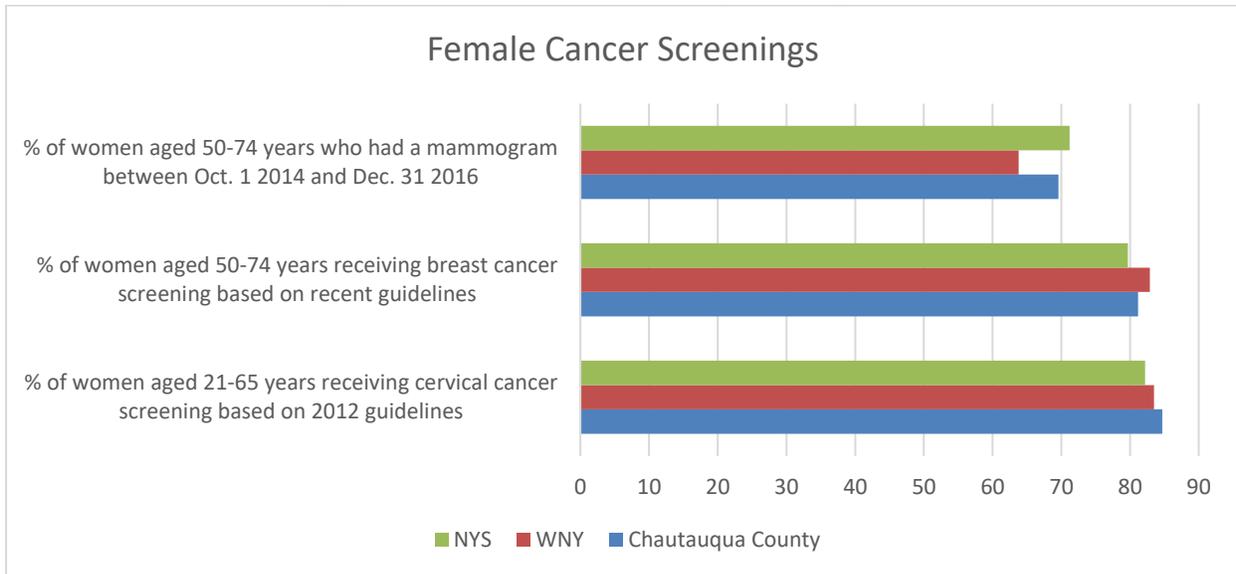
**Chautauqua County - Age-adjusted prostate cancer mortality rate per 100,000**



Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2013-2015

In Chautauqua County in 2013-2015, 84.7% of women aged 21-65 years of age with a cervical cancer screening based on 2012 guidelines, compared to 82.2% in New York State as a whole, and 83.5% in WNY. Between October 1, 2014 and December 31, 2016, 69.6% of women aged 50-74 years had a mammogram in Chautauqua County. This figure was slightly lower than NYS (71.2%), but slightly higher than WNY (63.8%). The percentage of women aged 50-74 years receiving breast cancer screenings based on recent guidelines was similar across all comparison regions with Chautauqua County at 81.2%, NYS at 79.7%, and WNY at 82.9%.

Table 49. Cancer Screening Rates for Females in Chautauqua County, 2013-2015



Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2013-2015

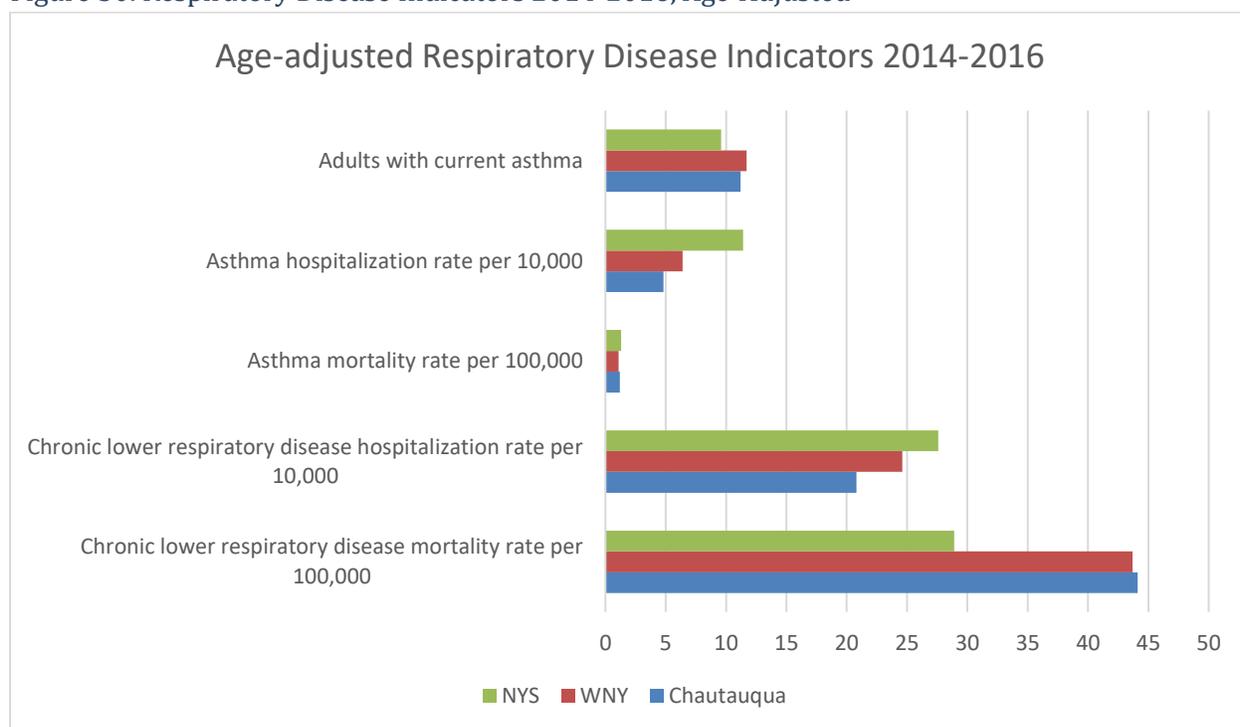
### Respiratory Disease

The third leading cause of death in Chautauqua County in 2016 was Chronic Lower Respiratory Disease (CLRD) with a total of 82 deaths at a rate of 44 deaths per 100,000 residents.

Figure 50 displays age-adjusted hospitalization and mortality rates for both asthma and CLRD. While hospitalization rates for asthma and CLRD were noticeably lower than the state rates, the mortality rate for CLRD was significantly higher than the state and region comparison groups 2014-2016.

The NYSDOH eBRFSS data from 2016 indicate that 11.2% (age-adjusted) of adults in Chautauqua County had current asthma, compared to 9.6% in New York State and 11.7% in WNY.

Figure 50. Respiratory Disease Indicators 2014-2016, Age-Adjusted



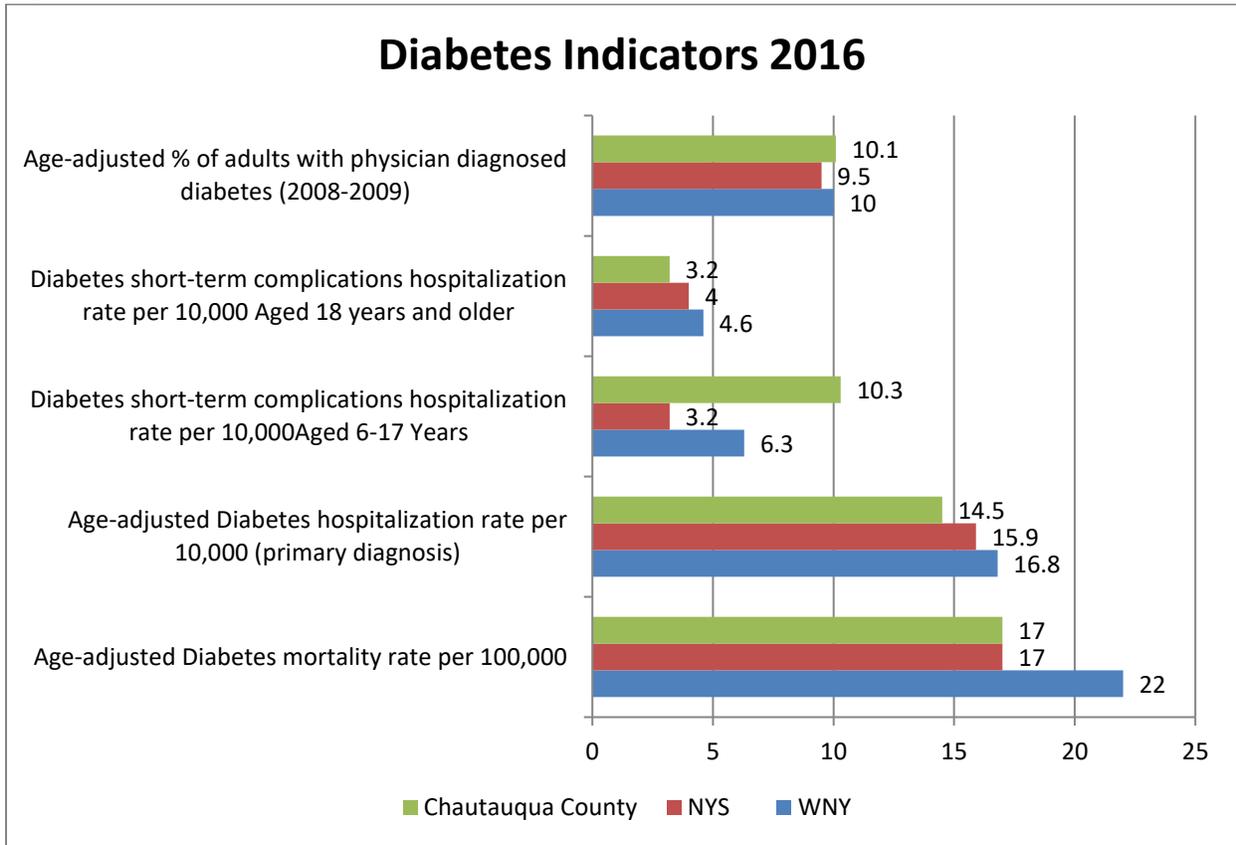
Source: NYSDOH Community Health Indicator Reports: Respiratory Disease Indicators, 2014-2016

### Diabetes

According to the NYSDOH Expanded Behavioral Risk Factor Surveillance System, the age-adjusted rate of physician-diagnosed diabetes among adults in 2016 was 10.1% in Chautauqua County. This rate exceeded both NYS (9.5%) and WNY (10%). In 2016, Chautauqua County saw a rate of short-term diabetes complications hospitalizations among adults per 10,000 of 3.2, lower than NYS (4) and WNY (4.6). In comparison, short-term diabetes complication hospitalizations rate per 10,000 for children ages 6-17 was significantly greater in Chautauqua County (10.3) than NYS (3.2) and WNY (6.3).

The age-adjusted diabetes hospitalization rate per 10,000 (primary diagnosis) in Chautauqua County (14.5) was lower than its state and regional comparisons. The age-adjusted diabetes mortality rate per 100,000 was 17 in Chautauqua County; the same as NYS and lower than WNY at 22.

Figure 51. Diabetes Indicators, 2016

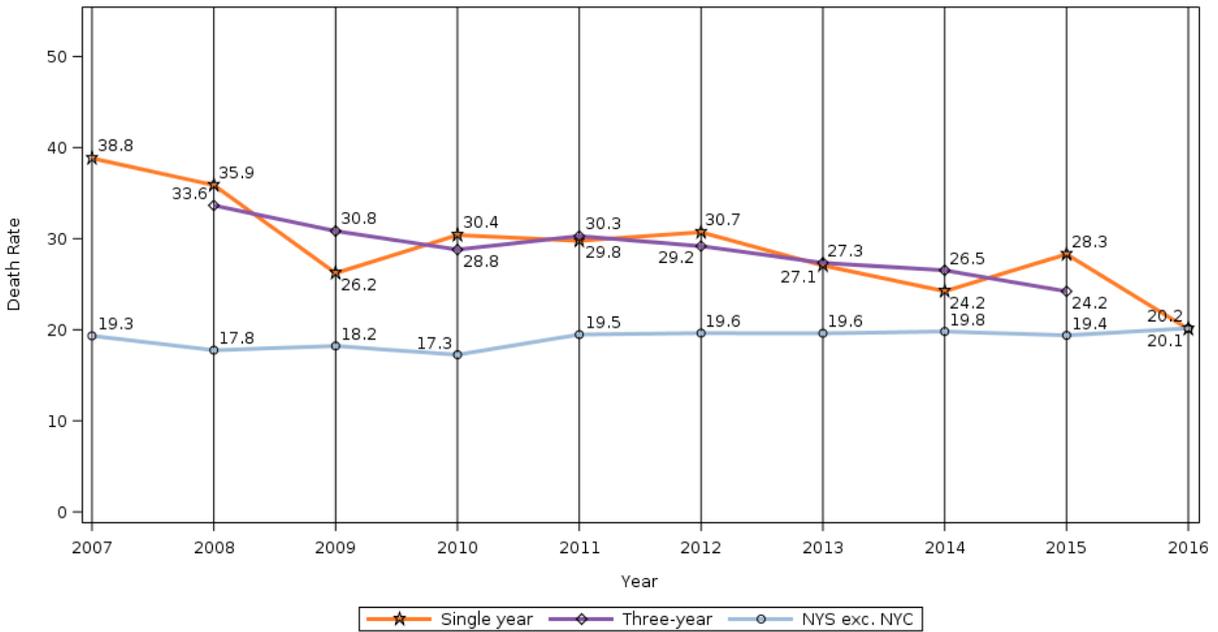


Source: NYSDOH Community Health Indicator Reports: Cirrhosis, Diabetes and Kidney Indicators 2016

A look at diabetes mortality rates per 100,000 show slight fluctuations, but overall decrease from 2007 to 2016 (Figure 52). The rate for Chautauqua County was consistently higher than New York State excluding New York City, until 2016, when the rates are similar (20.1 and 20.2 respectively).

Figure 52. Diabetes Mortality Rate per 100,000, 2007 - 2016

**Chautauqua County - Diabetes mortality rate per 100,000**



Source: NYSDOH Community Health Indicator Reports: Cirrhosis, Diabetes and Kidney indicators 2016

## Promote a Healthy and Safe Environment

“The 2019-2024 State Health Improvement Plan to "Promote a Healthy and Safe Environment" in New York State focuses on five core areas that impact health. These are: the quality of the water we drink and enjoy for recreation; the air we breathe; the food and products we ingest and use; the built environments where we live, work, learn and play; as well as injuries, violence and *occupational health*. "Environment," as used here, incorporates all dimensions of the physical environment that impact health and safety.”

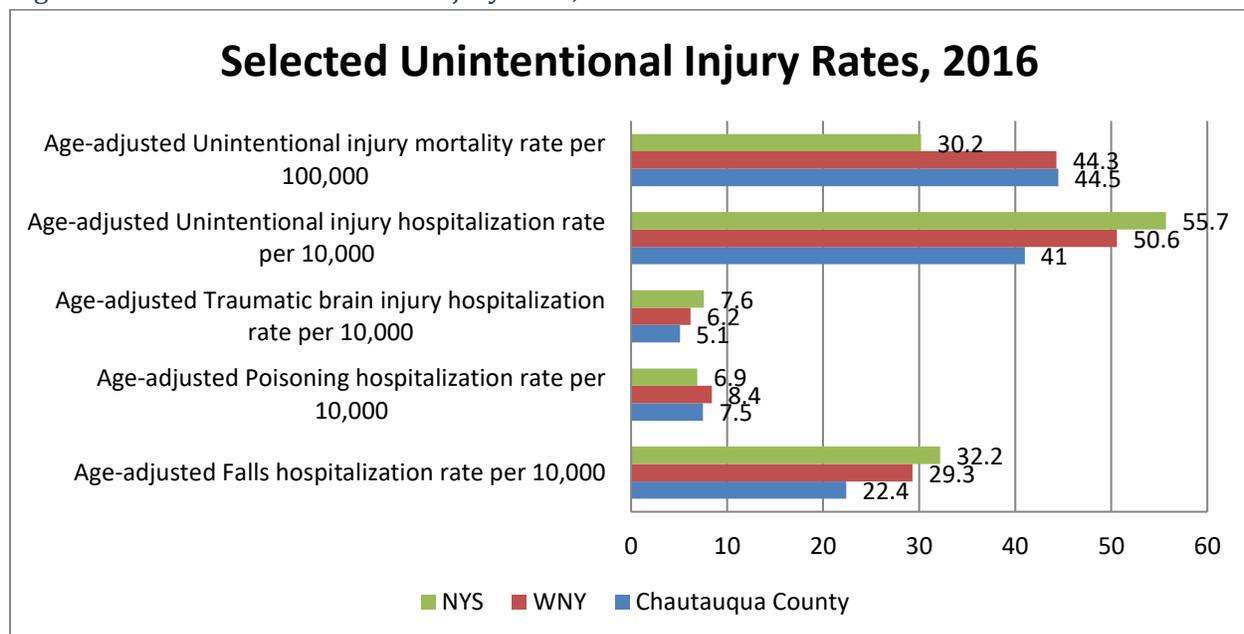
-New York State Prevention Agenda 2019-2024, Promote a Healthy and Safe Environment Action Plan

### Injury

The fifth leading cause of death in Chautauqua County and the third leading in New York State as a whole is unintentional injury. In 2016, sixty-eight deaths occurred due to unintentional injury, resulting in a mortality rate of 51 per 100,000 residents.

The age-adjusted unintentional injury mortality rate for 2016 for Chautauqua County was higher than New York State and WNY, while the corresponding hospitalization rate was lower. Age-adjusted rates of traumatic brain injury and falls hospitalizations were also lower in Chautauqua County during 2016. Age-adjusted poisoning hospitalization rates in Chautauqua County were lower than WNY, but higher than NYS.

Figure 53. Selected unintentional injury rates, 2016

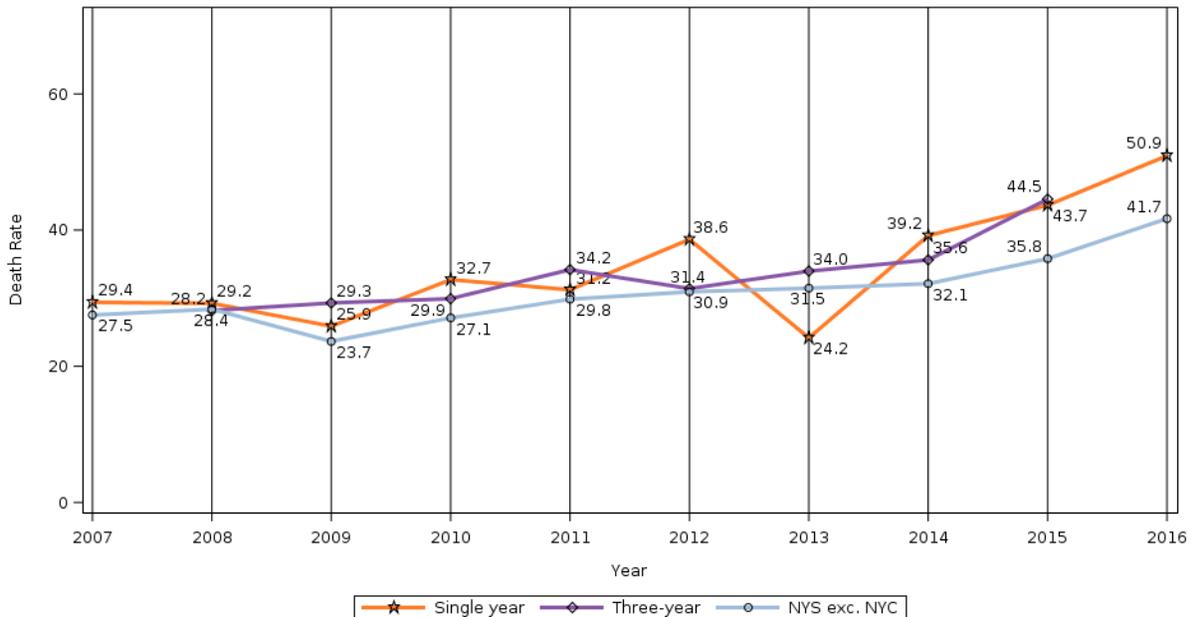


Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2016

The age-adjusted unintentional injury mortality rate per 100,000 has risen for both Chautauqua County and NYS excluding NYC, from 2009 to 2016. Chautauqua County had a significant drop in 2013, but then the rate rose in 2014, to a higher rate than 2012, and has continued to rise.

Figure 54 Age-adjusted unintentional injury mortality rate per 100,000, 2016

**Chautauqua County - Age-adjusted unintentional injury mortality rate per 100,000**

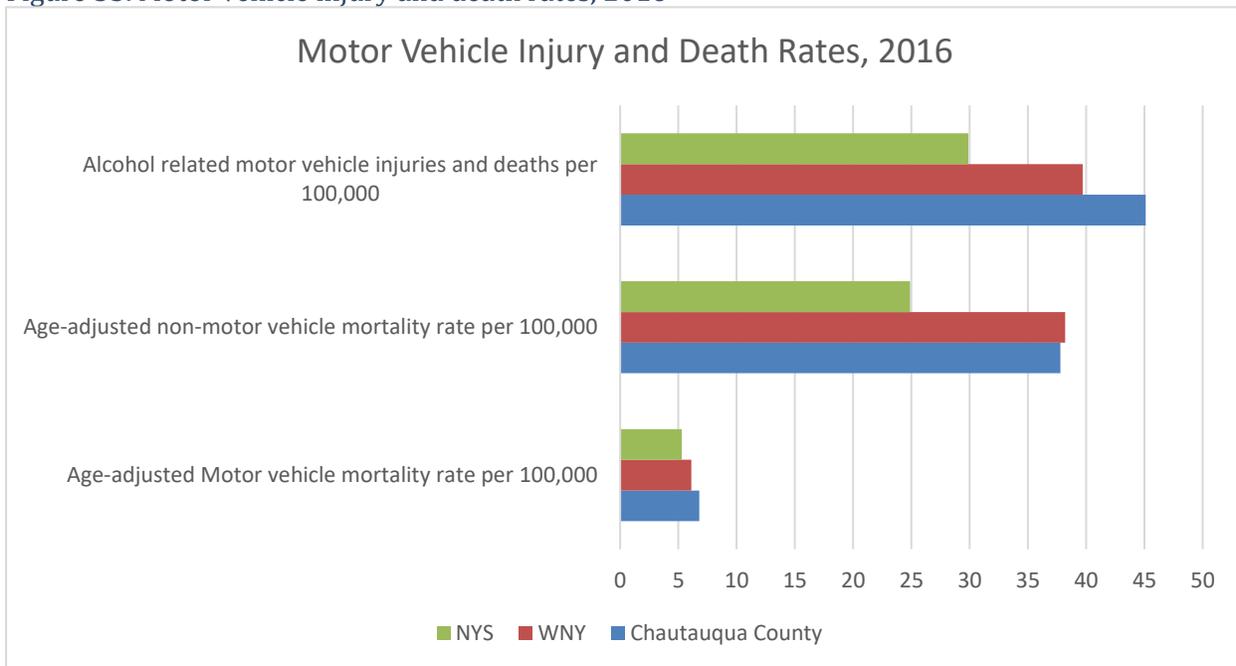


Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2016

Alcohol-related motor vehicle injuries and deaths per 100,000 were significantly higher in Chautauqua County (51.1) than New York State (34.8) in 2009-2011, and just slightly higher than New York State excluding New York City (47.8). The age-adjusted motor vehicle mortality rate saw the same pattern, with a rate of 10.8 deaths per 100,000 in Chautauqua County.

While alcohol-related motor vehicle injuries and deaths were greater in Chautauqua County than NYS and WNY, a look at the rate over time shows a discernable downward trend (Figure 56). Of interest is the increase in age-adjusted non-motor vehicle mortality rates (all injury-related deaths that did not involve motor vehicles), in both Chautauqua County and NYS, over time (Figure 57).

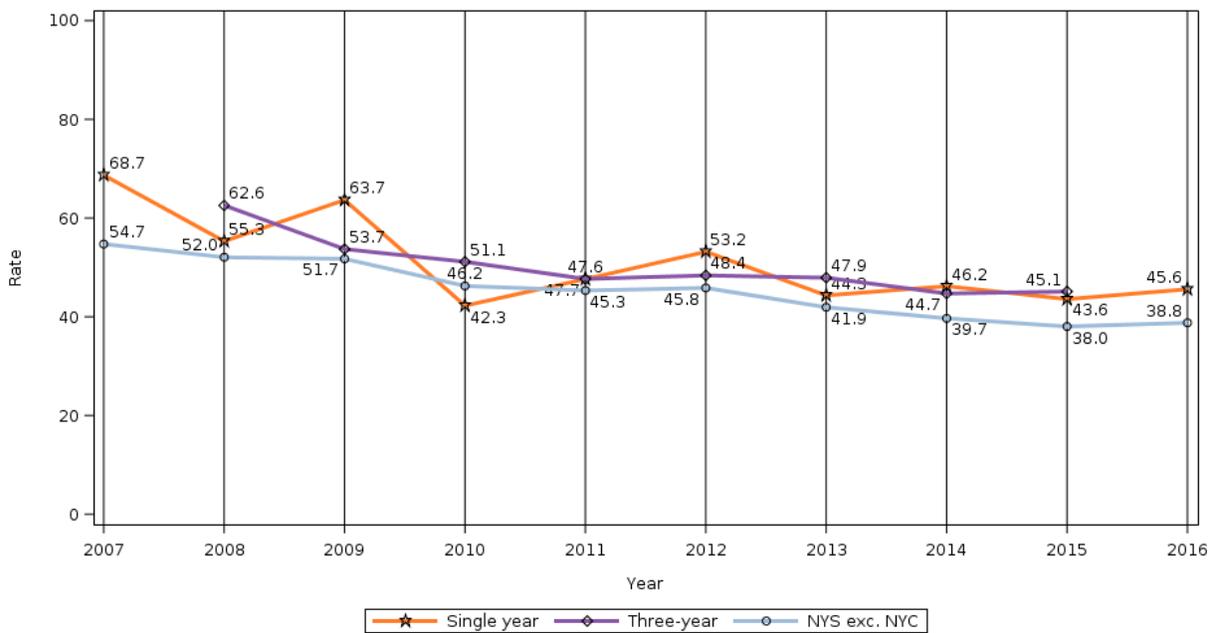
Figure 55. Motor vehicle injury and death rates, 2016



Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2016

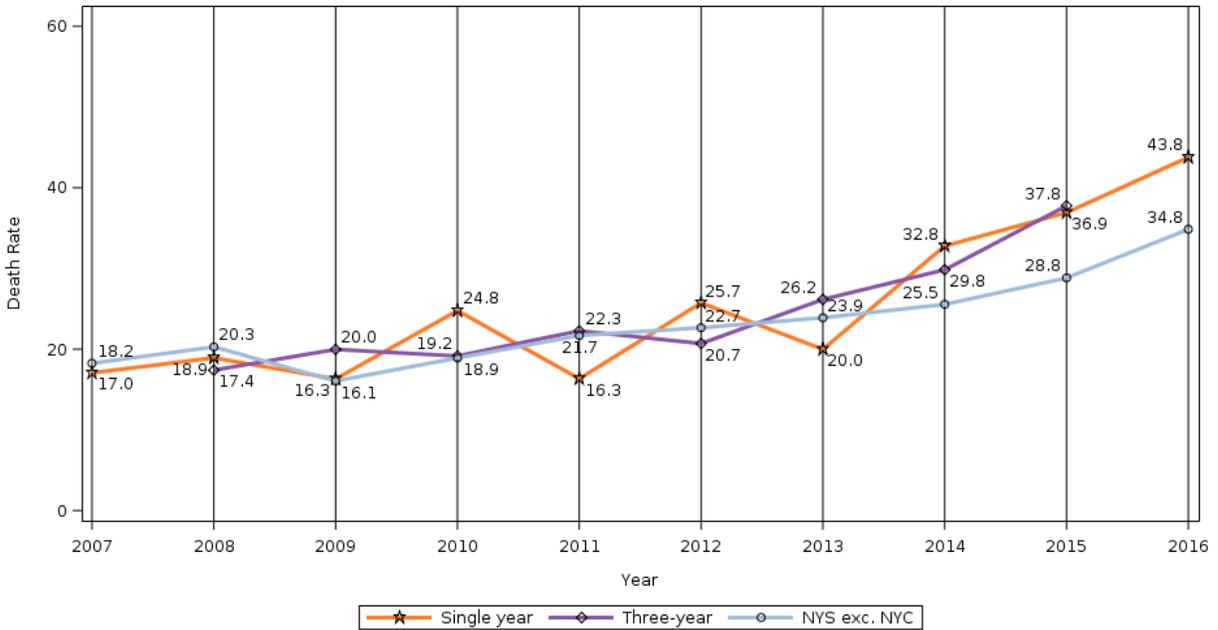
Figure 56. Alcohol related motor vehicle injury and death rate per 100,000, 2016

**Chautauqua County - Alcohol related motor vehicle injuries and deaths per 100,000**



Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2016

Figure 57. Age adjusted non-motor vehicle mortality rate per 100,000, 2016  
**Chautauqua County - Age-adjusted non-motor vehicle mortality rate per 100,000**

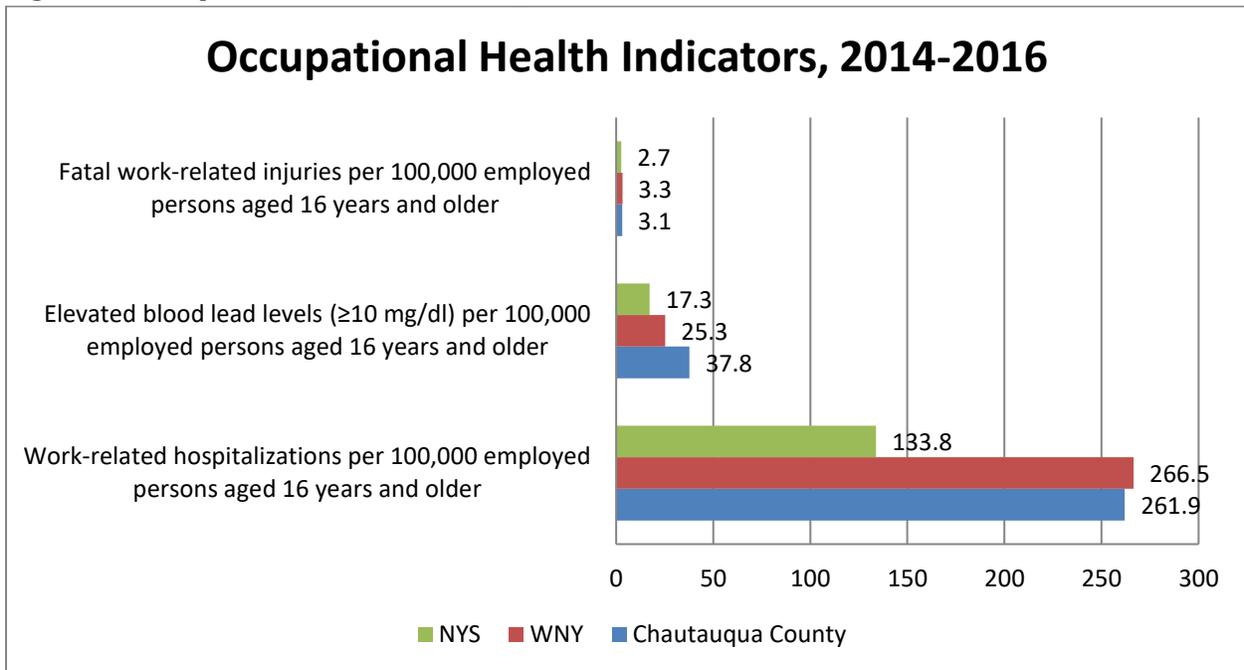


Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2016

### Occupational Health Indicators

Occupational health indicators provided by the NYSDOH Community Health Indicator Reports for Chautauqua County and state/regional comparisons 2014-2016 are presented in Figure 58. Fatal work-related injuries were very low at 3.1 deaths per 100,000 employed persons aged 16 years and older. Elevated blood lead levels were higher in Chautauqua County than NYS and WNY. The rate of work-related hospitalizations per 100,000 employed persons ages 16 years and older was higher at 261.9 in Chautauqua County than New York State (133.8) but lower than the WNY rate of 266.5. In total, there were 423 work-related hospitalizations in Chautauqua County for workers ages 16 and older from 2014-2016. This rate has dropped markedly from a rate of 514.1 in 2007, although it has been consistently higher than NYS as seen in Figure 59.

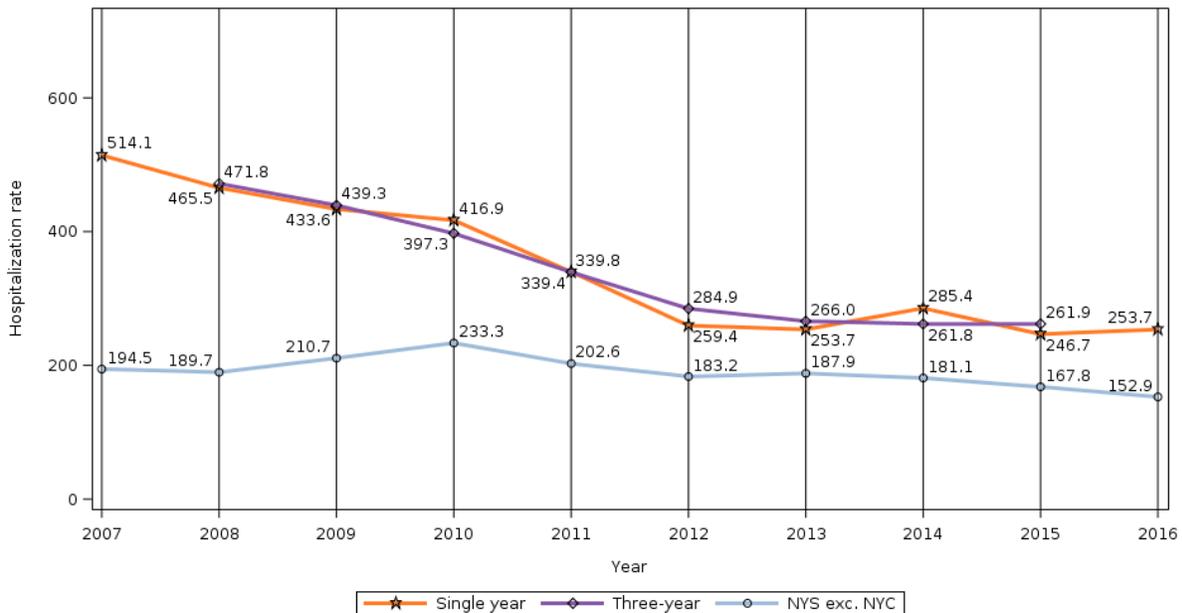
Figure 58. Occupational health indicators, 2014-2016



Source: NYSDOH Community Health Indicator Reports: Occupational Health Indicators 2014-2016

Figure 59. Chautauqua County work-related hospitalizations per 100,000 employed persons ages 16 and older, 2007-2016

**Chautauqua County - Work-related hospitalizations per 100,000 employed persons aged 16 years and older**

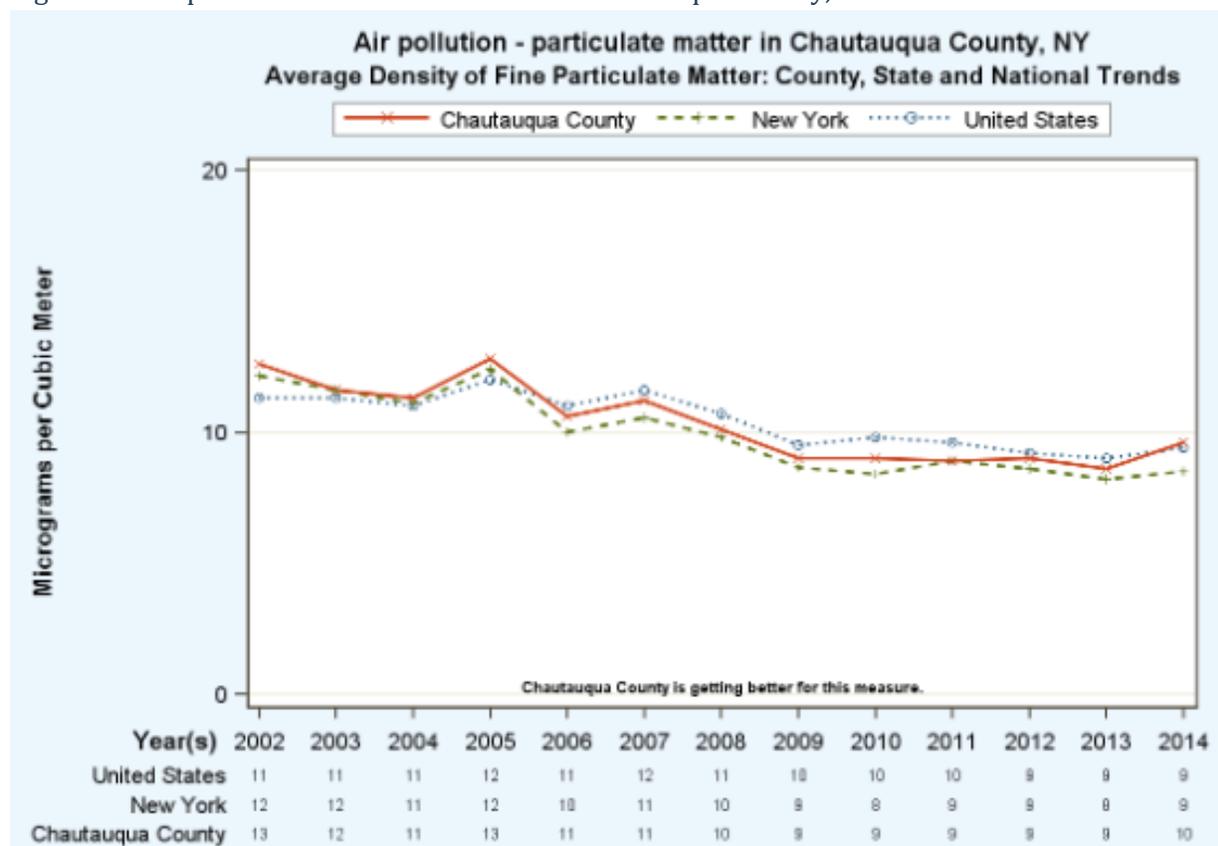


Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2014-2016

## Respiratory Disease

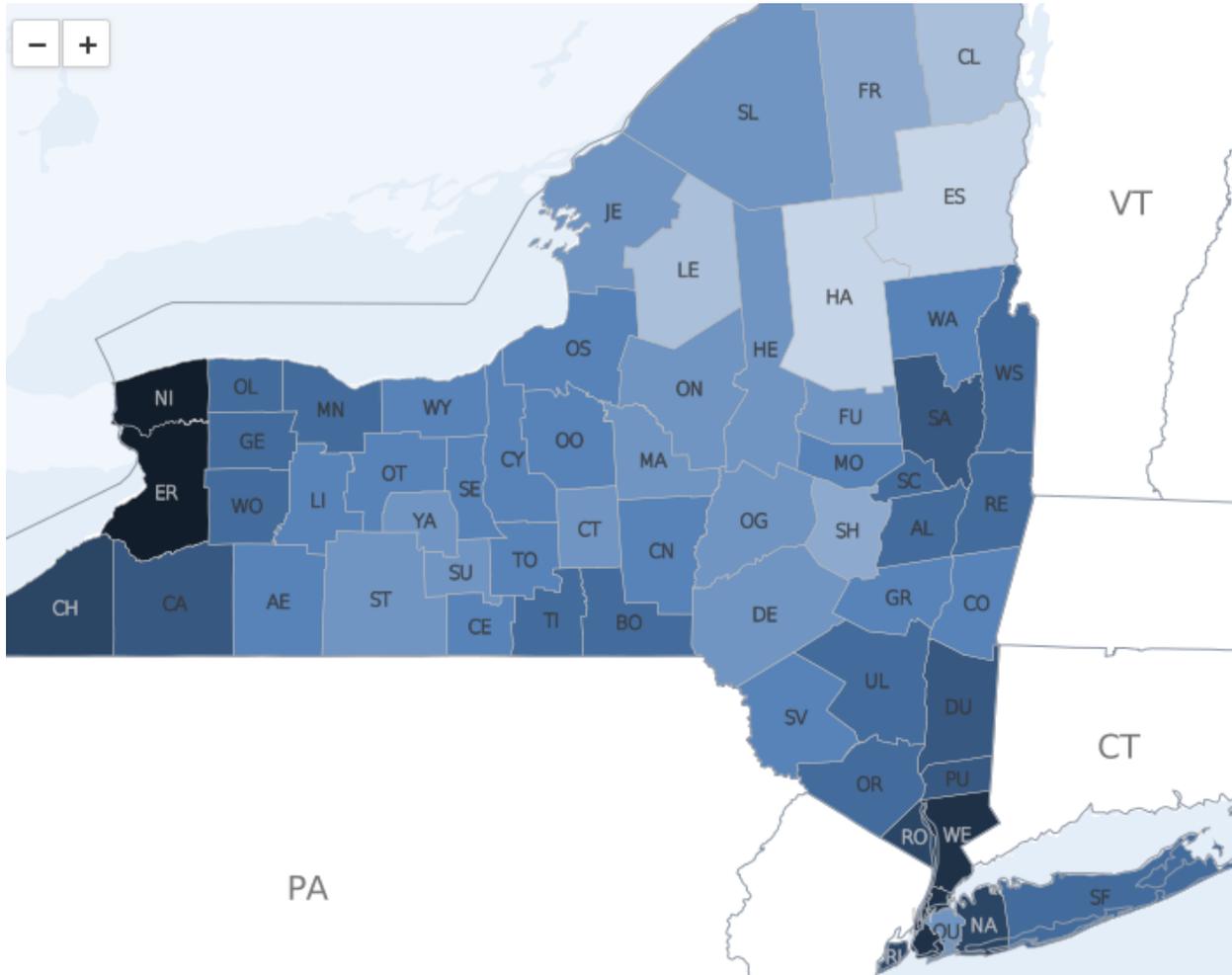
CDC WONDER Environmental Data provides measures of Outdoor Air Quality- Fine Particulate Matter. The County Health Rankings website provides a comparison of daily fine particulate matter with an aerodynamic diameter less than 2.5 micrometers (PM2.5) ( $\mu\text{g}/\text{m}^3$ ) at the county level across the United States. Negative health outcomes of ambient air pollution include decreased lung function, asthma, chronic bronchitis, and other pulmonary issues. According to the County Rankings, in 2014, average daily PM2.5 for Chautauqua County was measured at 9.6. During the same time period, the NYS average was 8.5. As Figure 60 illustrates, Chautauqua County has seen improvements in this measure. With daily averages ranging 8.5 - 11, all eight counties in Western New York are equal to or above the NYS average (Map 8).

Figure 60. Air pollution- Particulate Matter in Chautauqua County, 2002-2014



Source: County Health Rankings, Chautauqua County, 2019

Map 8. Air Pollution- Particulate Matter, 2014



Source: County Health Rankings, Chautauqua County, 2019

The third leading cause of death in Chautauqua County in 2016 was Chronic Lower Respiratory Disease (CLRD) with a total of 82 deaths at a rate of 44 deaths per 100,000 residents. Detailed statistics of respiratory disease in Chautauqua County begins on page 66.

## Promote Healthy Women, Infants, and Children

"Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system." - Healthy People 2020

"The health of women, infants, children, and their families is fundamental to population health. This Prevention Agenda priority aligns directly with the Maternal and Child Health Services Block Grant (Title V) Program, the core federal and state public health program for promoting the health and well-being of the nation's mothers, infants, and children, including children and youth with special health care needs, and their families.

Mirroring NY's Title V action plan, the Prevention Agenda Healthy Women, Infants, and Children (HWIC) priority focuses on health outcomes in three focus areas: Maternal and Women's Health, Perinatal and Infant Health, and Child and Adolescent Health, including children with special health care needs (CSHCN).

In addition, the HWIC plan includes a fourth cross-cutting focus area on social determinants of health and health equity, intended to address the entire MCH life course."

-New York State Prevention Agenda 2019-2024, Promote Healthy Women, Infants, and Children Action Plan

## Births

According to NYS Vital Statistics Tables, there were 4,249 births (an average of 1,416 births per year) to Chautauqua County mothers during the period 2014-2016, resulting in a crude birth rate of 10.8 births per 1,000 population (NYSDOH Community Health Indicator Reports). The fertility rate during the same time period was 60.8 births per 1,000 females ages 15-44, slightly higher than the New York State rate of 57.2. Of all births 2014-2016, 1,660 (39.1%) were first births and 127 (3%) were multiple births.

Of all births, 1,170 (82%) of babies were white, 181 (12.8%) were Hispanic, 19 (1.3%) were black or African American, and less than 1% were listed as Asian or Pacific Islander or were some other race.

## Pregnancy, Fertility, and Abortions

Table 20 displays pregnancy and fertility rates for selected age groups in Chautauqua County, Western New York, and New York State as a whole for the time period 2014-2016. While Chautauqua County pregnancy rates are lower than both WNY and NYS for all age categories except for ages 15-17 and ages 15-19, all category fertility rates are higher than the other

geographies. This trend is consistent with the discrepancy in abortion ratios across these geographies, where Chautauqua County has significantly fewer abortions.

Table 20. Pregnancy and fertility rates for women of selected age groups, 2014-2016

Age Group	Pregnancy Rates			Fertility Rates		
	Chautauqua County	WNY	NYS	Chautauqua County	WNY	NYS
All Ages	70.4	73.6	83.8	60.8	57.7	58.5
Ages 10-14	0.4	0.6	0.6	0.4	0.2	0.2
Ages 15-17	15.9	14	15.1	12.8	8.7	6.6
Ages 15-19	30.4	28.8	29.8	25.2	18.5	14.6
Ages 18-19	46.3	48.8	50.1	38.8	31.9	25.6

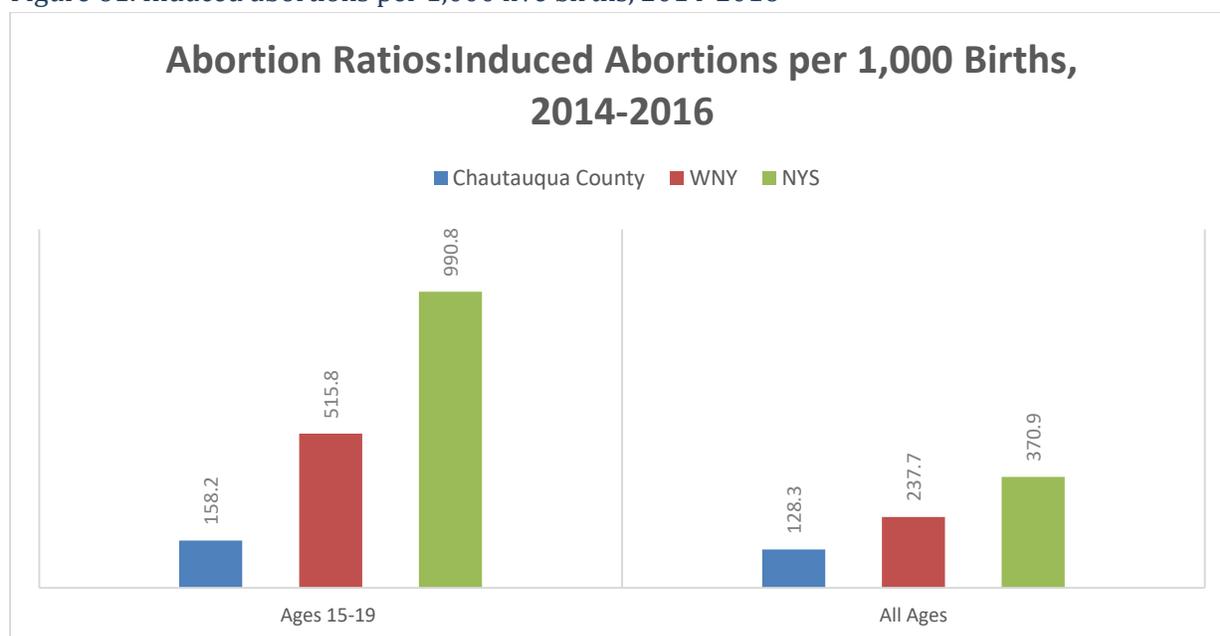
Pregnancy rate per 1,000 (all pregnancies/female 15-44 years)

Fertility rate per 1,000 (births to women in selected age group/ all women in selected age group)

Source: NYSDOH Family Planning/Natality Indicators 2014-2016

Abortion ratios, or the number of induced abortions per 1,000 live births, are significantly lower in Chautauqua County than Western New York and New York State as a whole. During the time period 2014-2016, there were 128.3 induced abortions for every 1,000 births in Chautauqua County; this ratio is nearly three times less than New York State’s ratio of 370.9. Among women ages 15-19 years old, there were 158.2 abortions for every 1,000 births in Chautauqua County; this ratio is over six times less than New York State’s ratio of 990.8. Chautauqua County’s ratios are also lower than WNY for both age categories.

Figure 61. Induced abortions per 1,000 live births, 2014-2016



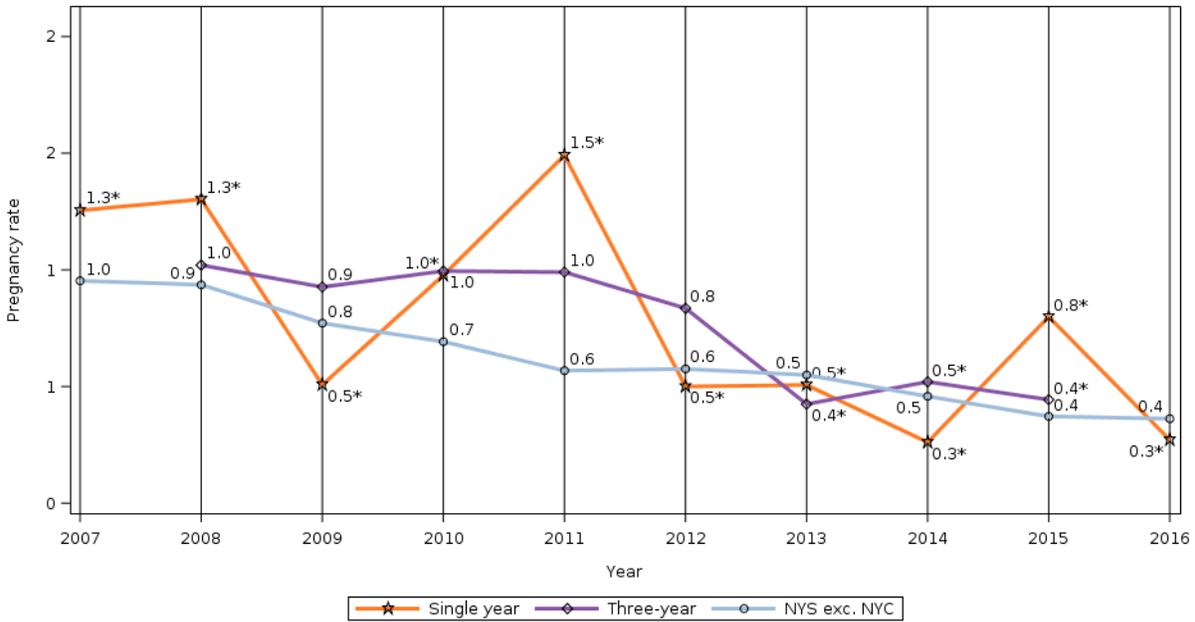
Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2014-2016

### Teen Pregnancies

The following figures demonstrate the time trends in teenage pregnancy age groups from 2007 to 2016. Rates for the 10-14 age group show more fluctuation than the other age groups because the number of pregnancies is very low. These rates are unstable because there were fewer than ten cases.

Figure 62. Chautauqua County Teen Pregnancy Rate per 1,000, ages 10-14, 2007-2016

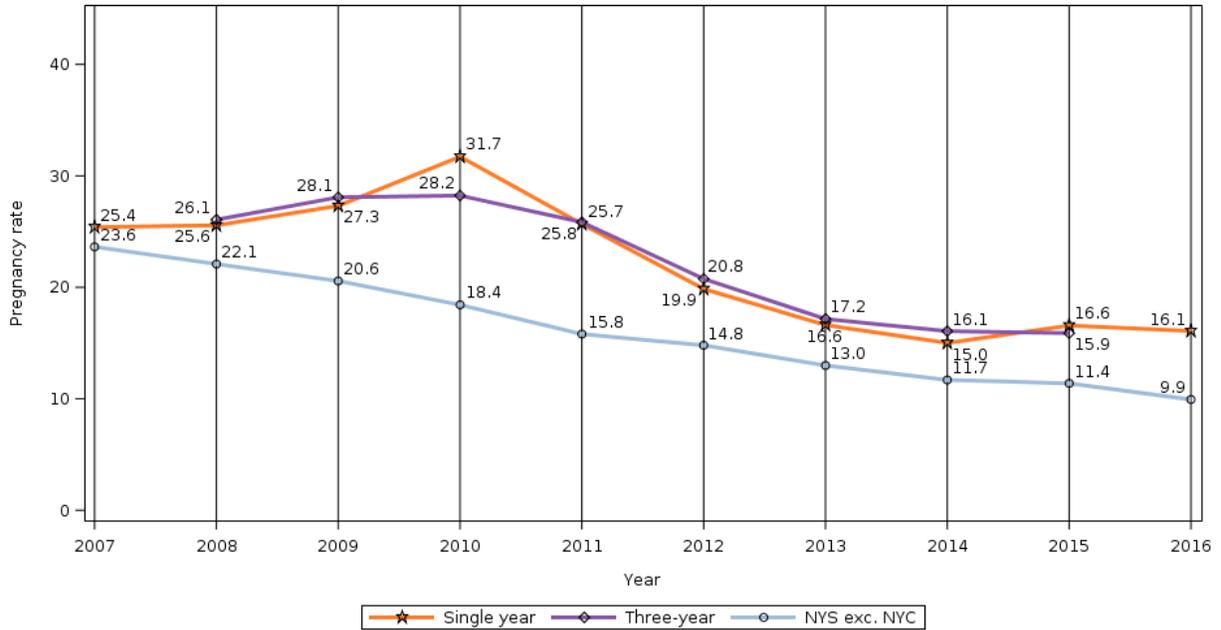
#### Chautauqua County - Teen pregnancy rate per 1,000 females aged 10-14 years



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2014-2016

From 2014 to 2016, the rate of pregnancy among females ages 15-17 was 28.1 per 1,000 women in the same age group. The figures below show a steady decrease beginning in 2010 for Chautauqua County, and a continual decrease since 2007 for New York State exc. New York City.

Figure 63. Chautauqua County Teen Pregnancy Rate per 1,000, ages 15-17, 2014-2016  
**Chautauqua County - Teen pregnancy rate per 1,000 females aged 15-17 years**

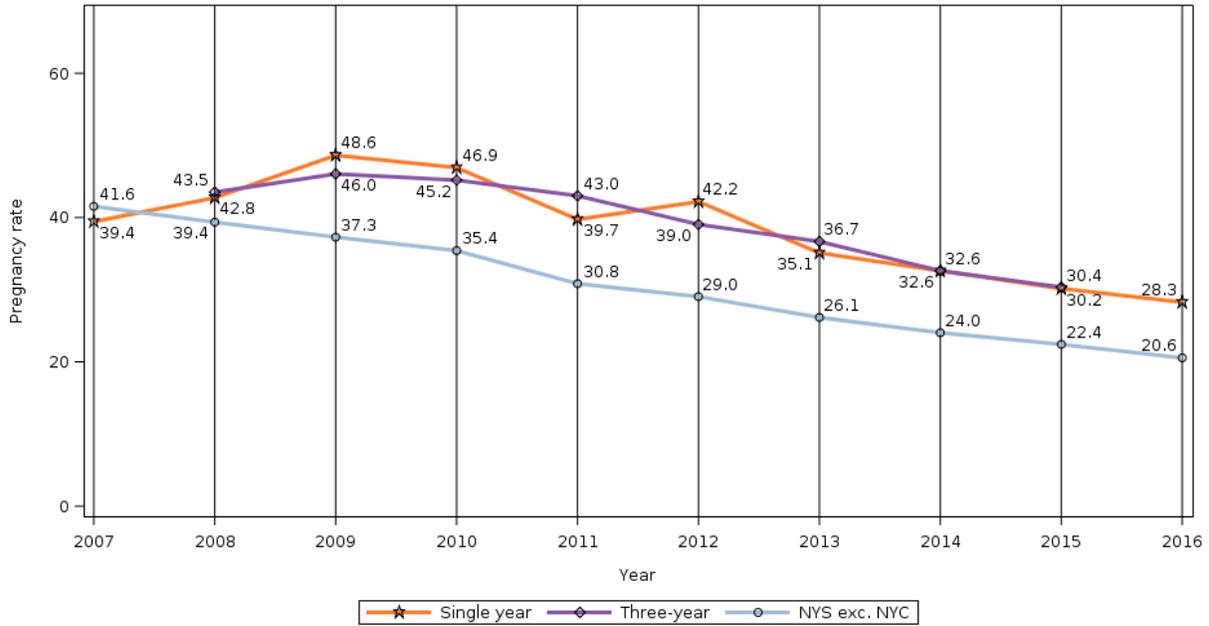


Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2014-2016

Teen pregnancy rates among females ages 15-19 (Figure 64) and ages 18-19 (Figure 65) decreased slowly beginning in 2009, with a one-year upward fluctuation in 2012.

Figure 64. Chautauqua County teen pregnancy rate per 1,000, ages 15-19, 2014-2016

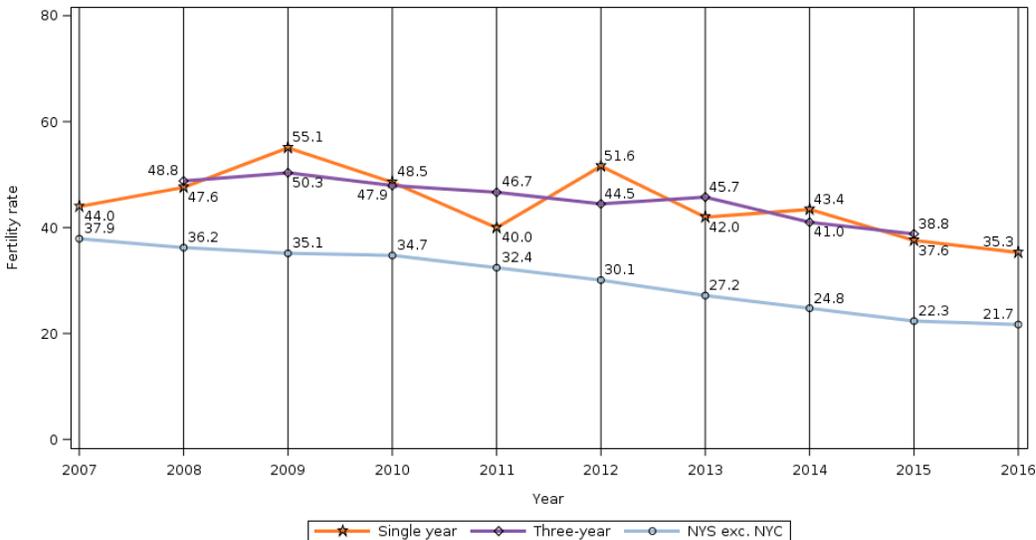
**Chautauqua County - Teen pregnancy rate per 1,000 females aged 15-19 years**



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2014-2016

Figure 65. Chautauqua County teen pregnancy rate per 1,000, ages 18-19, 2014-2016

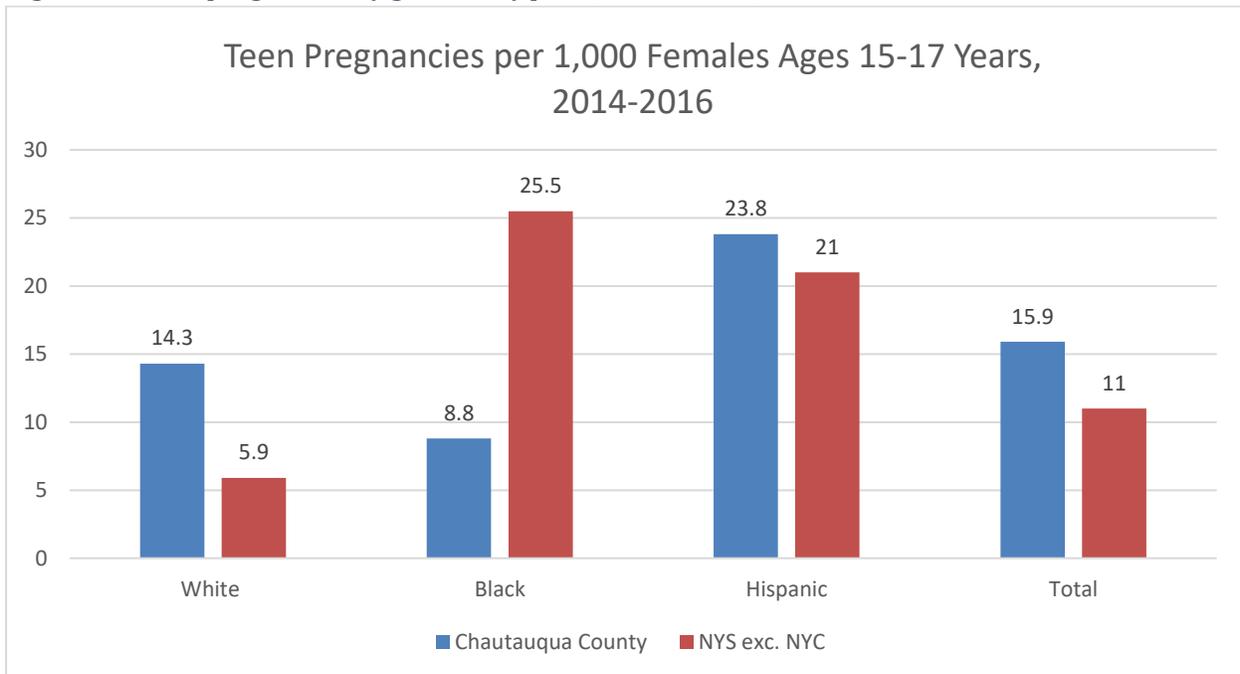
**Chautauqua County - Teen fertility rate per 1,000 (births to mothers aged 18-19 years/female population aged 18-19 years)**



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2014-2016

From 2014 to 2016, the teen pregnancy rates per 1,000 for Hispanic women ages 15-17 were higher than those of Black and White women in Chautauqua County. Black women ages 15-17 in New York State excluding New York City had the highest pregnancy rates per 1,000, followed by Hispanics and Whites. These figures are presented in Figure 66 below.

Figure 66. Teen pregnancies (ages 15-17) per 1,000 females, 2014-2016



Source: NYSDOH Vital Statistics, 2014-2016

The percentage of births within 18 months of a previous live birth 2014-2016 is higher in Chautauqua County as compared to both New York State and Western New York. During that time period, 39% of births were within 18 months of a previous live birth in Chautauqua County. In New York State, this figure was 31.2%, and 36.6% for Western New York (NYSDOH Family Planning/Natality Indicators 2014-2016).

### Prenatal Care

As indicated by the NYSDOH Maternal and Infant Health Tracking indicators in 2014-2016, 6.6% of Chautauqua County mothers initiated prenatal care in the third trimester or did not seek prenatal care at all.

NYSDOH Maternal and Infant Health Indicators indicate that from 2014-2016, 68.2% of mothers who gave birth sought out prenatal care during the first trimester. This figure is lower than the NYS rate of 75.2% and the WNY rate of 73.3%. The percentage of mothers seeking out prenatal care during the third trimester is significantly higher than the rest of the state at 6.6%. Additionally, only 74.5% of births during 2014-2016 were designated as having adequate prenatal care. The rate of prenatal care use during the first trimester is significantly greater among mothers who participate in the WIC program with 83.1% during 2009-2011.

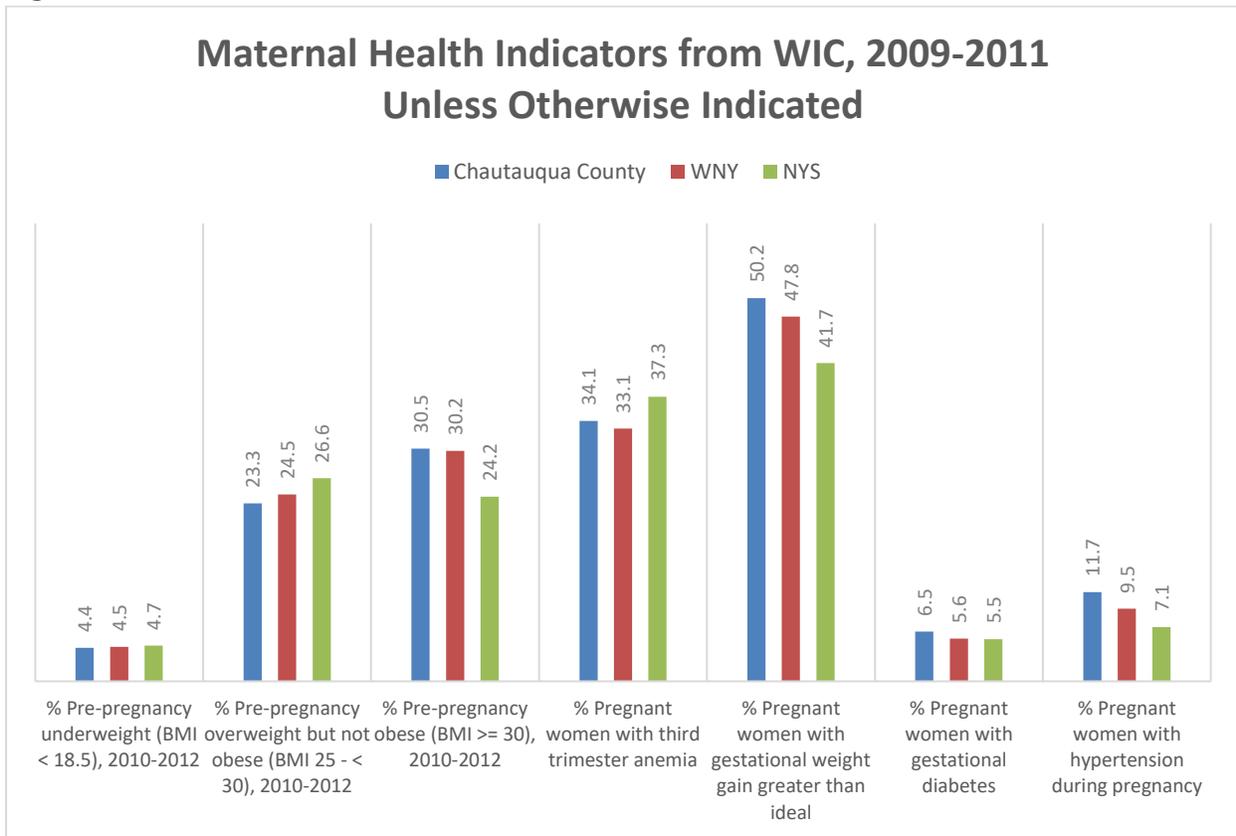
Table 21. Prenatal care indicators for Chautauqua County, 2014-2016

	<i>Chautauqua County</i>	<i>WNY</i>	<i>NYS</i>
% of births with early (1st trimester) prenatal care	68.2	73.3	75.2
% of births with late (3rd trimester) or no prenatal care	6.6	5.4	5.6
% of births with adequate prenatal care (Kotelchuck)	74.5	71.3	74
% of pregnant women in WIC with early (1st trimester) prenatal care	83.1	89.2	86.5

Source: NYSDOH Maternal and Infant Health Indicators 2014-2016

According to figures from the Women, Infants, and Children Supplemental Nutrition Program (WIC), there is a smaller percentage of women in Chautauqua County who are pre-pregnancy underweight or pre-pregnancy overweight than in WNY or NYS. However, the pre-pregnancy obese rate is higher in Chautauqua County than in both WNY and NYS. Weight gain greater than ideal was measured in 50.2% of pregnant women in Chautauqua County, compared to 47.8 in WNY and 41.7 in NYS. In addition, gestational diabetes, and hypertension during pregnancy are issues in Chautauqua County at higher percentages than in the comparison areas. (Figure 67).

Figure 67. Maternal Health Indicators from WIC

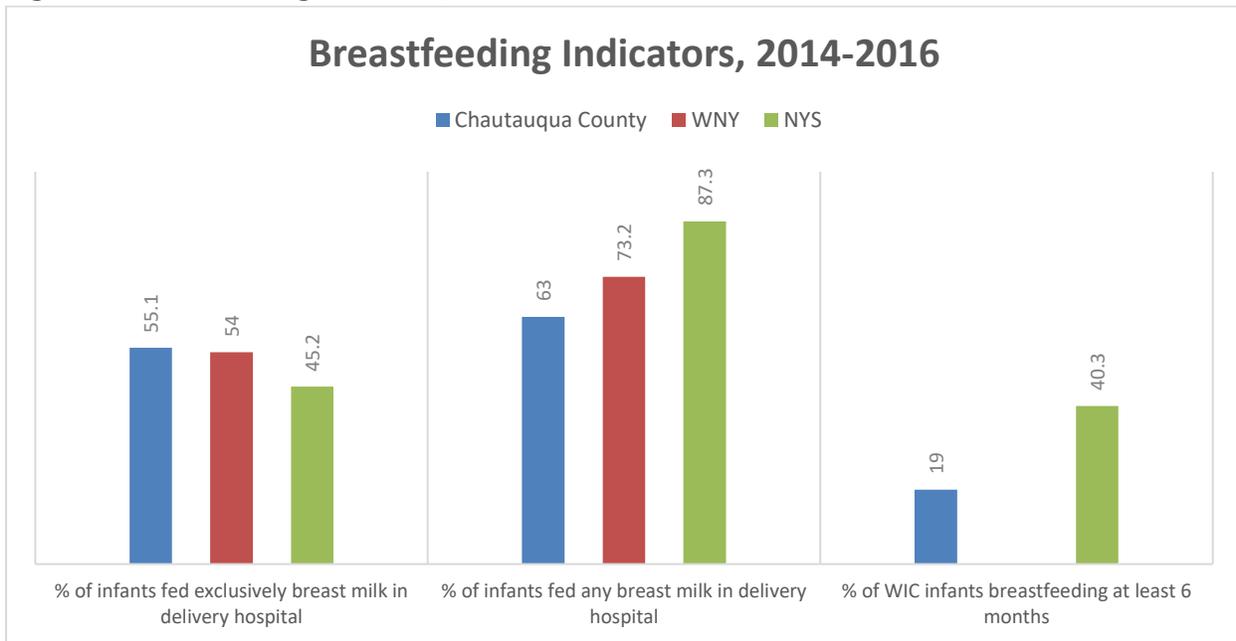


Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2009-2012

### Breastfeeding

A greater percentage of infants are exclusively fed breast milk in delivery hospital in Chautauqua County (55.1%) than Western New York (54%) and New York State as a whole (45.2%). However, the percentage of infants who were fed any breast milk in the delivery hospital was less in Chautauqua County than the two comparison geographies. The disparity between these entities was much greater when examining the percentage of WIC mothers still breastfeeding their babies at 6 months. As displayed in Figure 68 below, only 19% of WIC mothers in Chautauqua County were breastfeeding at 6 months.

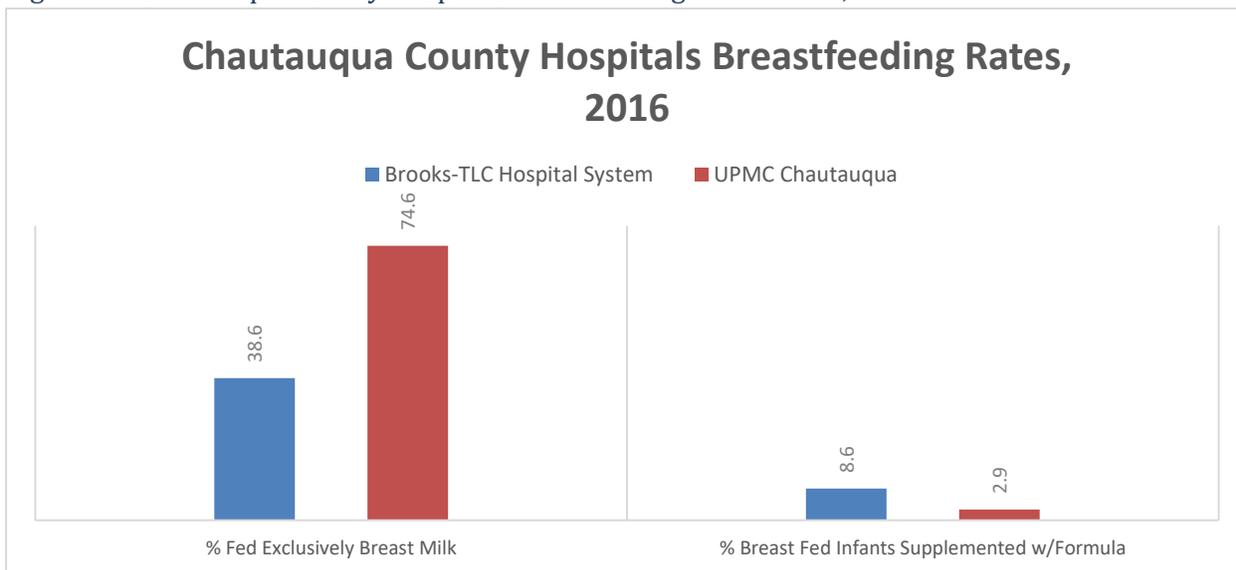
Figure 68. Breastfeeding indicators, 2014-2016



Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2014-2016

Of the two labor and delivery hospitals in Chautauqua County, exclusive breastfeeding in the delivery hospital was less common at Brooks TLC Hospital System than at UPMC Chautauqua (see Figure 69).

Figure 69. Chautauqua County Hospitals Breastfeeding Information, 2016



Source: NYSDOH NYS Health Profiles, Hospital Data

### Low Birthweight

Very low birthweight (less than 1.5 kg) figures were similar among Chautauqua County, Western New York, and New York State during 2014-2016. Low birthweight (less than 2.5 kg) births were slightly less common in Chautauqua County than Western New York, and New York State during the same time frame, but the differences were not significant. No discernable difference was noted among the geographies for percentage of premature births or percentage of births with a 5-minute APGAR score less than 6. These figures are displayed below in Table 22.

Table 22. Low birth weight and prematurity indicators, 2014-2016

	Chautauqua County	WNY	NYS
% very low birthweight (less than 1.5 kg) births	1.1	1.6	1.4
% very low birthweight (less than 1.5kg) singleton births	0.8	1.2	1.0
% low birthweight (less than 2.5 kg) births	7.0	8.1	7.9
% low birthweight (less than 2.5kg) singleton births	5.5	6.2	6
less than 32 weeks gestation	1.4	1.8	1.5
32 - less than 37 weeks gestation	7.2	7.7	7.3
less than 37 weeks gestation	8.6	9.5	8.8
% of births with a 5 minute APGAR less than 6	0.8	0.9	0.7

Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2014-2016

### Newborn Drug-Related Discharges

During data year 2016, Newborns with withdrawal syndrome and/or affected by maternal use of drugs of addiction, rate per 1,000 newborn discharges, were significantly higher in Chautauqua County than statewide comparison groups.

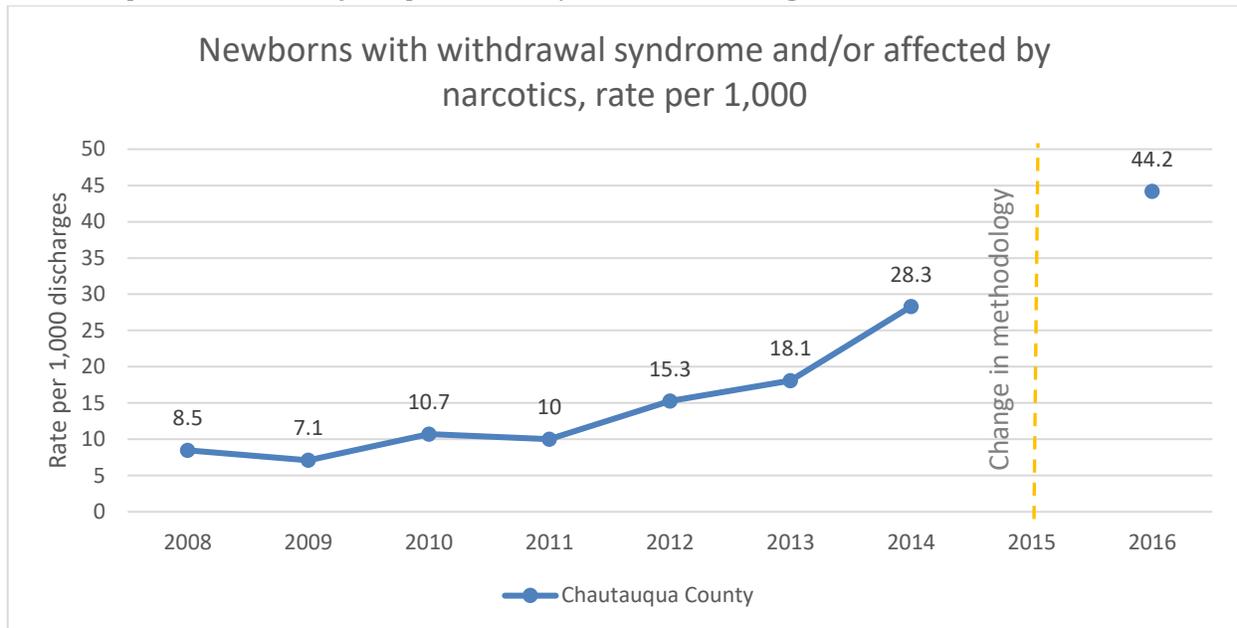
Table 23. Newborns with neonatal withdrawal syndrome and/or affected by maternal use of drugs of addiction, crude rate per 1,000 newborn discharges (any diagnosis), 2016

	Chautauqua County	WNY	NYS
Newborns with withdrawal syndrome and/or affected by narcotics via placenta or breast milk	44.2	29.7	10.1

Source: NYSDOH Opioid Data Dashboard; SPARCS as of August 2017

Methodology for this indicator changed in 2016, but a compilation of data from 2008 to 2014 alongside the 2016 figure for Chautauqua County suggests that the magnitude of this health concern has grown over time. It should be noted that there is no consistent standard for toxicology testing of mothers and babies across New York State. A map of county rates across New York State is available on page 118 in the Promote Well-Being and Prevent Mental and Substance Use Disorders Priority Area.

Figure 70. Newborns with withdrawal syndrome and/or affected by narcotics via placenta or breast milk, rate per 1,000 delivery hospitalizations/newborn discharges



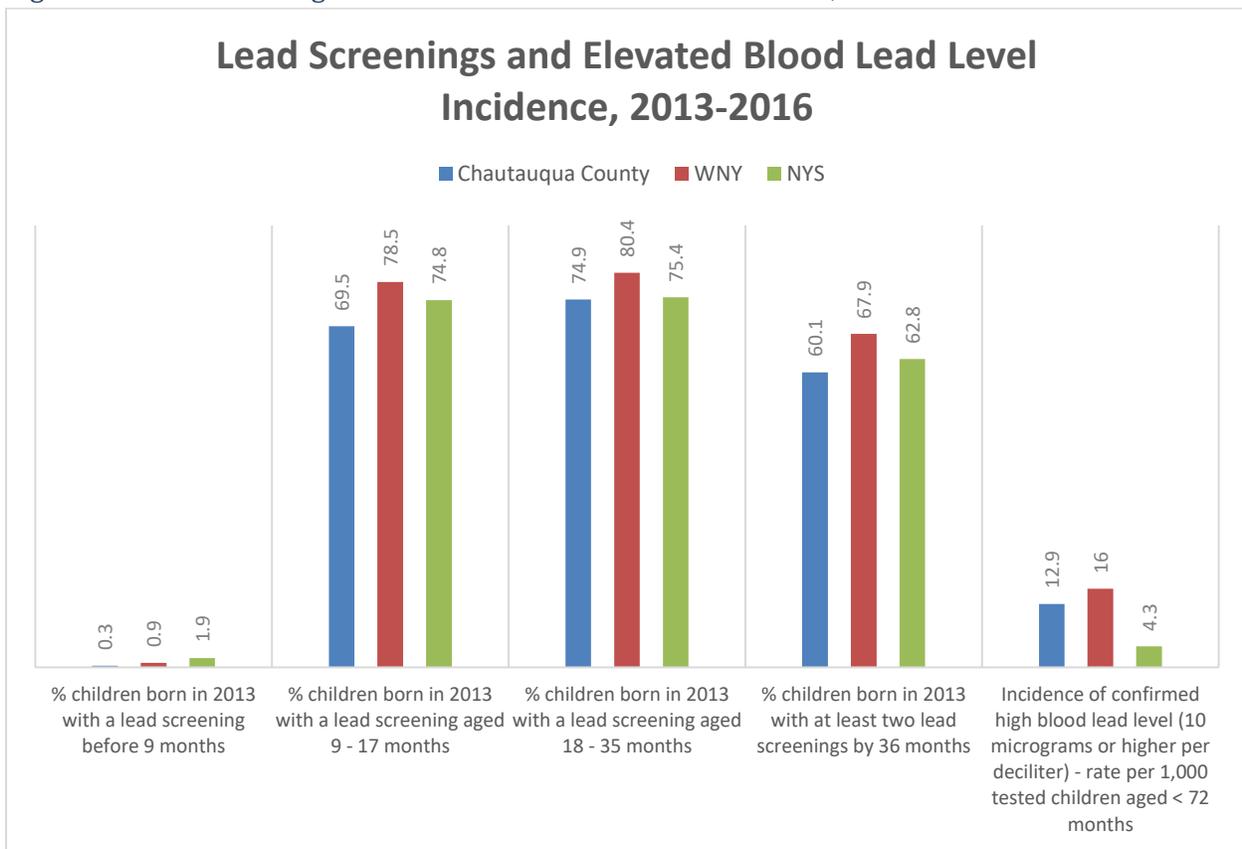
Source: NYSDOH Community Health Indicator Reports: Maternal and Child Health; Opioid Data Dashboard; SPARCS as of August 2017

## Childhood Health

### Childhood Lead Poisoning

As identified in the demographic profile, 70.2% of homes in Chautauqua County were built prior to 1970. Because lead paint is more common in older homes, childhood lead poisoning is a concern in Chautauqua County. Figure 71 displays lead screening and elevated blood lead level figures. The rate of lead screening, aged 9-17 months, was 69.5%, which is lower than both the NYS (74.8%) and the WNY (78.5%) rates. The lead screening rate for children aged 18-35 months, is only slightly lower than NYS, with rates of 74.9 and 75.4 respectively; the WNY percentage rate was higher at 80.4. The percentage of children born in 2013 with at least two lead screenings by 36 months was 60.1 in Chautauqua County, 62.8 in NYS, and 67.9 in WNY. The incidence of a confirmed elevated blood lead levels ( $\geq 10$  mg/dl) among children less than 72 months old was 12.9 per 1,000, which was higher than the New York State rate of 4.3 but lower than the WNY rate of 16.

Figure 71. Lead screenings and elevated blood lead level incidence, 2013-2016

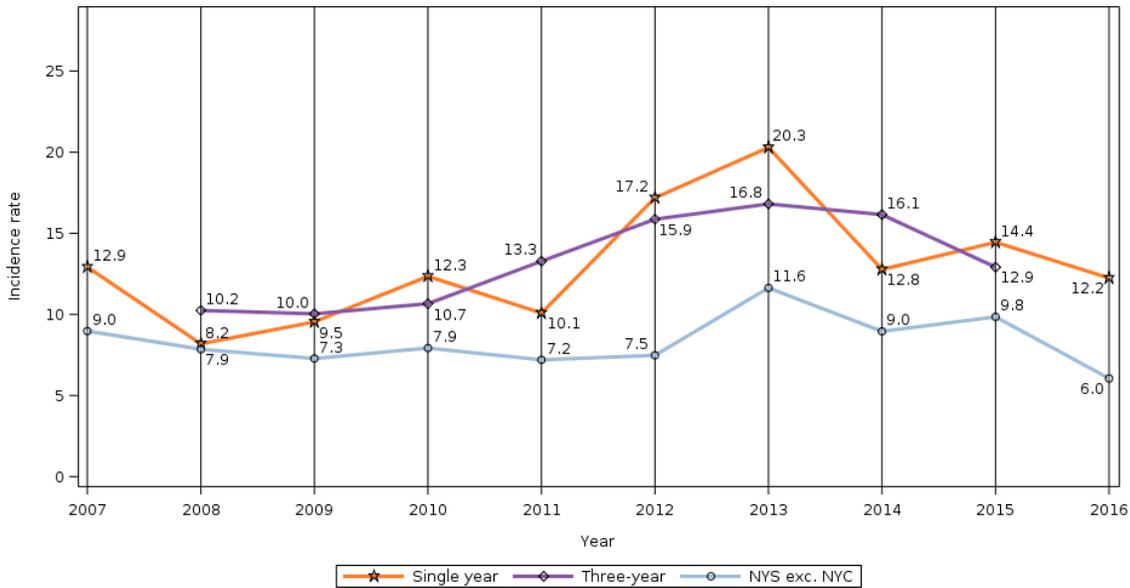


Source: NYSDOH Community Health Indicator Reports: Child and Adolescent Health Indicators; 2013-2016 NYS Child Health Lead Poisoning Prevention Program Data

Figure 72 shows the incidence rate (per 1,000 tested children) of confirmed high blood lead levels among children less than 72 months old from 2007 to 2016. Rates for Chautauqua County and New York State excluding New York City show a rise through 2013 and then a strong downward trend after 2013.

Figure 72. Incidence of confirmed high blood lead level ( $\geq 10$  mg/dl) rate per 1,000 children <72 months old, 2013-2016

**Chautauqua County - Incidence of confirmed high blood lead level (10 micrograms or higher per deciliter)**

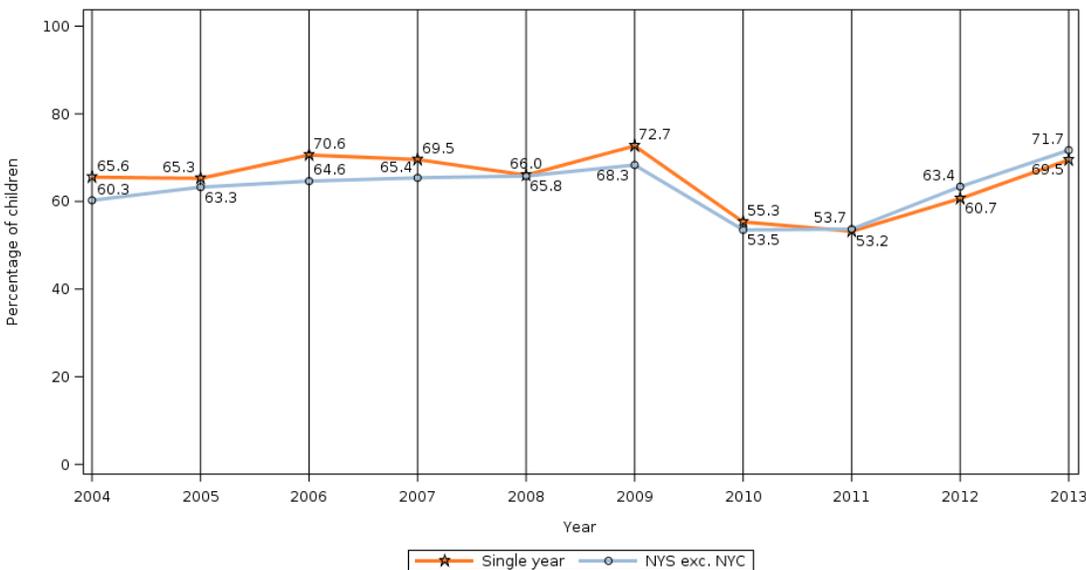


Source: NYSDOH Community Health Indicator Reports: Child and Adolescent Health Indicators; 2013-2016 NYS Child Health Lead Poisoning Prevention Program Data

Chautauqua County has seen significant improvement in children born in 2013 with a lead screening, aged 9-17 months and with at least two lead screenings by 36 months, as shown in the Figures 73 and 74 below.

Figure 73. Incidence of children born in 2013 with a lead screening aged 9-17 months, 2013-2016

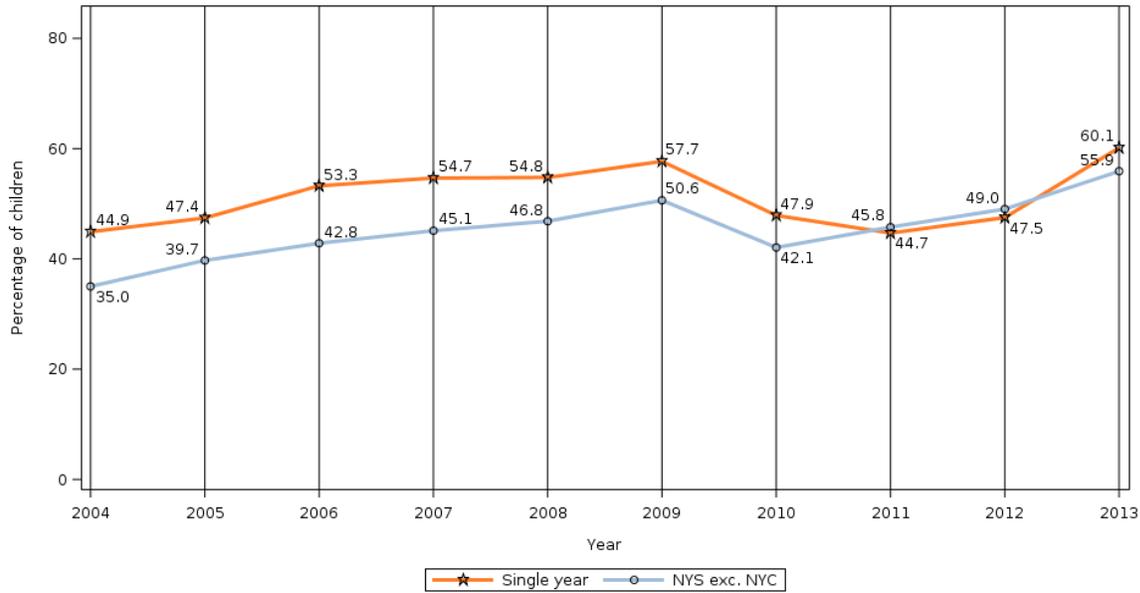
**Chautauqua County - Percentage of children born in 2013 with a lead screening - aged 9-17 months**



Source: NYSDOH Community Health Indicator Reports: Child and Adolescent Health Indicators; 2013-2016 NYS Child Health Lead Poisoning Prevention Program Data

Figure 74. Children Born in 2013 with at Least 2 Lead Screenings by 36 months, 2013-2016

**Chautauqua County - Percentage of children born in 2013 with at least two lead screenings by 36 months**

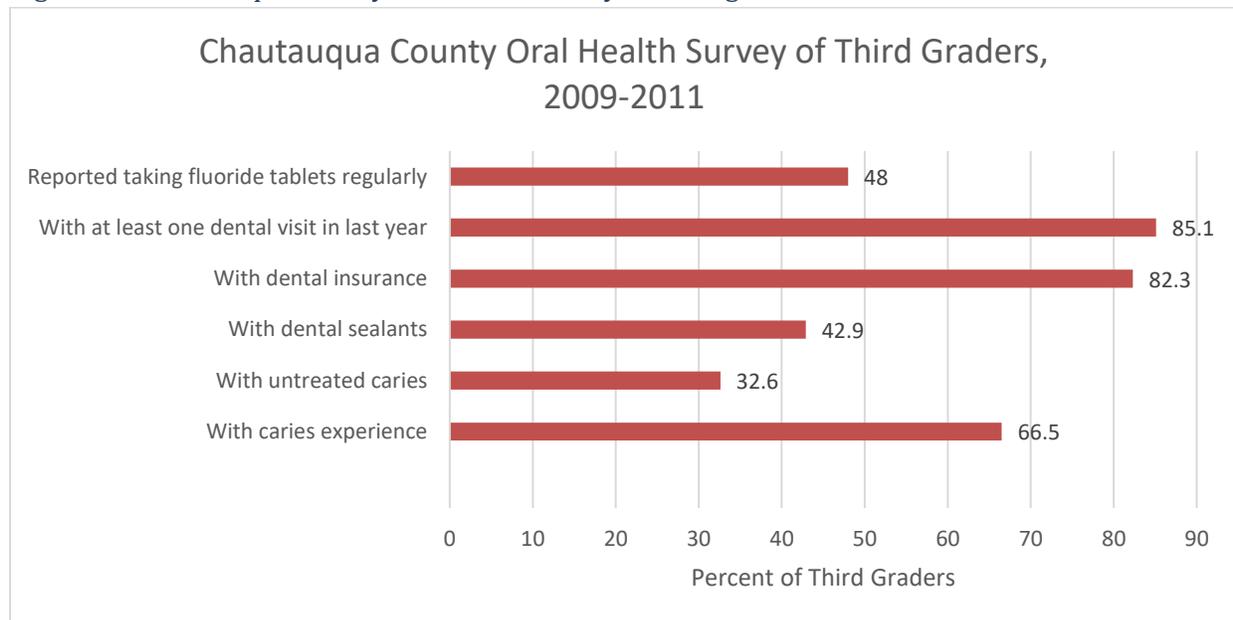


Source: NYSDOH Community Health Indicator Reports: Child and Adolescent Health Indicators; 2013-2016 NYS Child Health Lead Poisoning Prevention Program Data

**Oral Health**

The Oral Health Survey of 3<sup>rd</sup> Grade Children, conducted by the New York State Department of Health, Bureau of Dental Health, from 2009-2011 examined a number of oral health indicators for children. Chautauqua County statistics are available in Figure 75.

Figure 75. Chautauqua County oral health survey of third grade children, 2009-2011



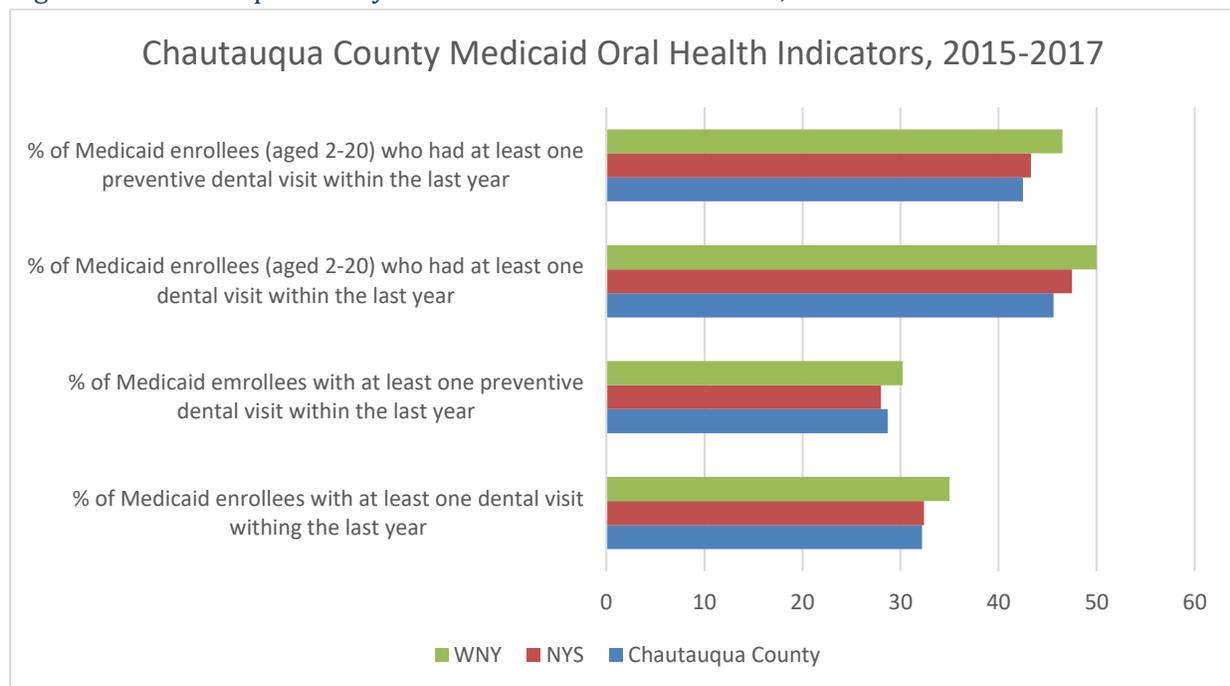
Source: NYSDOH Community Health Indicator Reports: Oral Health Indicators 2009-2011

In 2016, Chautauqua County experienced 182 outpatient visits due to dental caries among children ages 3 to 5 years old. The resulting crude rate was 443.4 per 10,000 3-5 year olds. This rate was significantly higher than the New York State (90) and Western New York (334) rates. (SPARCS data as of December 2017)

According to the New York State eBRFSS, in 2016, at 64.1%, Chautauqua County adults (age-adjusted) were less likely than New York State residents (68.4%) or Western New York residents (71.2%) to have visited a dentist within the past year.

Medicaid dental visit data provided by the New York State Department of Health Oral Health Indicators for Chautauqua County 2015-2017 are presented below. According to Medicaid claims, only 45.6% of Medicaid enrollees in Chautauqua County ages 2-20 years old had at least one dental visit within the past year, which is lower than the NYS and WNY rates; 42.5% of this same population had at least one preventive dental visit within the past year, compared to 43.3% in NYS and 46.5% in WNY. Trends were consistent for Medicaid enrollees of all ages for preventive dental visits (28.7%) and dental visits (32.2%).

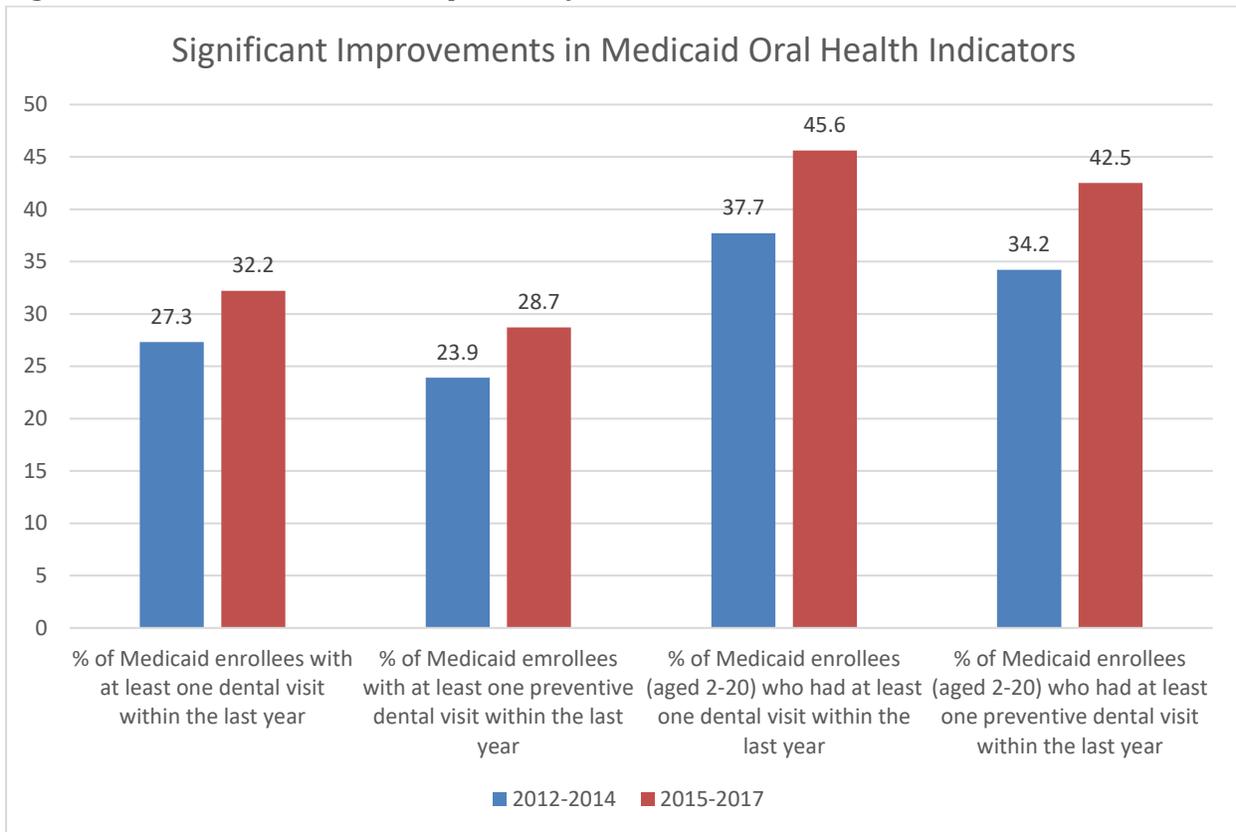
Figure 76. Chautauqua County Medicaid oral health indicators, 2015-2017



Source: NYSDOH Community Health Indicator Reports: Oral Health Indicators 2015-2017

Although still slightly behind NYS and WNY in Medicaid Oral Health Indicators, Chautauqua County has significantly improved in all indicators, as seen in Figure 77.

Figure 77. Recent trend in Chautauqua County Medicaid oral health indicators



Source: NYSDOH Community Health Indicator Reports: Oral Health Indicators 2015-2017

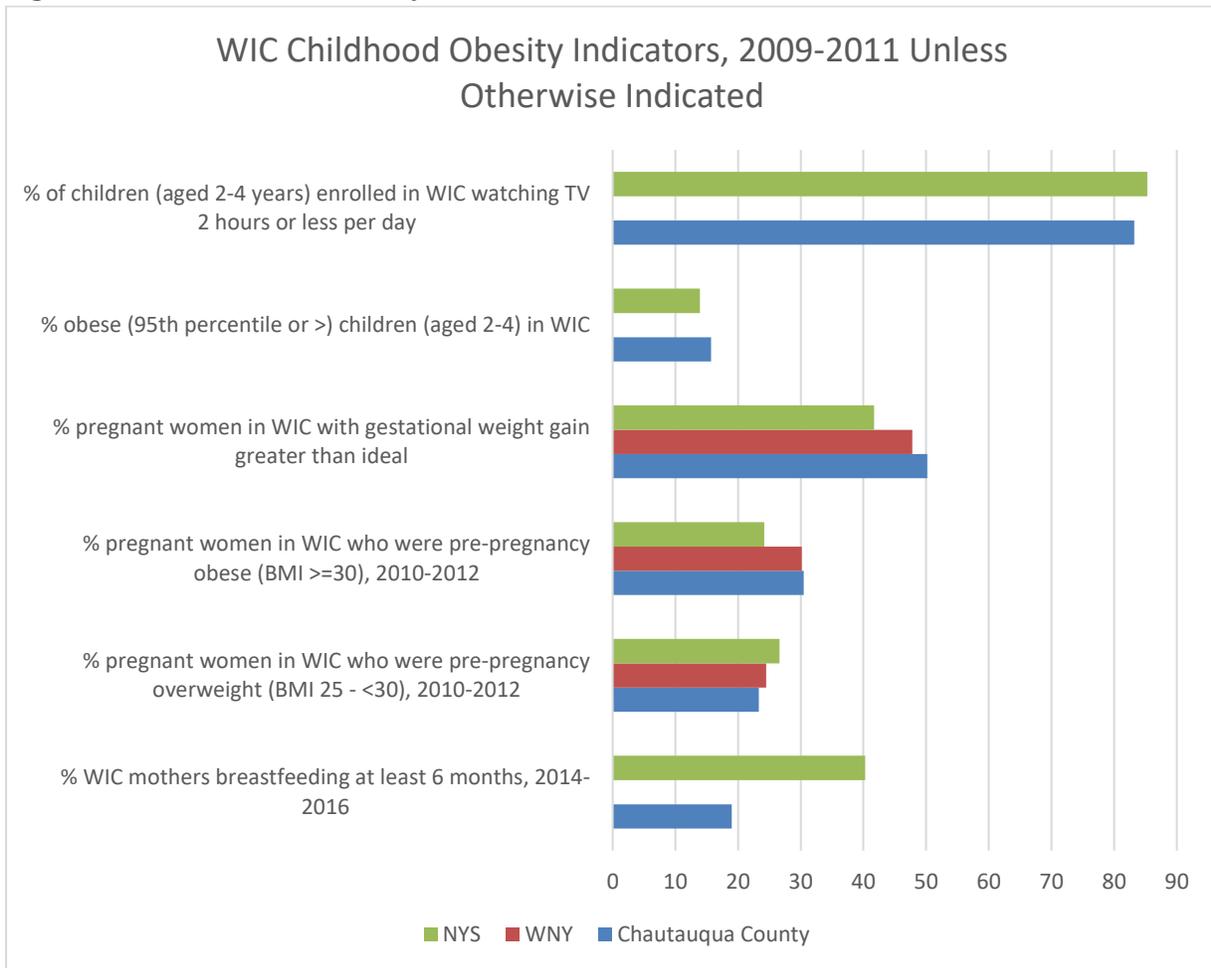
### Childhood Weight Status

Additional data regarding childhood weight and general health indicators is provided by the Women, Infants, and Children Supplemental Nutrition Program (WIC). During the time frame 2014-2016, 19% of mothers were still breastfeeding their babies at 6 months of age. This figure is much lower than the state comparison rate. In Chautauqua County, 83.2% of children enrolled in WIC, ages 2-4, viewed television two hours or less per day, which was just slightly lower than New York State (85.3).

From 2014 to 2016, 15.7% of Chautauqua County children in WIC ages 2-4 were obese, which was higher than New York State (13.9%).

Chautauqua County women in WIC had increased rates of greater than ideal gestational weight gain and pre-pregnancy obesity than NYS and WNY; although rates of pre-pregnancy overweight were lower than both comparison geographies.

Figure 78. WIC Childhood Obesity Indicators



Source: NYSDOH Community Health Indicator Reports: Obesity indicators, 2014-2016

## **Promote Well-Being and Prevent Mental and Substance Use Disorders**

“Mental and emotional well-being is essential to overall health. At any given time, almost one in five young people nationally are affected by mental, emotional and behavioral (MEB) disorders, including conduct disorders, depression and substance abuse. Adverse Childhood Experiences and many MEB disorders, such as substance abuse and depression, have lifelong effects that include high psychosocial and economic costs for people, their families, schools and communities.

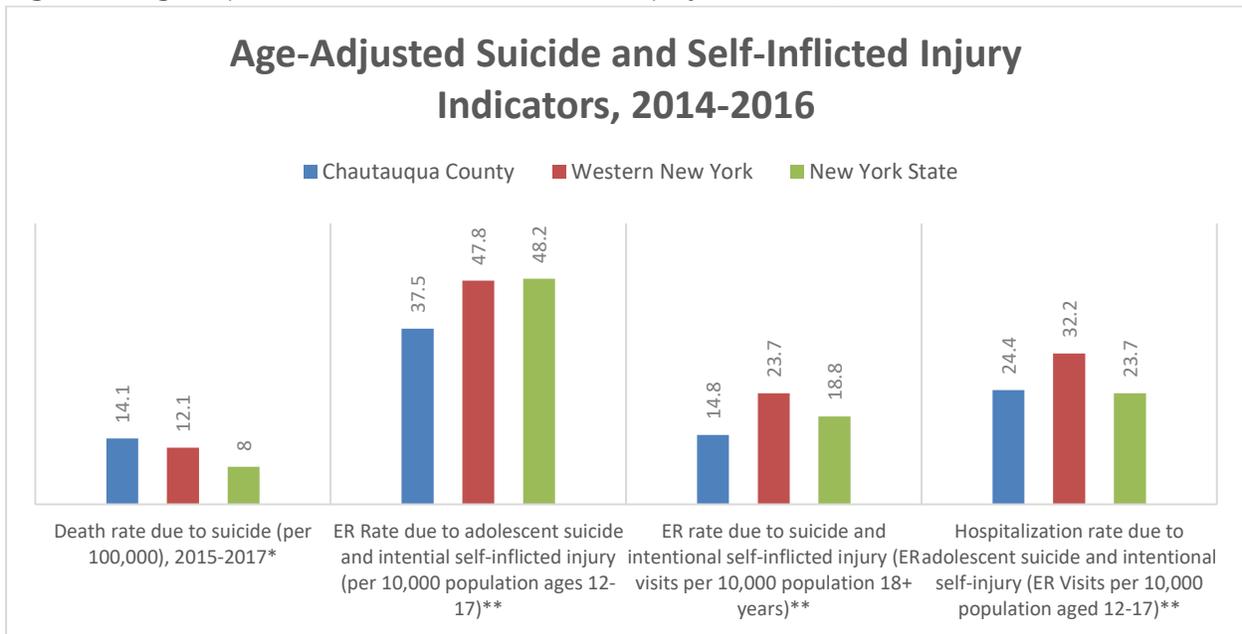
The financial costs nationally in terms of treatment services and lost productivity are estimated at \$467 billion in 2012, and \$442 billion for misuse of prescription drugs, illicit drugs and alcohol. Mental and physical health problems are interwoven. Improvements in mental health help improve individuals and populations' physical health. The best opportunities to improve the public's mental health are interventions delivered before a disorder manifests itself, to prevent its development. These interventions can be integrated with routine health care and wellness promotion in health care settings, as well as in schools and community settings.”

-New York State Prevention Agenda 2019-2024, Promote Well-Being and Prevent Mental and Substance Use Disorders Action Plan

### **Mental Health**

Suicide and self-inflicted injury indicators found on the Keys to Health website (managed by Population Health Collaborative of Western New York) show that suicide death rates are higher in Chautauqua County (14.1 per 100,000) than in Western New York (12.1 per 100,000) and New York State (8.0 per 100,000) comparisons. Emergency Room and hospitalization rates for both adolescents and the general population are noticeably lower in Chautauqua County than the regional comparisons (Figure 79).

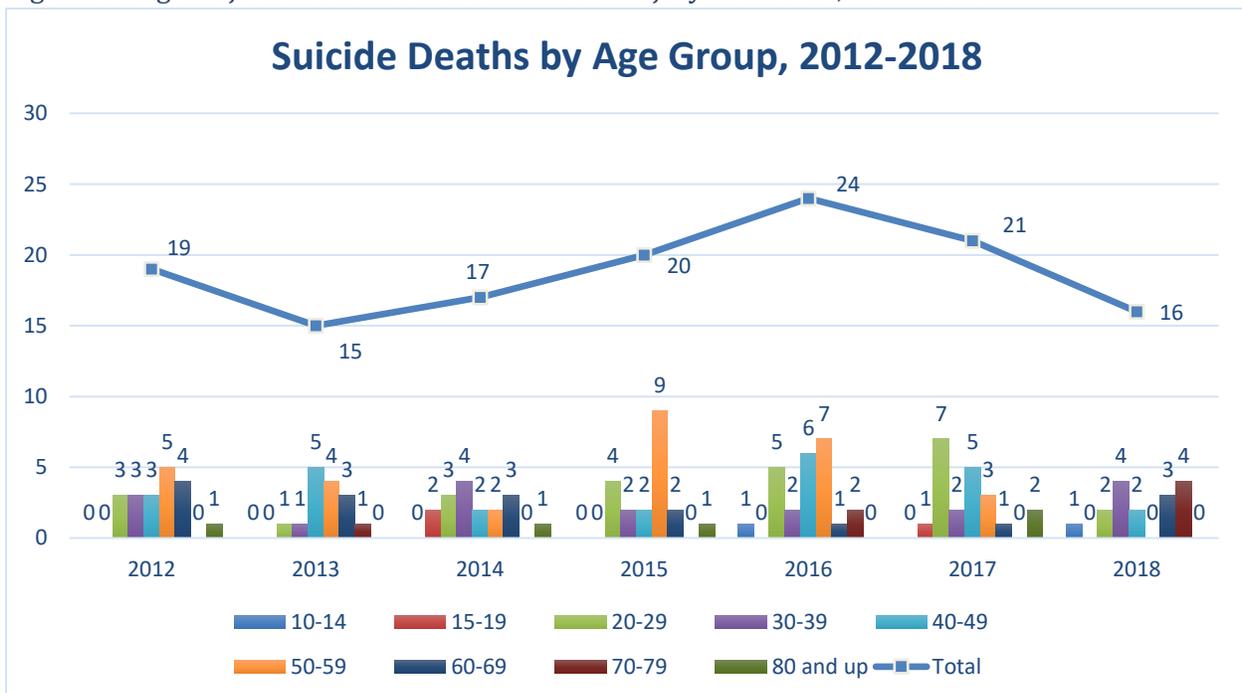
Figure 79. Age-Adjusted Suicide and Self-Inflicted Injury Indicators, 2014-2016



Sources: Keys to Health WNY; \*CDC WONDER Data; \*\*NYSDOH SPARCS Data

An analysis of death certificates submitted to the CCDHHS shows that from 2012 to 2018, Chautauqua County suicide deaths peaked in 2016 (24 deaths) and declined in 2017 (21 deaths) and 2018 (16 deaths). During the period, the average age of death was 46.7 years old.

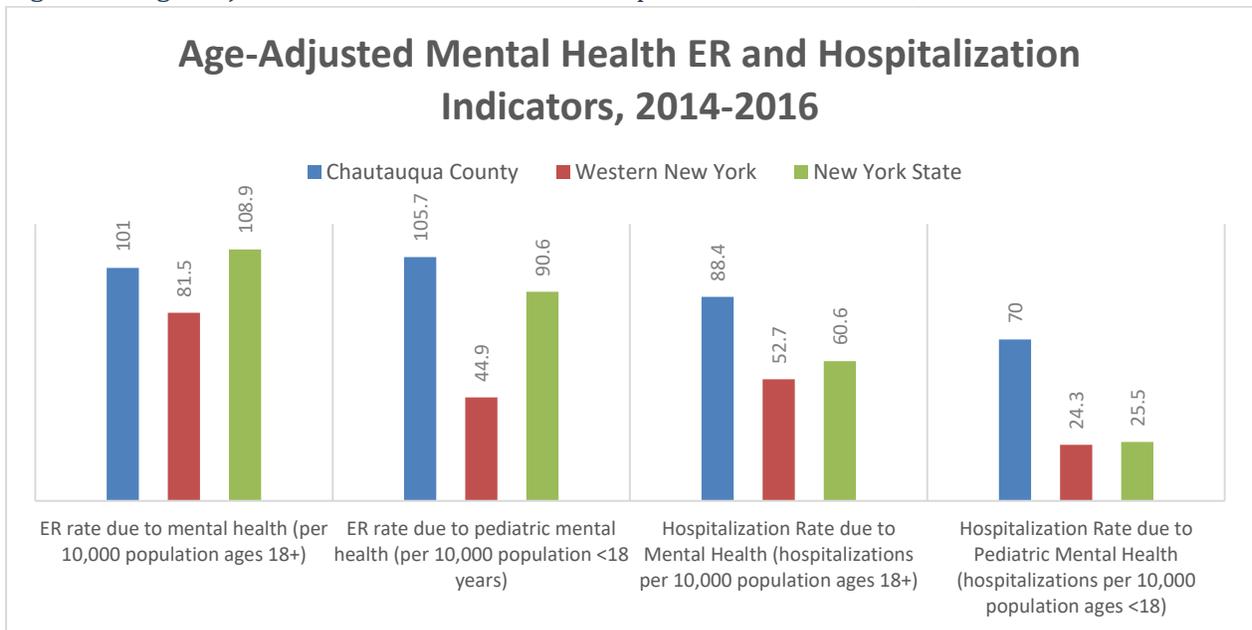
Figure 80. Age-Adjusted Suicide and Self-Inflicted Injury Indicators, 2014-2016



Source: Death Certificates Submitted to CCDHHS, Preliminary Data

While Emergency Room and hospitalization rates for suicide attempts or self-injury were comparatively low, age-adjusted admissions for general mental health concerns were much higher. From 2014 to 2016, with the exception of New York State’s elevated rate for adult ER mental health visits, Chautauqua County exceeded Western New York and New York State rates for pediatric and adult ER mental health visits and adult and pediatric mental health hospitalizations.

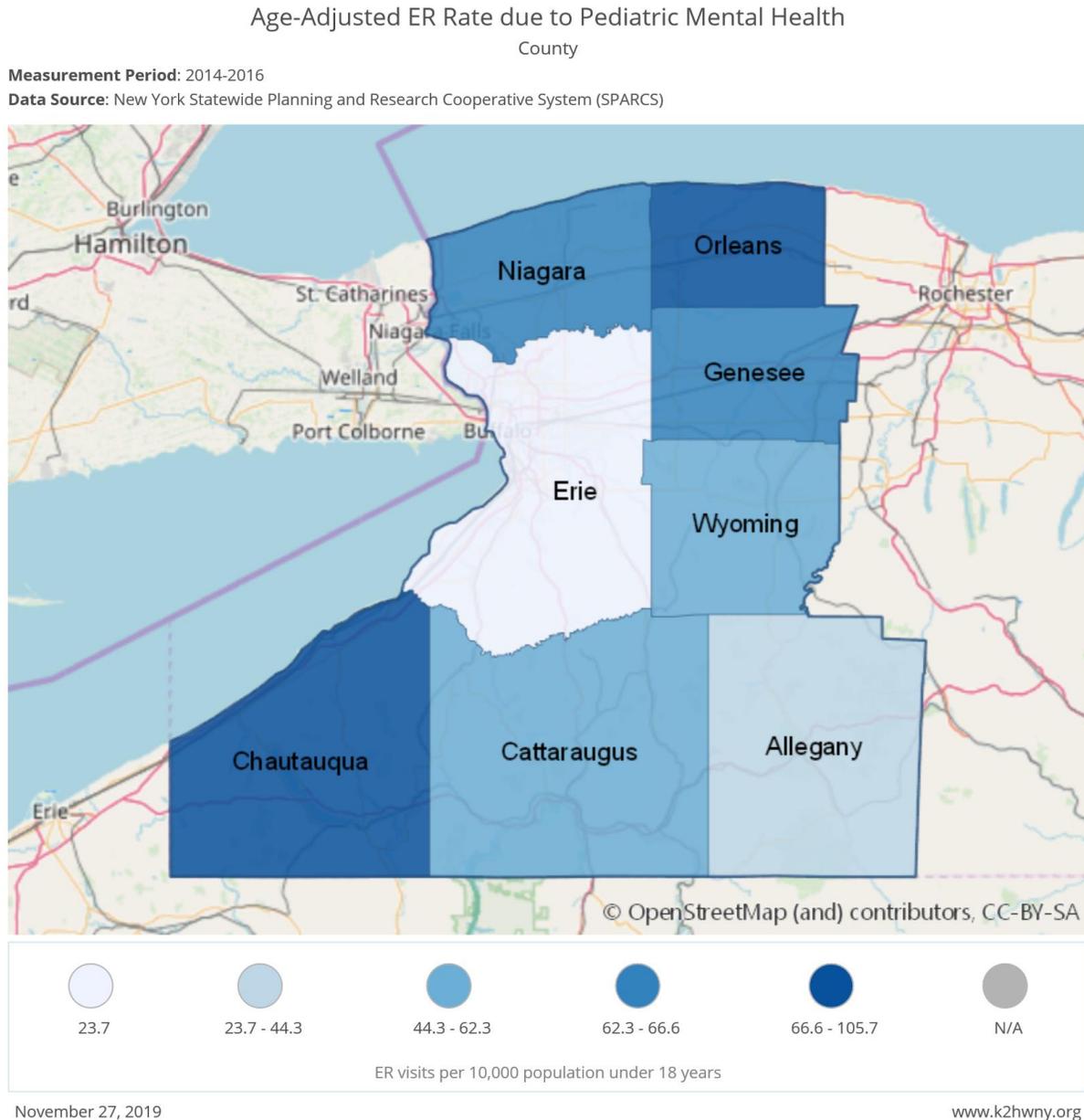
Figure 81. Age-Adjusted Mental Health ER and Hospitalization Indicators, 2014-2016



Sources: Keys to Health WNY; NYSDOH SPARCS Data

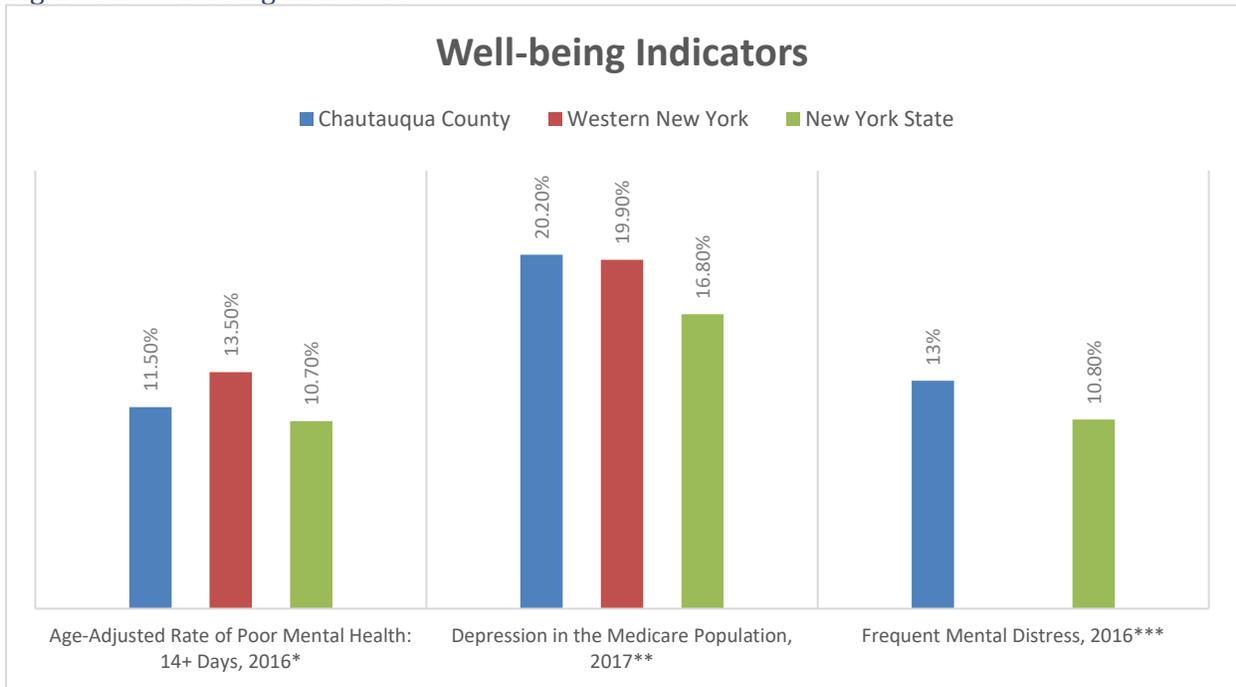
Map 9 shows a heat map of age-adjusted Emergency Room rates for to pediatric mental health concerns for all counties in Western New York. Chautauqua County had the highest rate among all counties in WNY (105.7 per 10,000 persons less than 18 years old) and fell in the third quartile among New York State Counties. The corresponding New York state rate was 90.6 per 10,000 persons less than 18 years old.

Map 9. Age-Adjusted ER Rate due to Pediatric Mental Health, 2014-2016



According to the New York State Expanded Behavioral Risk Factor Surveillance System in 2016, 11.5% of adults self-reported having poor mental health for 14 or more days over the last month; a figure slightly higher than NYS and slightly lower than WNY. Of Medicare beneficiaries in Chautauqua County, 20.2% were treated for depression in 2017. The CDC Behavioral Risk Factor Surveillance System indicates that 13.0% of Chautauqua County adults experienced frequent mental distress (14 or more days of poor mental health in the past 30 days), compared to 10.8% of New York State adults. See Figure 82 for more detail.

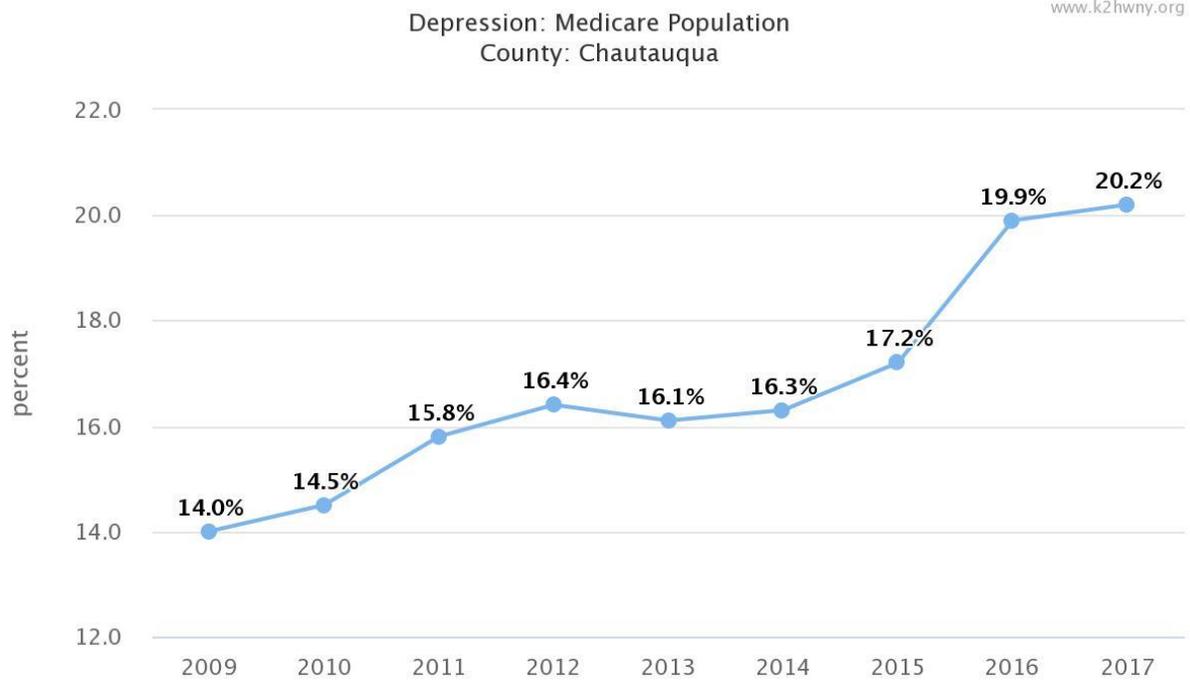
Figure 82. Well-Being Indicators



Sources: Keys to Health Western New York; \*NYSDOH eBRFSS; \*\*Centers for Medicare and Medicaid Services; \*\*\*CDC BRFSS

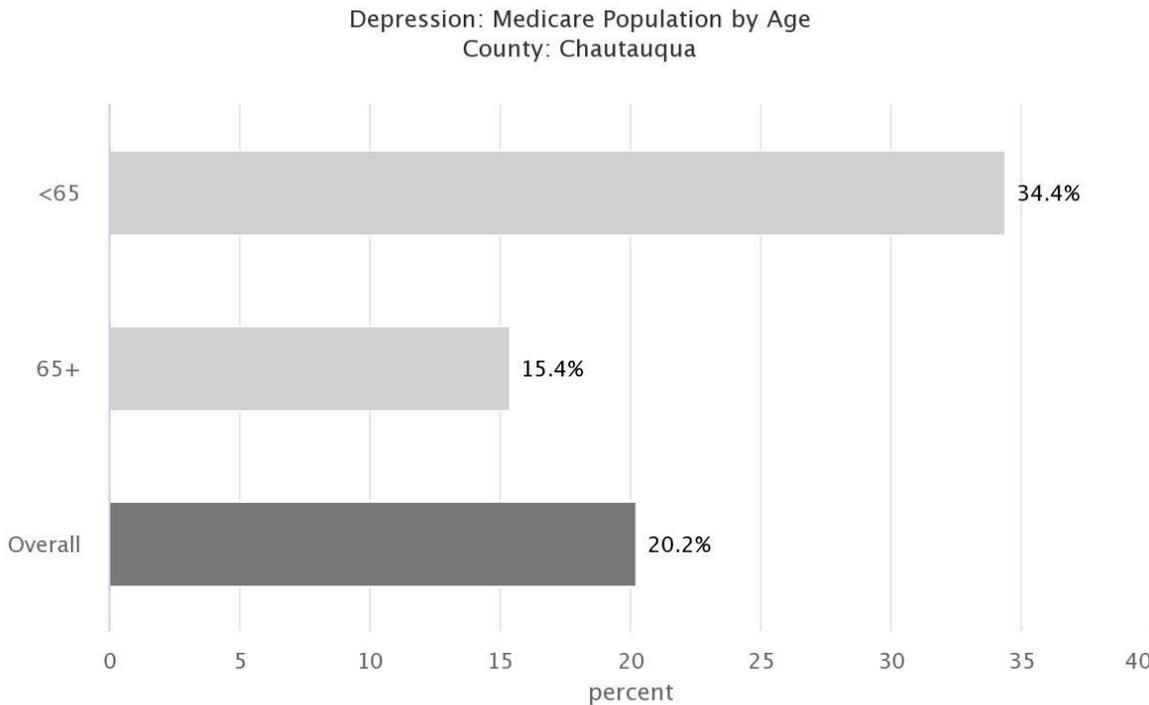
The percentage of Medicare beneficiaries who were treated for depression has increased over time (2009-2017). Figure 83 demonstrates this upward trend. The rate of depression was much higher among individuals less than 65 years old (individuals with certain disabilities or end-stage renal disease) in 2017 (Figure 84).

Figure 83. Depression in the Medicare Population, 2017



Source: Centers for Medicare & Medicaid Services (2017)

Figure 84. Depression in the Medicare Population by Age, 2017



Source: Centers for Medicare & Medicaid Services (2017)

www.k2hwny.org

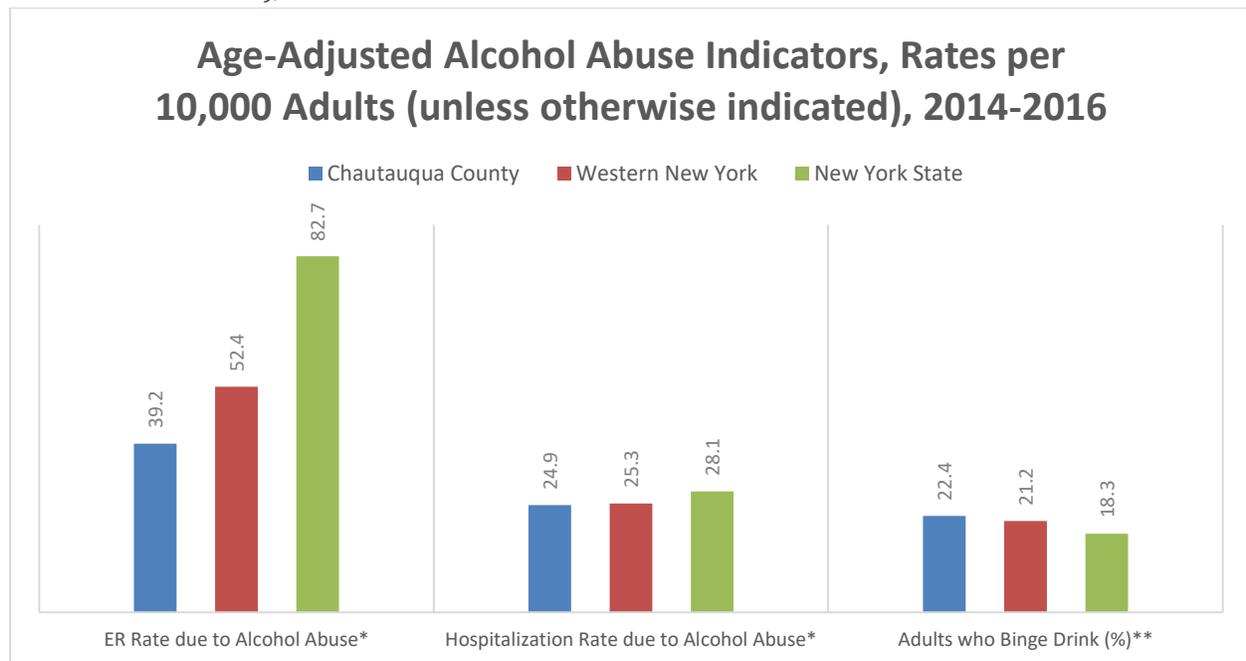
Additionally, Chautauqua County has proportionately fewer mental health providers than regional and state comparisons. In 2018, Chautauqua County had 149 mental health providers for every 100,000 residents, compared to 219 providers per 100,000 in Western New York, and 268 per 100,000 in New York State.

## Alcohol, Tobacco, and Substance Abuse

### Alcohol

Age-adjusted emergency room and hospitalization rates due to alcohol abuse were lower in Chautauqua County than in Western New York and New York State from 2014 to 2016. However, the percentage of adults who self-reported binge drinking over the last 30 days was slightly higher in Chautauqua County (22.4%) than regional and state comparisons.

Figure 85. Age-adjusted Alcohol Abuse Indicator Rates per 10,000 Adults Ages 18 and Over (Unless Otherwise Indicated), 2014-2016



Source: \*NYSDOH SPARCS \*\*NYSDOH eBRFSS

While rates of emergency room and hospitalization were lower among Chautauqua County adults as a whole, racial and ethnic disparities were evident. American Indian or Alaskan Natives and Black or African American residents were more than three times more likely than White-non-Hispanic residents to visit the Emergency Room as a result of alcohol abuse from 2014 to 2016. Hispanic or Latino individuals were more than twice as likely as White, non-Hispanics to visit the Emergency Room for Alcohol Abuse issues (Figure 86).

Black or African American residents were 2.7 times more likely than White non-Hispanic residents to be hospitalized for alcohol abuse in Chautauqua County from 2014 to 2016 (Figure 87).

Figure 86. Age-Adjusted ER Rate due to Alcohol Abuse by Race/Ethnicity, 2014-2016

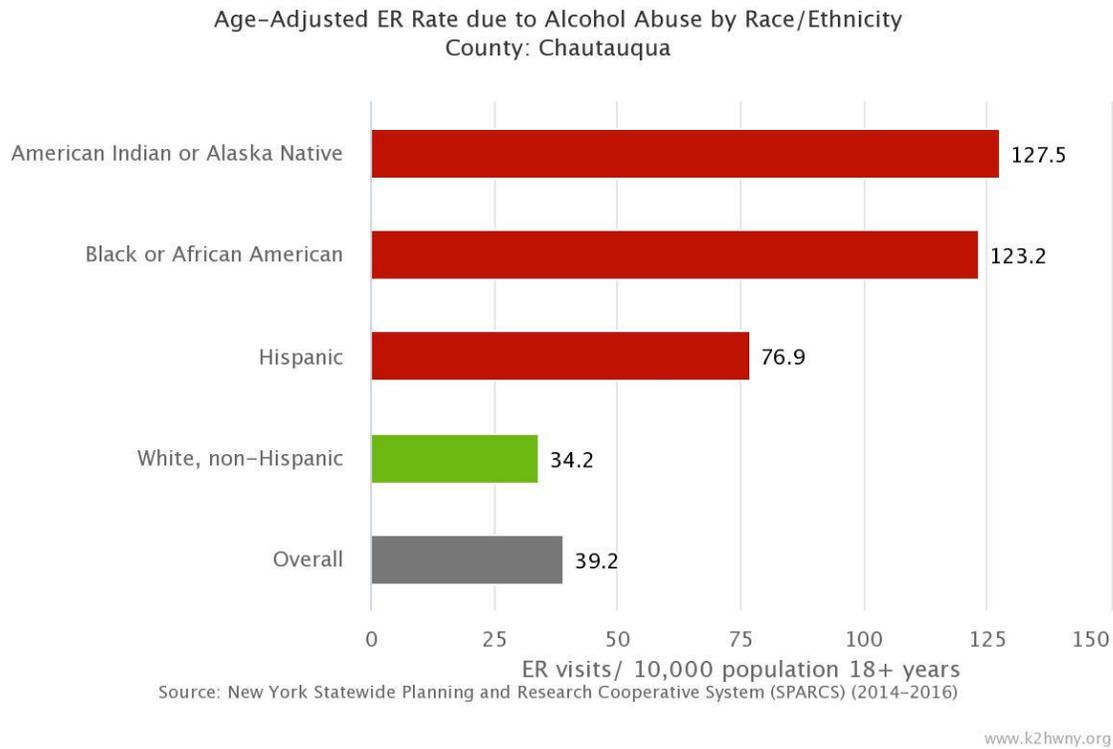
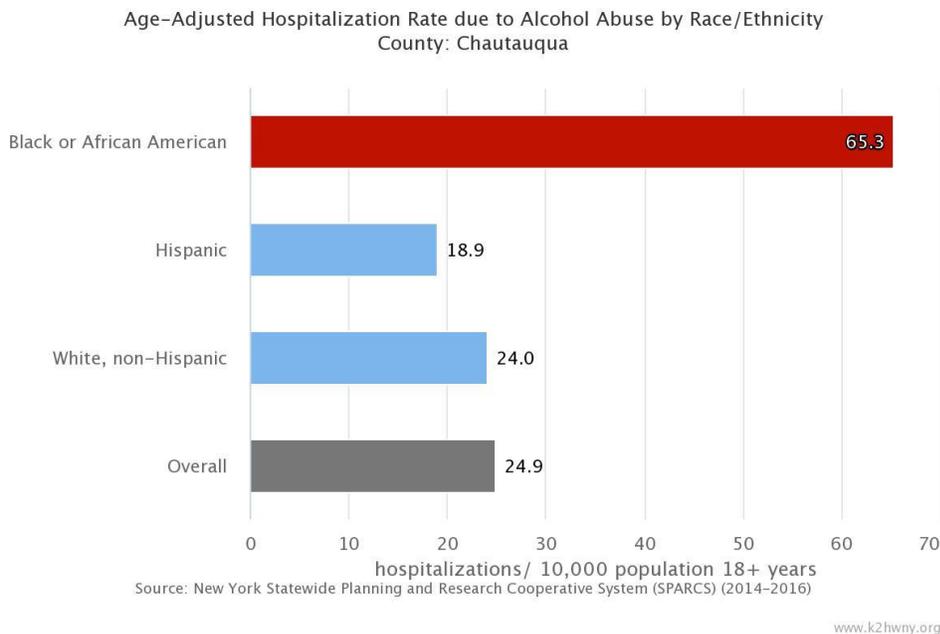


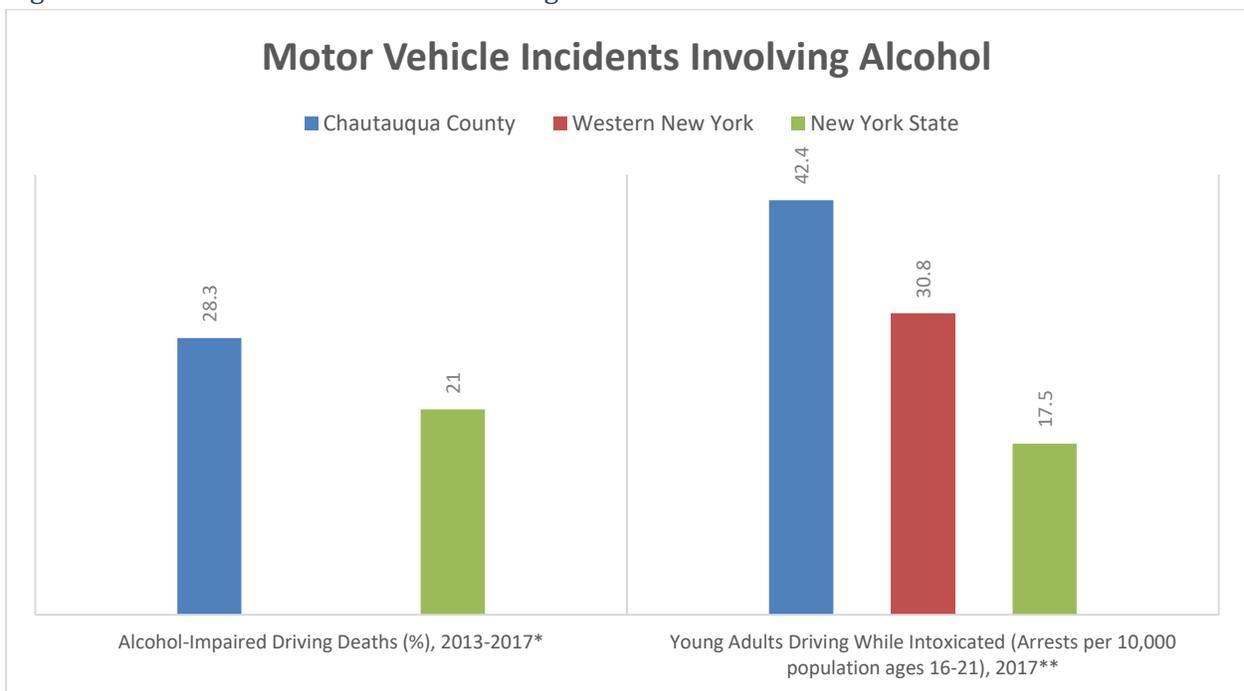
Figure 87. Age-Adjusted Hospitalization Rate due to Alcohol Abuse by Race/Ethnicity, 2014-2016



The County Health Rankings include alcohol-impaired driving deaths as a measure, reported by the Fatality Analysis Reporting System. Five-year calculations reflecting 2013-2017 indicate that 28.3% of driving deaths had alcohol involvement in Chautauqua County compared to 21% in New York State. At that time, Chautauqua County had the highest rate among all Western New York Counties.

Arrest of young adults (ages 16-21) for driving while intoxicated was 42.4 per 10,000 population ages 16-21 in 2017, but has gradually declined over time in Chautauqua County. In 2017, Chautauqua County's rate ranked as second highest of WNY Counties to Wyoming County (144.2), and exceeded both the Western New York and New York State rates.

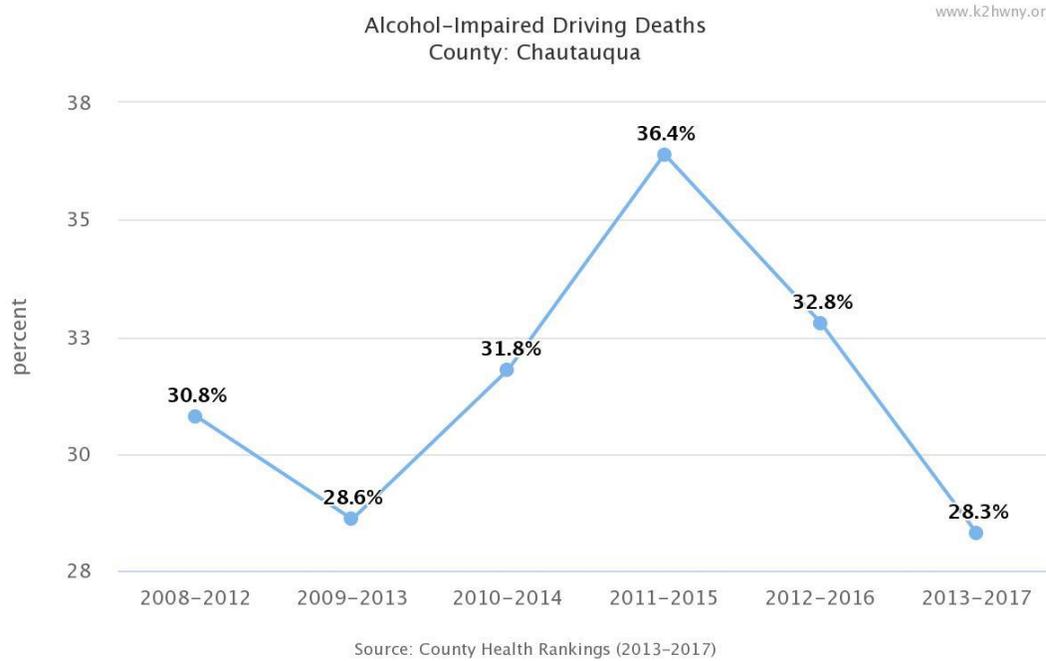
Figure 88. Motor Vehicle Incidents Involving Alcohol



Source: \*Fatality Analysis Reporting System; County Health Rankings; \*\*Council on Children and Families, Kids' Wellbeing Indicators Clearinghouse

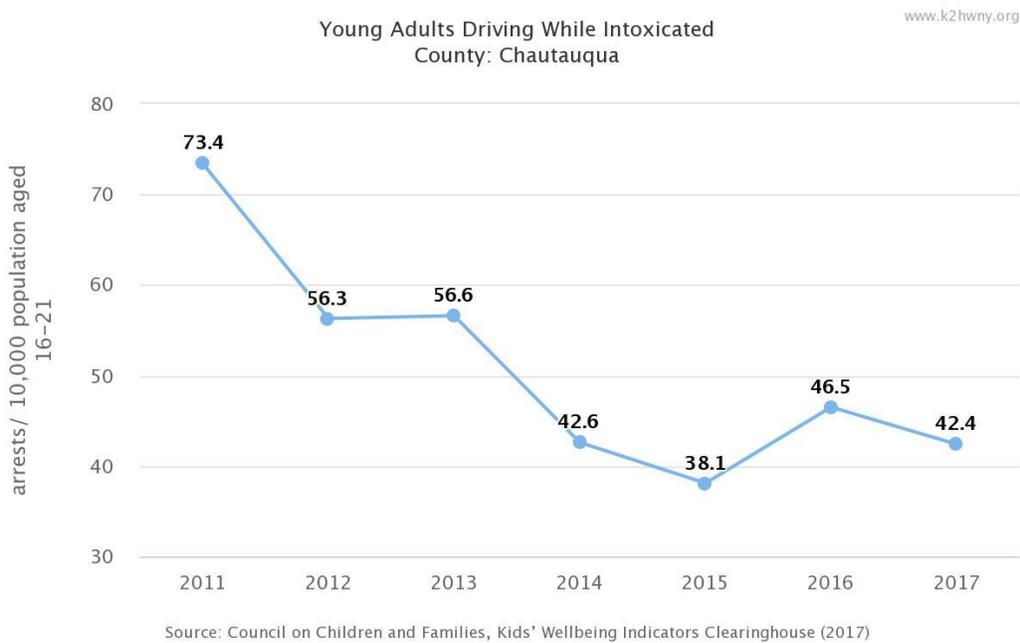
While Chautauqua County experienced the greatest rate of alcohol-impaired driving deaths in WNY in 2013-2017, the trend over time (in the last six years) shows a favorable decline. From 2011 to 2015, 36.4% of driving deaths involved alcohol (Figure 89).

Figure 89. Alcohol-Impaired Driving Deaths in Chautauqua County, 2008-2017 (five-year averages)



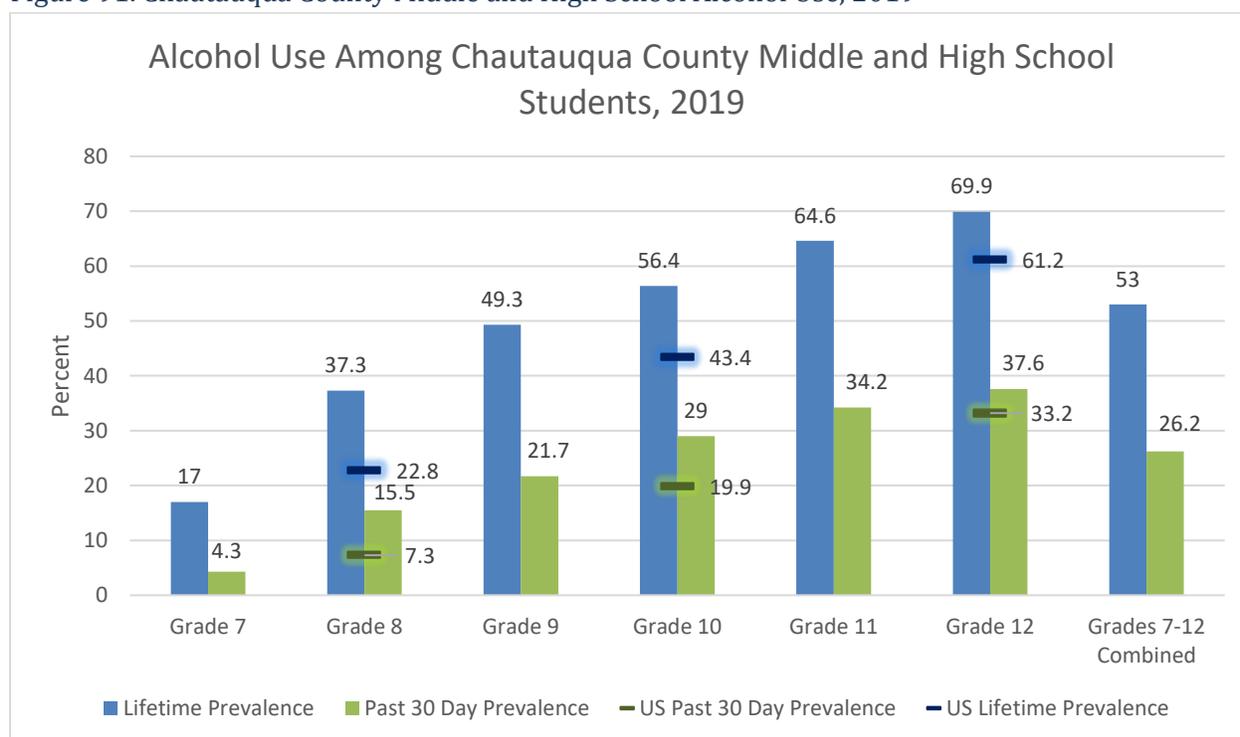
While the Chautauqua County arrest rate of young adults driving while intoxicated is elevated in comparison to most counties in Western New York, review of the indicator over time shows a dramatic decline in the arrest rate from 2011 to 2017 (Figure 90).

Figure 90. Young Adults Driving While Intoxicated, 2011-2017



In February 2019, 8 of the 18 Chautauqua County school districts participated in the Pride Survey, which measures teen substance use. Conducted by Prevention Works of Chautauqua County, the survey found that both lifetime prevalence and past 30-day prevalence increased with each grade level. Comparison figures are provided by the University of Michigan’s Monitoring the Future study, which measures the behaviors, attitudes, and values of Americans from adolescence through adulthood. These figures, calculated for students in grades 8, 10, and 12 are listed as US figures in Figure 91 below. Chautauqua County rates for lifetime prevalence and past 30-day prevalence exceeded national figures in grades 8, 10, and 12. Of all students surveyed, 53% had ever used alcohol, and 26.2% had used alcohol within the last 30 days.

Figure 91. Chautauqua County Middle and High School Alcohol Use, 2019



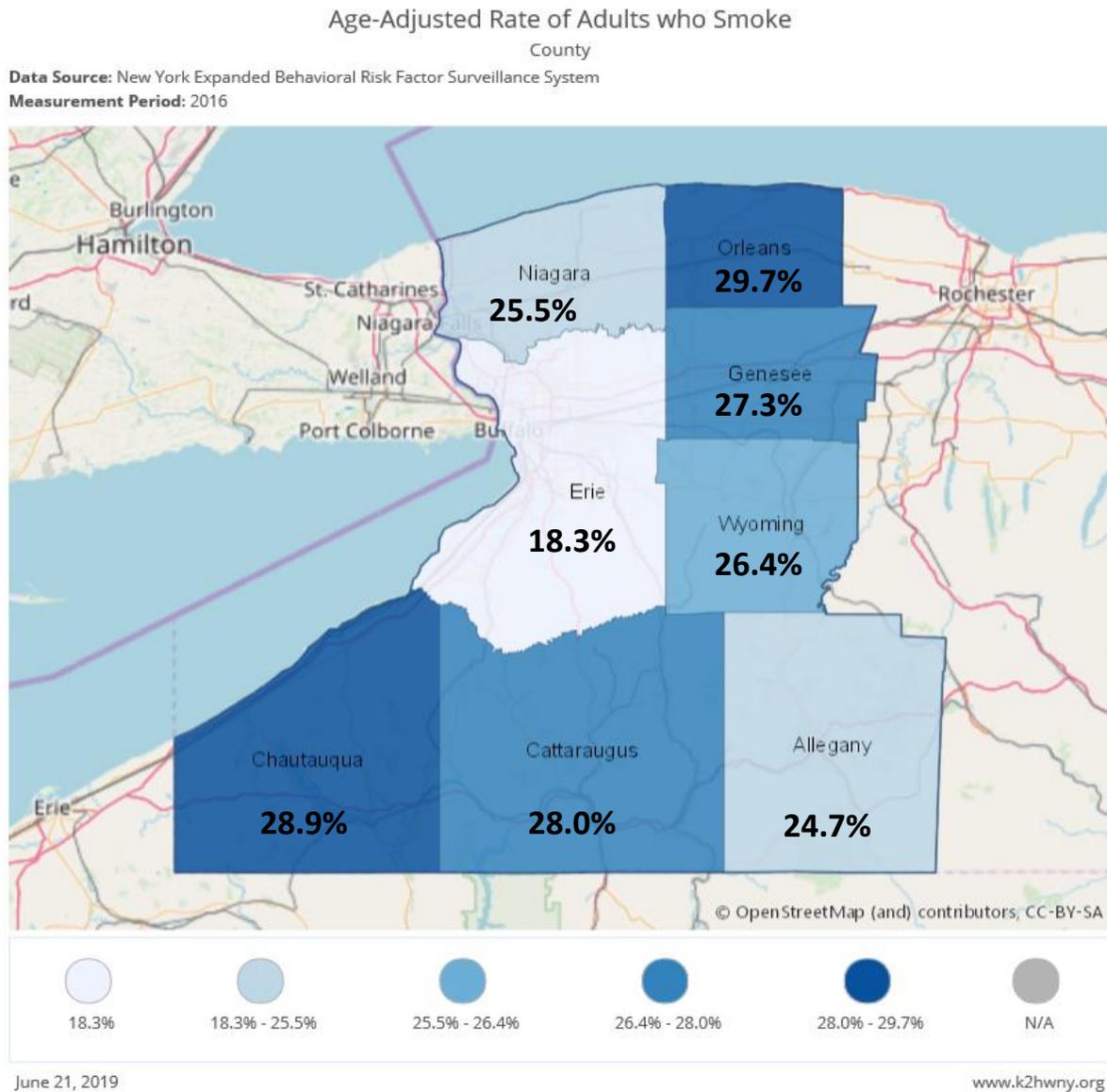
Source: PRIDE Survey of 8 Chautauqua County School Districts; Conducted by Prevention Works

### Tobacco

According to the NYSDOH Expanded Behavioral Health Surveillance System (eBRFSS) survey in 2016, Chautauqua County’s Adult Smoking Rate (28.9%) is the second highest of the Western New York Counties. It ranks higher than Western New York as a whole (21.8%), New York State (14.5%), and the United States (17.1%). The 2016 age-adjusted rate of Chautauqua county adults who smoke (28.9%) is higher than the rates measured in 2009 (26.0%) and 2014 (27.8%). These measurements indicate a gradual but steady increase in the adult smoking rate; however, it should be noted that there was a change in survey methodology in 2014.

A community health survey conducted by the Chautauqua County Department of Health and its partners found that 18.81% of 1,939 total respondents use nicotine products, including cigarettes, electronic cigarettes, cigars, cigarillos, little cigars, blunts, pipes, smokeless tobacco bidis, kreteks, hookah, etc.

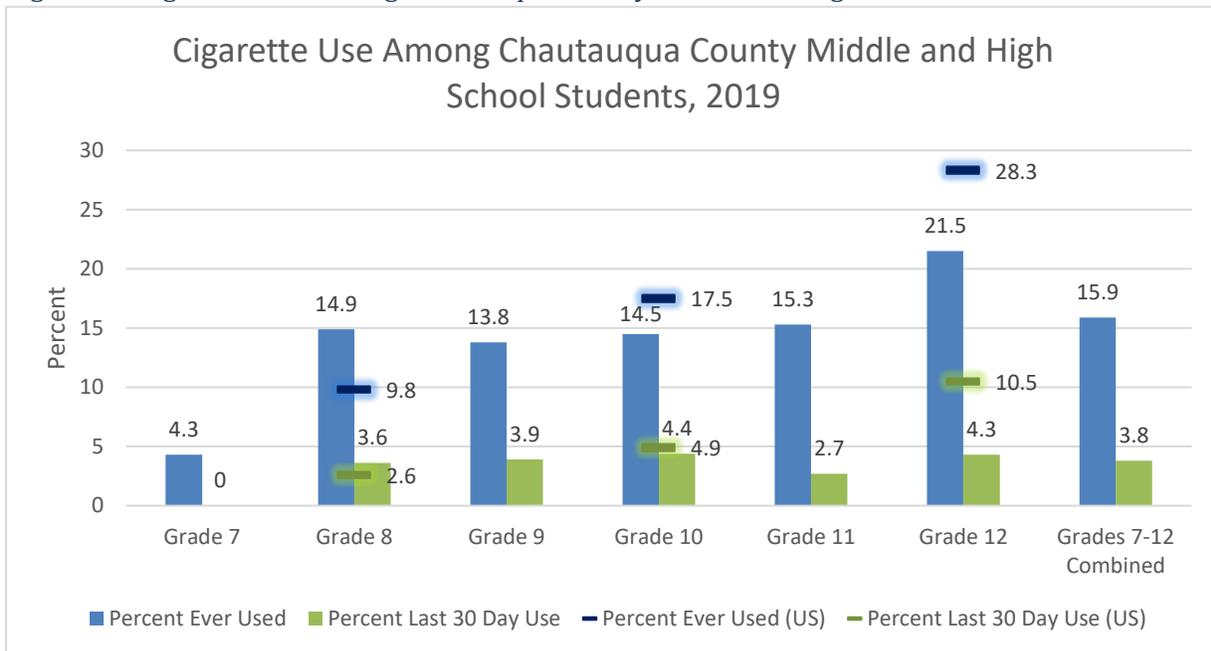
Map 10. Age-Adjusted Rate of Adults who Smoke, 2016



The 2019 Pride Survey of middle and high school students in Chautauqua County schools polled students about cigarette use. National comparison figures are provided (listed as US figures below) by the University of Michigan’s Monitoring the Future (MTF) study, which measures the behaviors, attitudes, and values of Americans from adolescence through adulthood. Traditional cigarette use was generally lower among Chautauqua County students when compared to

students in the MTF study, with the exception of “percent ever used” among 8<sup>th</sup> grade students. Interestingly, “percent ever used” was higher for 8<sup>th</sup> graders (14.9%) than 9<sup>th</sup> (13.8%) or 10<sup>th</sup> (14.5%) graders in Chautauqua County. Across students in grades 8 to 12, approximately 3-4% of students had used cigarettes within the last 30 days. Overall, 15.9% of students in grades 7-12 had ever used traditional cigarettes, and 3.8% had used cigarettes within the last 30 days.

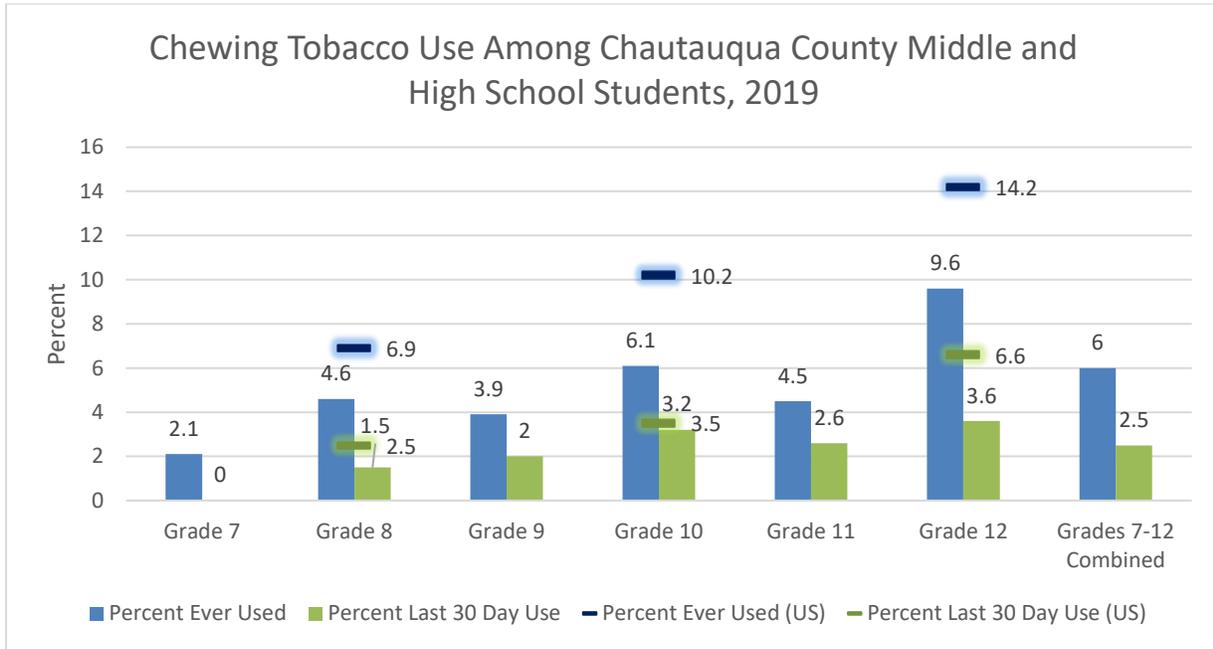
Figure 92. Cigarette Use Among Chautauqua County Middle and High School Students, 2019



Source: Pride Survey of 8 Chautauqua County School Districts; Conducted by Prevention Works

The 2019 Pride Survey also measured chewing tobacco use among Chautauqua County middle and high school students. Percent ever use and percent last 30 day use were much lower in Chautauqua County compared to US comparison figures. Among grades 7-12 combined, 6% of students had ever used chewing tobacco, and 2.5% had used chewing tobacco within the last 30 days.

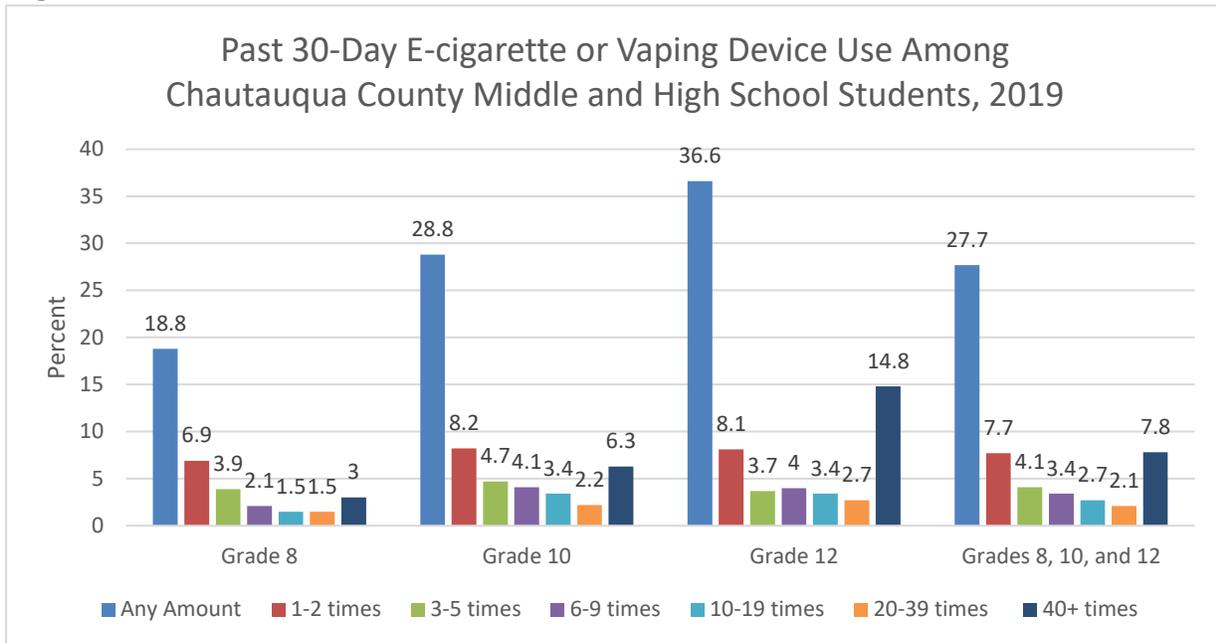
Figure 93. Chewing Tobacco Use Among Chautauqua County Middle and High School Students, 2019



Source: Pride Survey of 8 Chautauqua County School Districts; Conducted by Prevention Works

The 2019 Pride survey also inquired about volume of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students’ past 30-day use of e-cigarette or vaping devices, regardless of e-liquid used (i.e. containing nicotine, THC, etc.). Use at all (any amount) over the past 30 days increased with each grade level; 18.8% of 8<sup>th</sup> graders, 28.8% of 10<sup>th</sup> graders, and 36.6% of 12<sup>th</sup> graders had used an e-cigarette or vaping device over the past 30 days. The majority of 12<sup>th</sup> graders who indicated past 30-day use had used a device 40 or more times.

Figure 94. Past 30-day E-cigarette or Vaping Device Use Among Chautauqua County Middle and High School Students, 2019

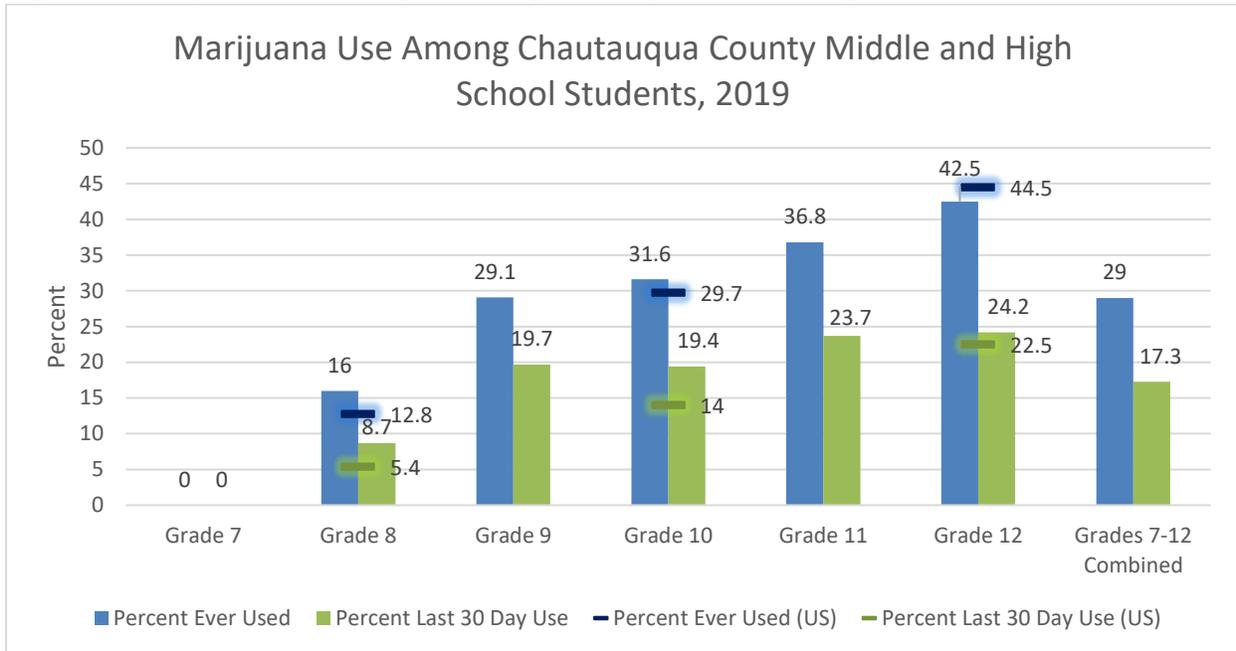


Source: PRIDE Survey of 8 Chautauqua County School Districts; Conducted by Prevention Works

### Other Substances

The 2019 Pride survey also inquired about ever use or past 30-day use of marijuana among students in grades 7-12. Of 7<sup>th</sup> graders surveyed, none indicated having ever used marijuana. Chautauqua County figures for grades 8-12 show a general positive relationship between grade level and both ever use and past 30-day use. With the exception of percent who have ever used marijuana in 12<sup>th</sup> grade, Chautauqua County marijuana use exceeded United States comparison figures for all grades measured. Nearly one-quarter of high school seniors in Chautauqua County surveyed had used marijuana within the last thirty days.

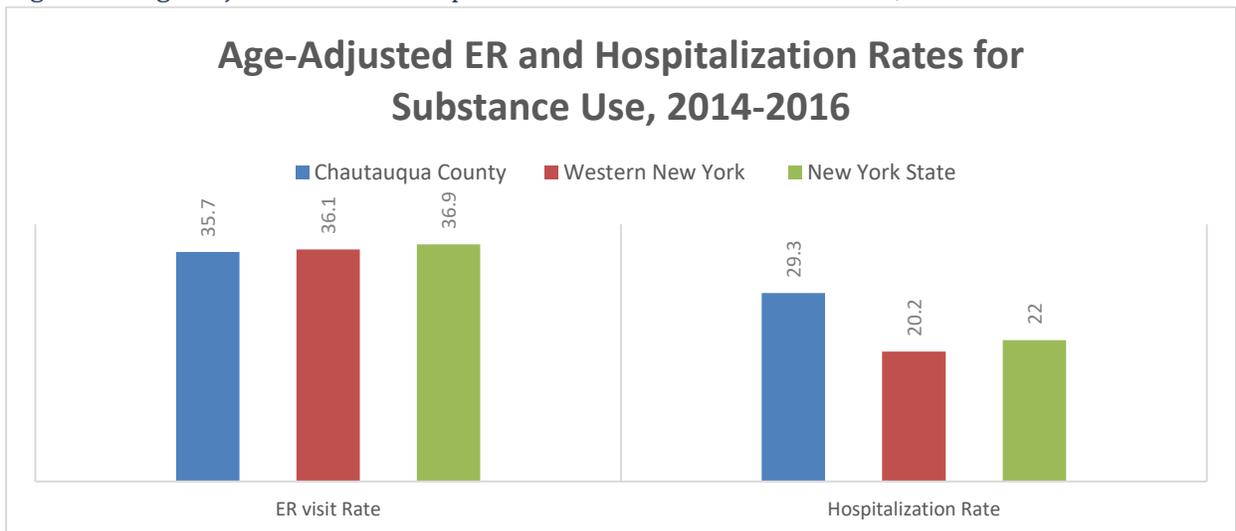
Figure 95. Marijuana Use Among Chautauqua County Middle and High School Students, 2019



Source: PRIDE Survey of 8 Chautauqua County School Districts; Conducted by Prevention Works

In 2014-2016, of Western New York Counties, Chautauqua County demonstrated the third highest age-adjusted emergency room rate due to substance use. Chautauqua County experienced a rate of 35.7 per 10,000 population 18 years and up, compared to 37.6 in Erie County, 45.2 in Niagara County, and 36.9 in New York State as a whole. During the same time period, Chautauqua County (29.3 per 10,000 adults) experienced proportionately more hospitalizations due to substance use than Western New York (20.2 per 10,000 adults) and New York State (22.0 per 10,000 adults) comparisons.

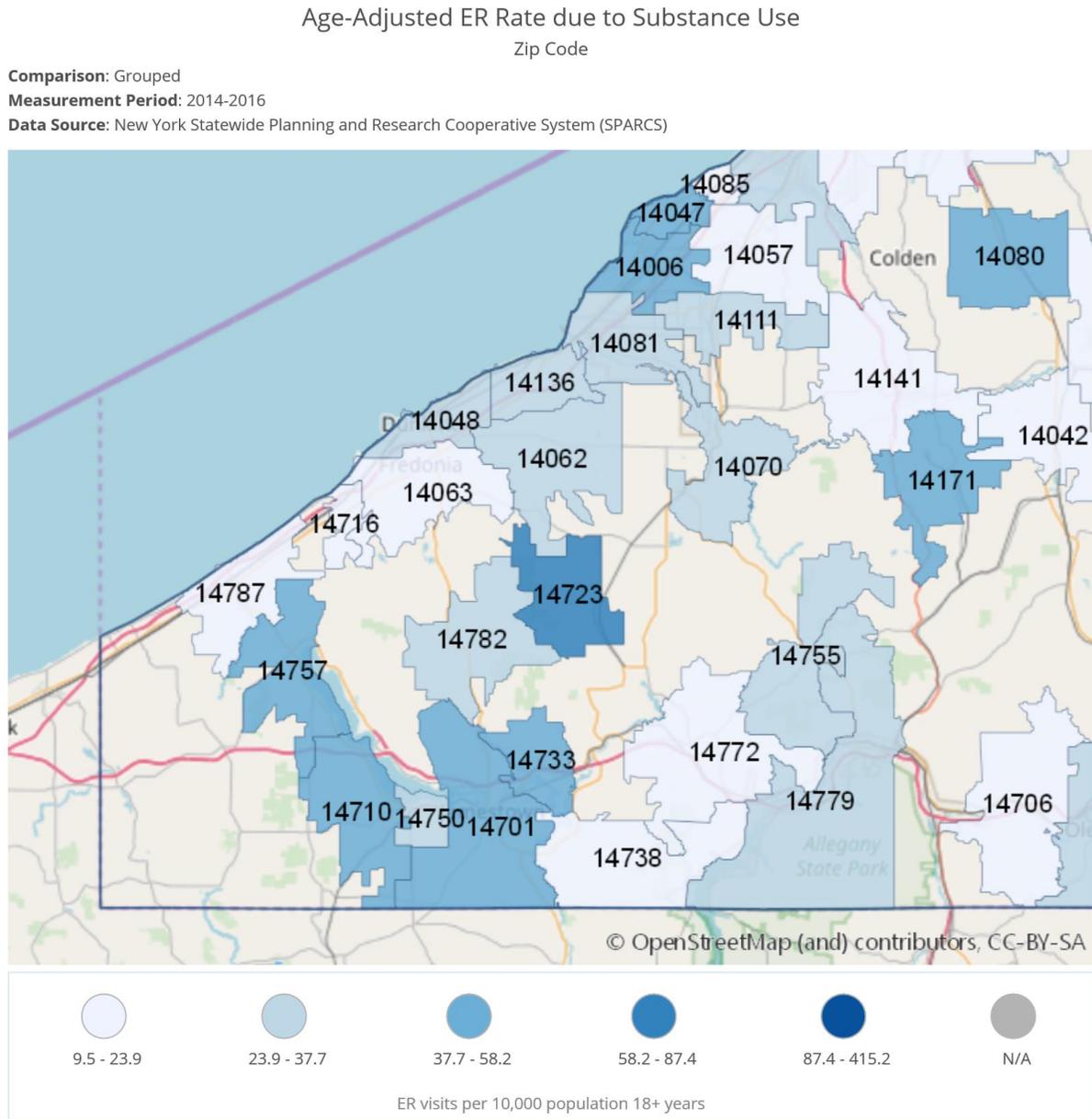
Figure 96. Age-adjusted ER and Hospitalization Rates for Substance Use, 2014-2016



Source: Keys to Health, NYSDOH SPARCS data 2014-2016

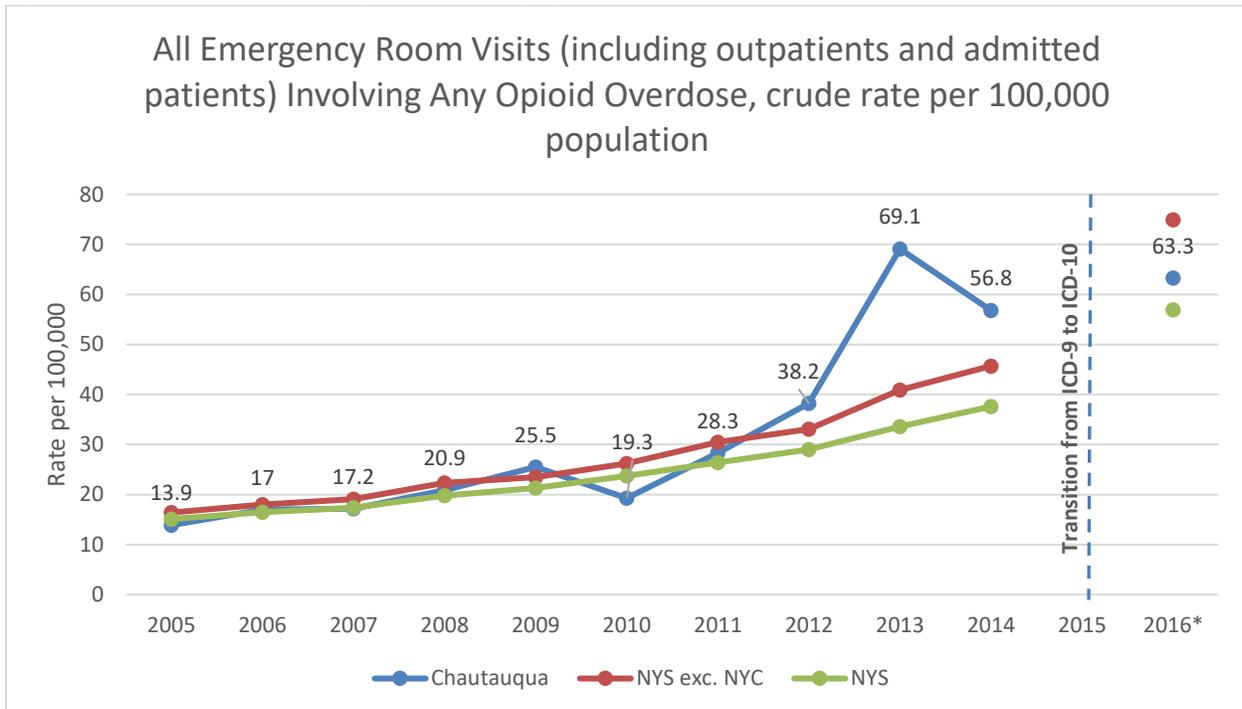
A breakdown by ZIP code for age-adjusted emergency room rates (per 10,000 adults) for substance use issues provides a more localized perspective of the substance use issue. Cherry Creek, ZIP Code 14723, demonstrated the highest rate in Chautauqua County (69.1), followed by Jamestown (14701) with a rate of 58.2, Falconer (14733) with a rate of 44.3, Mayville (14757) with a rate of 39.7, and Ashville (14710) with a rate of 39.6 per 10,000 adults ages 18 and up.

Map 11. Age-Adjusted ER Rate due to Substance Use, 2014-2016



A review of SPARCS data from 2005 to 2016 shows a dramatic increase in the rate of emergency room visits involving any opioid overdose over time. Figure 97 below demonstrates this trend.

Figure 97. All Emergency Room Visits (including outpatients and admitted patients) Involving Any Opioid Overdose, crude rate per 100,000 population

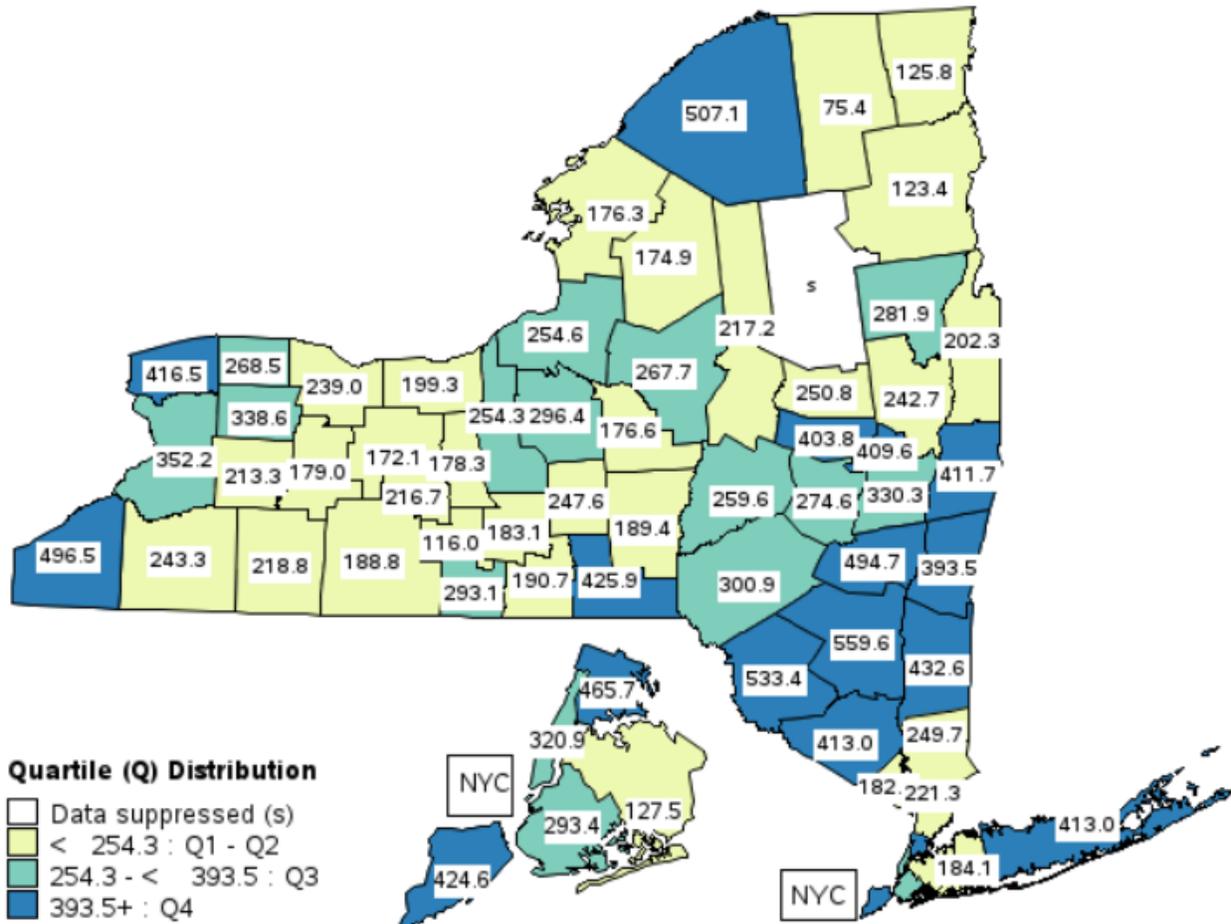


Source: NYSDOH Opioid Data Dashboard, NYSDOH SPARCS Data

To quantify and compare the public health impact of the opioid crisis among New York State Counties, NYSDOH established the “opioid burden” metric. This measure is a rate that includes outpatient emergency department visits, hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified used, as well as opioid overdose deaths. In 2016, the opioid burden rate per 100,000 population in Chautauqua County was 496.5- the highest in Western New York and among the counties within the highest quarter in New York State. The corresponding rate for WNY was 357.2 and the rate for NYS was 295.9.

Map 12. Opioid Burden, Crude Rate per 100,000, 2016

**Opioid burden (including outpatient ED visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose deaths), crude rate per 100,000 population, 2016**



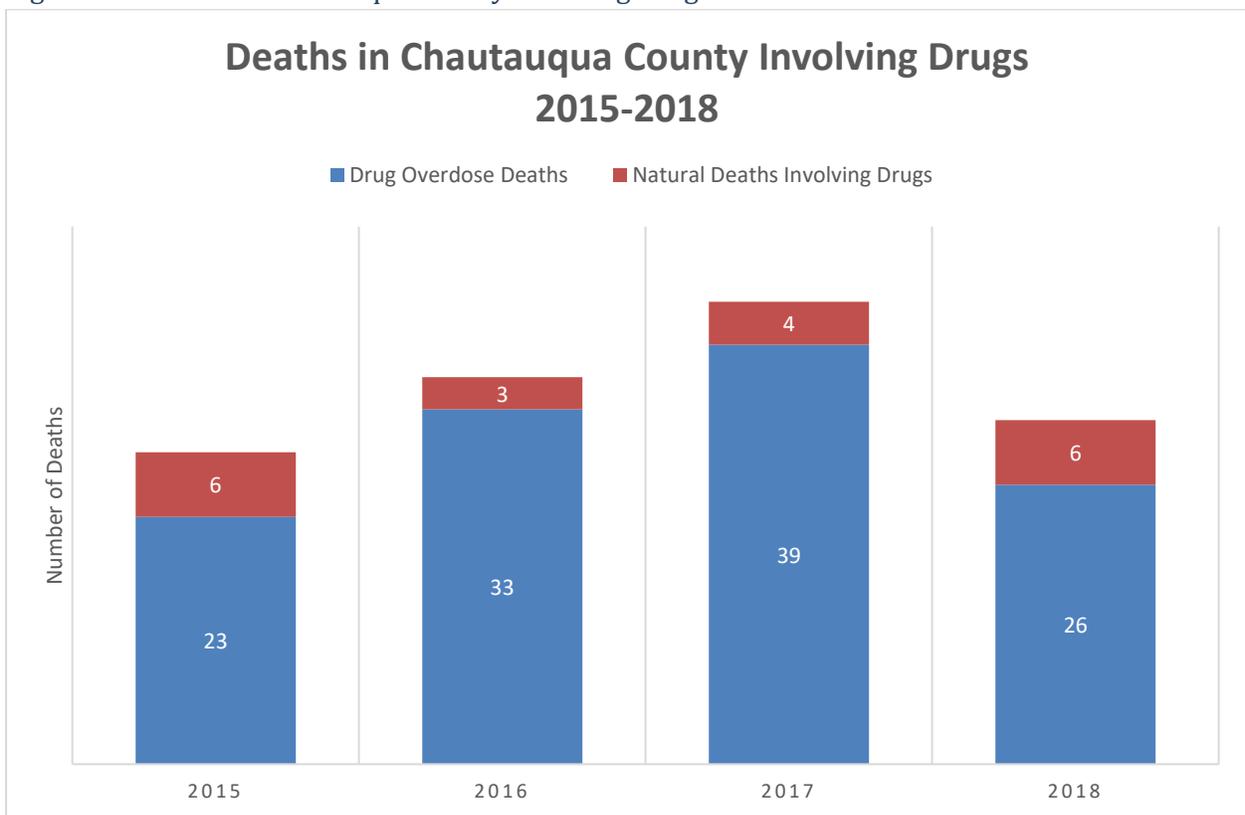
**Data Source: Vital Statistics and SPARCS data as of May 2018**

In 2018, available data regarding naloxone administrations by first responders and community members indicate that this life-saving medication was used at least 150 times. The Exchange at Evergreen in Jamestown refilled 68 kits after they had been used in 2018; all individuals who had been given naloxone survived. The Overdose Detection Mapping Application Program reports that first responders administered naloxone 76 times in non-fatal overdose incidents, and 6 times in fatal overdose incidents. Many more naloxone kits have been distributed in the community through state programs and through availability at pharmacies; however, it is not possible to measure how many of those kits have been used.

Figure 98 shows drug overdose and drug-related deaths that occurred in Chautauqua County for 2015-2018, gleaned from death certificates submitted to CCDHHS for statistical purposes. Fatal drug overdoses are deaths for which the cause has been determined as an acute intoxication by stated or unstated drug, regardless of manner of death (accident, suicide, etc.), and also includes positional asphyxia due to drug intoxication. Drug-related deaths include both fatal overdoses and natural deaths that occurred with chronic or past drug use listed as a contributing factor to the death.

Deaths involving drugs increased steadily from 2015 to 2017, but dropped in 2018. There were 13 fewer fatal drug overdoses in 2018 than in 2017.

Figure 98. Deaths in Chautauqua County Involving Drugs 2015-2018

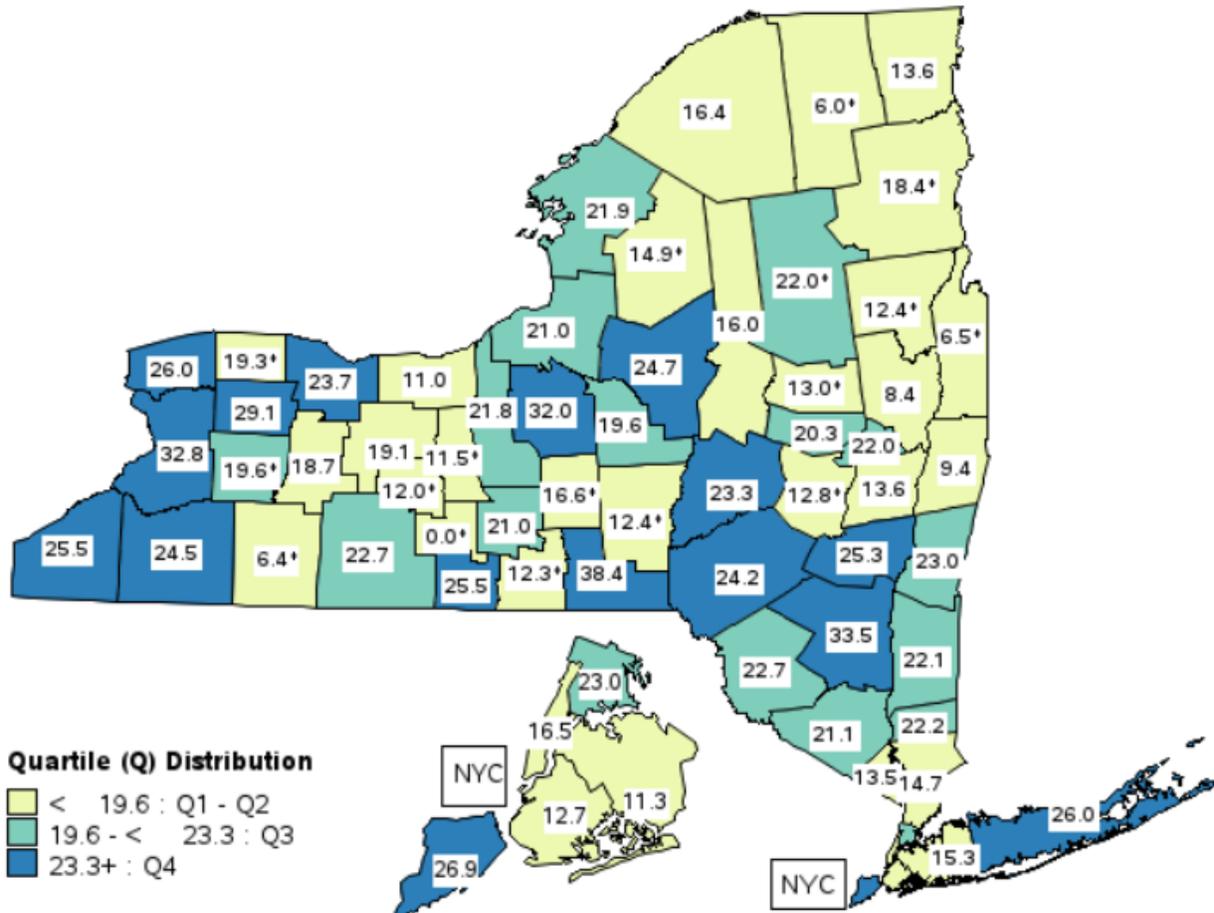


Source: Death Certificates submitted to CCDHHS

When compared to counties across New York State, Chautauqua County ranked among the highest quartile for overdose death rate involving any drug in 2016; 5 of the 8 counties of Western New York fell into this quartile. The overdose death (involving any drug) rate per 100,000 population for Chautauqua County was 25.5, slightly lower than the Western New York rate of 29.1 and higher than the New York State rate of 18.9.

Map 13. Overdose Deaths involving any drug, crude rate per 100,000 population, 2016

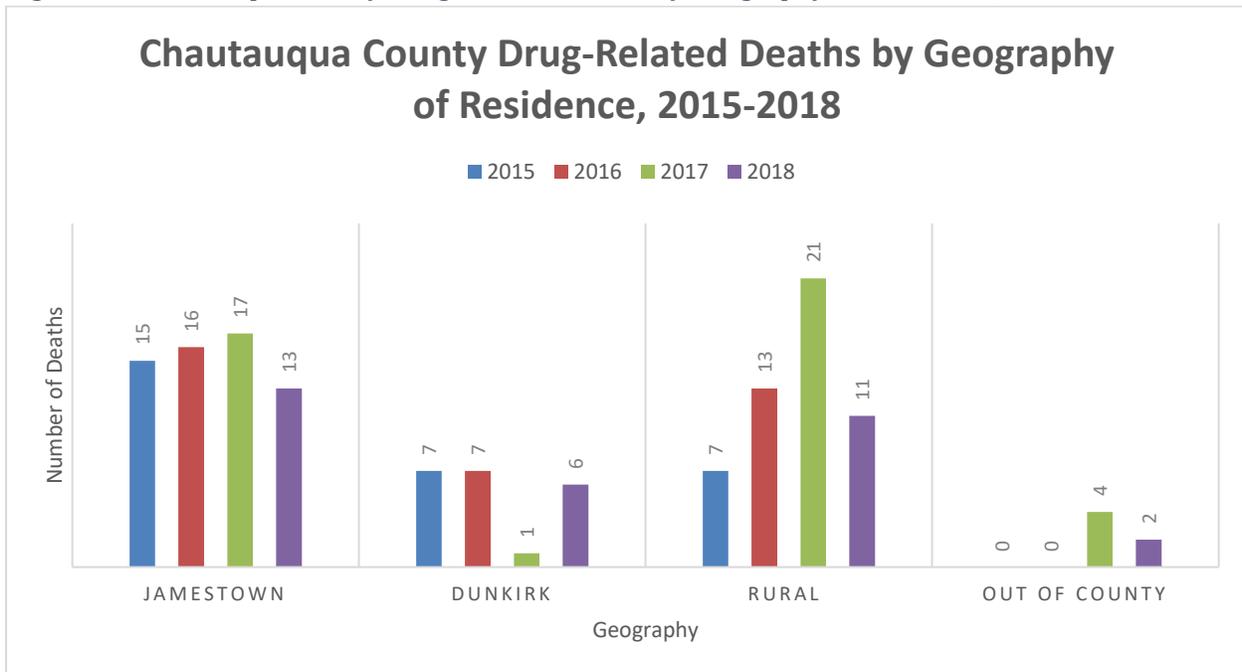
**Overdose deaths involving any drug, crude rate per 100,000 population, 2016**



Data Source: Vital Statistics Data as of May 2018

Figure 99 provides a breakdown of drug-related deaths in Chautauqua County by the decedent’s geography of residence. Decedent residences are divided into four categories: City of Jamestown, City of Dunkirk, in-county rural areas, and out-of-county. With the exception of the spike in deaths to people from rural areas in 2017, the City of Jamestown consistently accounts for the most deaths. Dunkirk experiences fewer than half of the number of deaths experienced by Jamestown. An upward trend was staggering for rural areas 2015-2017, but favorably declined in 2018.

Figure 99. Chautauqua County Drug-Related Deaths by Geography of Residence, 2015-2018



Source: Death Certificates submitted to CCDHHS

According to death certificates submitted to CCDHHS, more than three-quarters of fatal overdoses in 2017 and 2018 involved any opioid (76.9% for both years). Fentanyl was highly prevalent, present in over half of the deaths; involvement of heroin declined from 2017 to 2018. All of the deaths reported in 2018 involved polysubstance use. Toxicology results from death certificates and anecdotal evidence from local law enforcement agencies indicate that Chautauqua County is seeing the rise of methamphetamine and cocaine use.

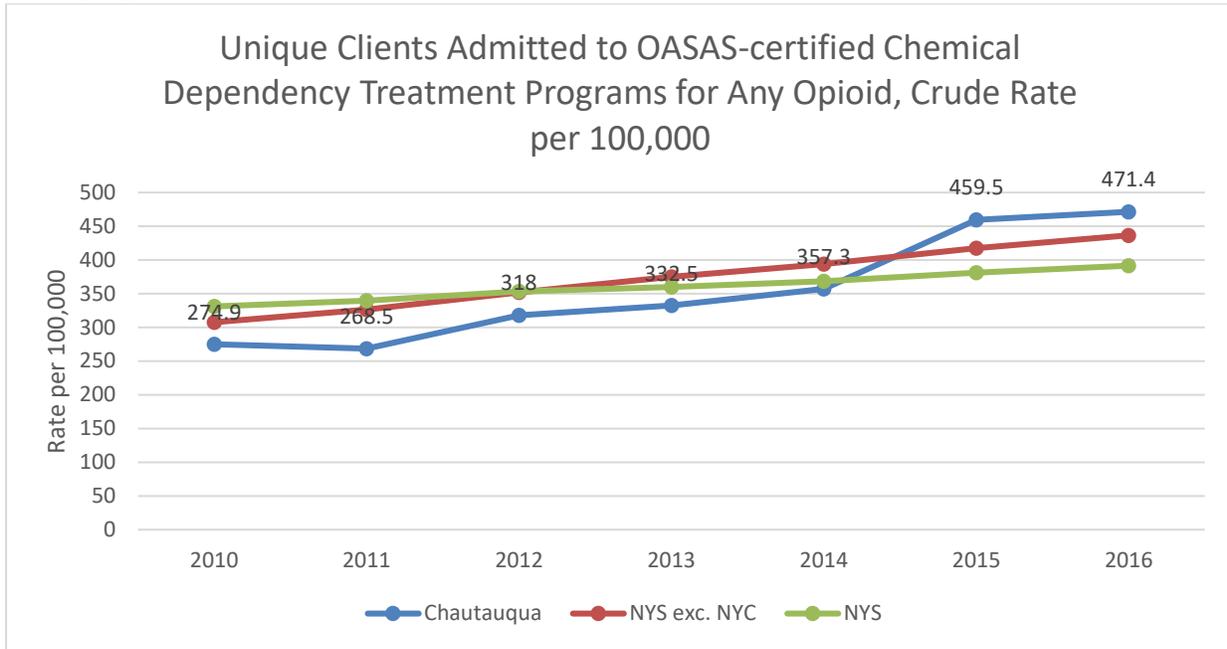
Table 24. Drugs and Types of Drugs Included in Toxicology Reports on Death Certificates (Fatal Overdoses Only), 2017-2018

Drug Type	2017		2018	
	Number	Percent	Number	Percent
<i>Any Opioid</i>	30	76.9%	20	76.9%
<i>Cocaine</i>	2	5.1%	7	26.9%
<i>Fentanyl</i>	21	53.8%	13	50.0%
<i>GABA analogues</i>	2	5.1%	8	30.8%
<i>Anti-depressants and Anti-Psychotics</i>	4	10.3%	7	26.9%
<i>Heroin</i>	14	35.9%	5	19.2%
<i>Benzodiazepine</i>	5	12.8%	6	23.1%
<i>Methamphetamine</i>	3	7.7%	7	26.9%
<i>Buprenorphine</i>	0	0.0%	3	11.5%
<i>Amphetamine</i>	0	0.0%	4	15.4%
<i>Antihistamine</i>	0	0.0%	4	15.4%
<i>Methadone</i>	2	5.1%	2	7.7%
<i>Prescription Opioids, excluding fentanyl</i>	6	15.4%	2	7.7%
<i>Sedative</i>	0	0.0%	1	3.8%
<i>Anti-convulsant</i>	0	0.0%	1	3.8%
<i>Muscle relaxers</i>	0	0.0%	4	15.4%
<i>Cough Medicine</i>	0	0.0%	1	3.8%
<i>Alcohol</i>	4	10.3%	3	11.5%
<i>MDMA</i>	1	2.6%	0	0.0%
<b>Total Fatal Overdoses</b>	<b>39</b>		<b>26</b>	

Source: Death Certificates submitted to CCDHHS

Chautauqua County, and New York State, and New York State excluding New York City have experienced a steady increase in the rate of unique clients (ages 12 and over) admitted to OASAS-certified chemical dependency treatment programs for any opioid from 2010 to 2016.

Figure 100. Unique Clients Admitted to OASAS-certified Chemical Dependency Treatment Programs for Any Opioid

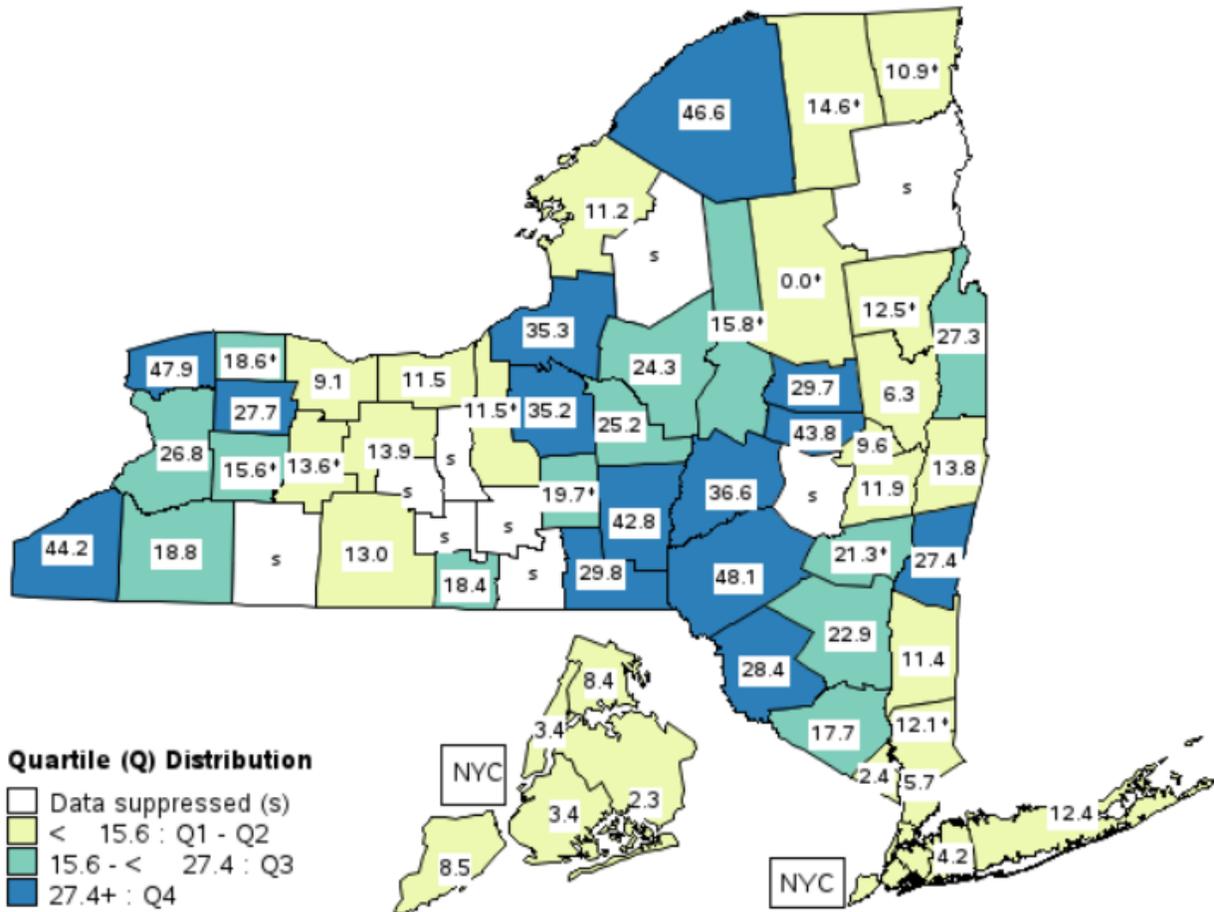


Source: NYSDOH Opioid Data Dashboard; OASAS Data

The rate of newborns with neonatal withdrawal syndrome and/or affected by maternal use of drugs of addiction continues to be a concern in Chautauqua County. Due to change in methodology and/or transition from ICD-9 to ICD-10, the figure calculated for 2016 by NYSDOH is not comparable to the figures provided in earlier years. The 2016 rate for Chautauqua County was 44.2 per 1,000 newborn discharges with any diagnosis; this is the second highest rate in Western New York, and the fourth highest rate in New York State. It must be noted that there is no consistent standard for testing newborns for prenatal exposure in New York, and consequently, screening protocols vary widely.

Map 14. Newborns with Neonatal Withdrawal Syndrome and/or Affected by Maternal Use of Drugs of addiction, Crude Rate per 1,000 Newborn Discharges, 2016

**Newborns with neonatal withdrawal syndrome and/or affected by maternal use of drugs of addiction, crude rate per 1,000 newborn discharges (any diagnosis), 2016**



Data Source: SPARCS data as of December 2017

## Prevent Communicable Diseases

“A communicable disease is an illness or infection that can be spread from person to person, animal to person, animal to animal or person to animal. Communicable diseases contribute to sickness and death in New York State and are preventable.”

The Prevention Agenda 2019-2024 Prevent Communicable Diseases Priority Area aligns statewide efforts under five distinct focus areas:

- Vaccine Preventable Diseases
  - Human Immunodeficiency Virus (HIV)
  - Sexually Transmitted Infections (STI)
  - Hepatitis C Virus (HCV)
  - Antibiotic Resistance and Healthcare-Associated Infections
- New York State Prevention Agenda 2019-2024, Prevent Communicable Diseases Action Plan

### Vaccine Preventable Diseases

From 2014 to 2016, Chautauqua County rates of pertussis and Salmonella significantly exceeded rates for New York State and New York State excluding New York City. Hospitalization rates for pneumonia and flu in Chautauqua County did not significantly differ from state comparisons. During the same time period, Chautauqua County rates of mumps, acute hepatitis B, tuberculosis, and Lyme disease were noticeably lower than the state rates.

Table 26. Selected communicable disease counts and rates, 2014-2016

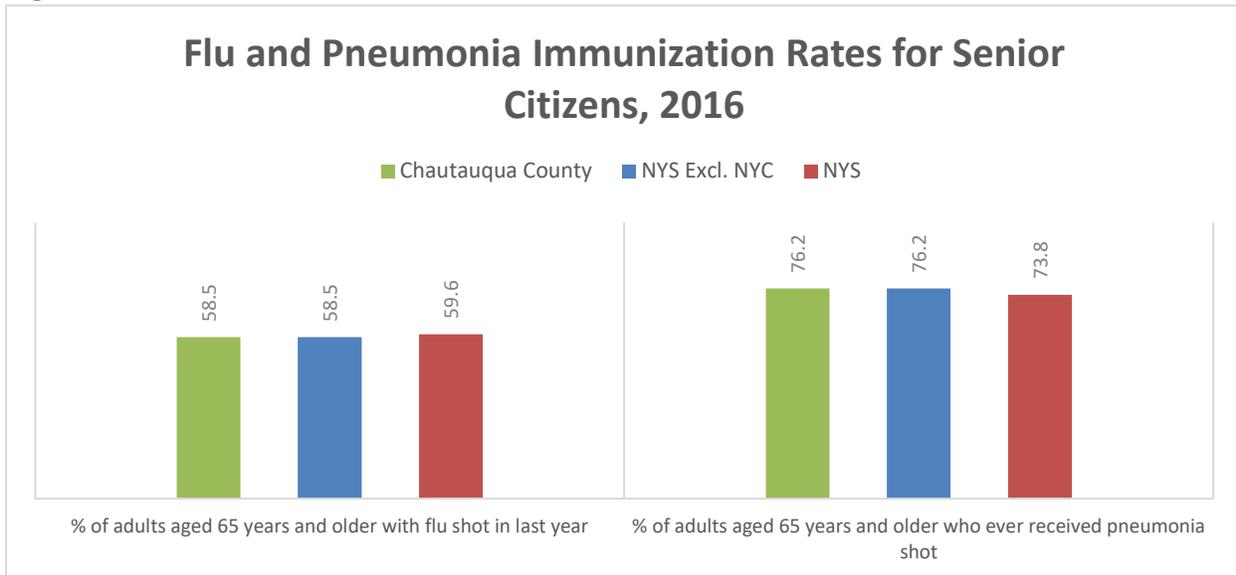
	Chautauqua County		NYS Excluding NYC	New York State
	3 Year Total	Rate per 100,000	Rate per 100,000	Rate per 100,000
Pertussis	58	14.8	6.5	5.1
Mumps	0	0.00*	0.7	1.1
Meningococcal	1	0.3*	0.1	0.1
Haemophilus influenza	9	2.3*	1.7	1.5
Hepatitis A	1	0.3*	0.4	0.5
Acute hepatitis B	0	0.0*	0.3	0.5
Tuberculosis	0	0.0*	1.8	3.9
E. coli Shiga Toxin	10	2.5	1.9	1.6
Salmonella	70	17.8	12	11.6
Shigella	4	1.0*	2.5	3.9
Lyme disease	12	3.1	58.6	38

Source: Community Health Indicators: Communicable Disease Indicators 2014-2016

\*Rate/percentage is unstable or unreliable

Immunization rates for flu and pneumonia among Chautauqua County residents aged 65 years and older were relatively similar to state comparisons. From 2014 to 2016, 76.2% of county senior citizens had ever received the pneumonia shot, while 58.5% had received the flu shot in the last year.

Figure 101. Flu and Pneumonia Immunization Rates for Seniors, 2014-2016

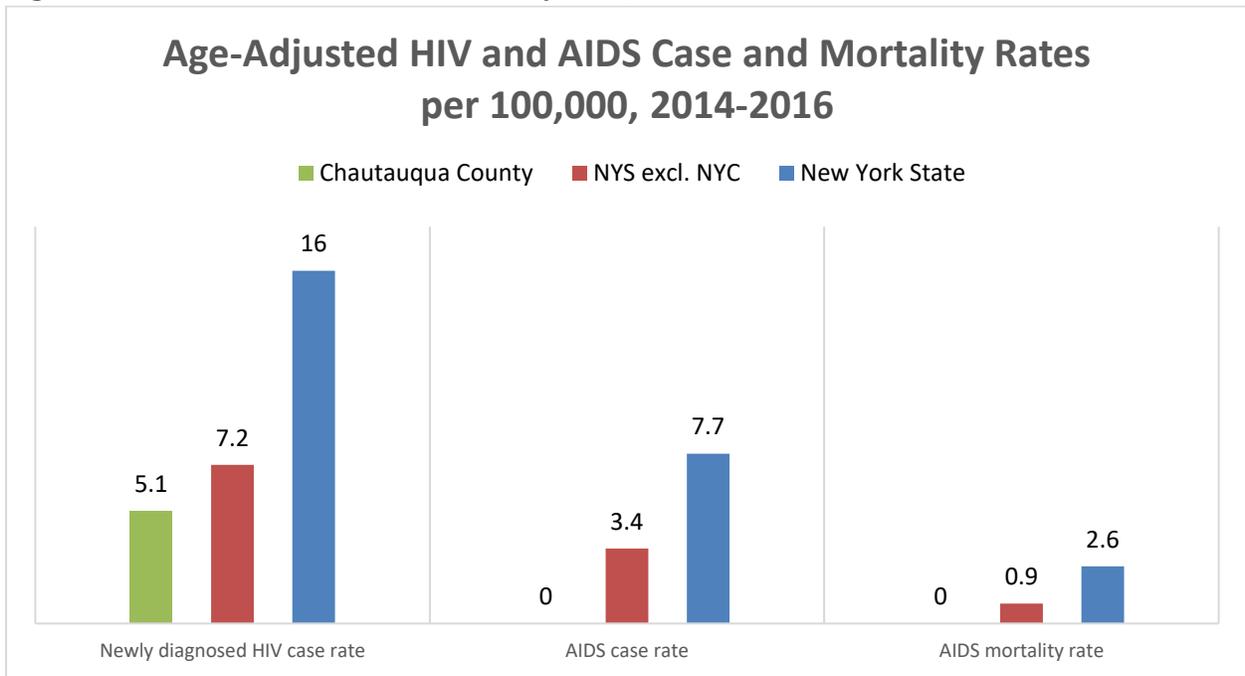


Source: NYSDOH Community Health Indicators: Communicable Disease Indicators 2014-2016

### HIV and AIDS

In 2014-2016, 17 new cases of HIV occurred in Chautauqua County. The resulting age-adjusted case rate per 100,000 was 5.1 in the county, slightly lower than the NYS excluding NYC rate of 7.2, and significantly lower than the New York State rate of 16.0. During the same time period, there were 4 new cases of AIDS and 2 deaths due to AIDS in Chautauqua County. The age-adjusted AIDS case rate and AIDS mortality rate were also noticeably lower than New York State as a whole. A review of AIDS data over the past ten years found a steady decline in the Chautauqua County AIDS case rate.

Figure 102. HIV and AIDS case and mortality rates, 2014-2016

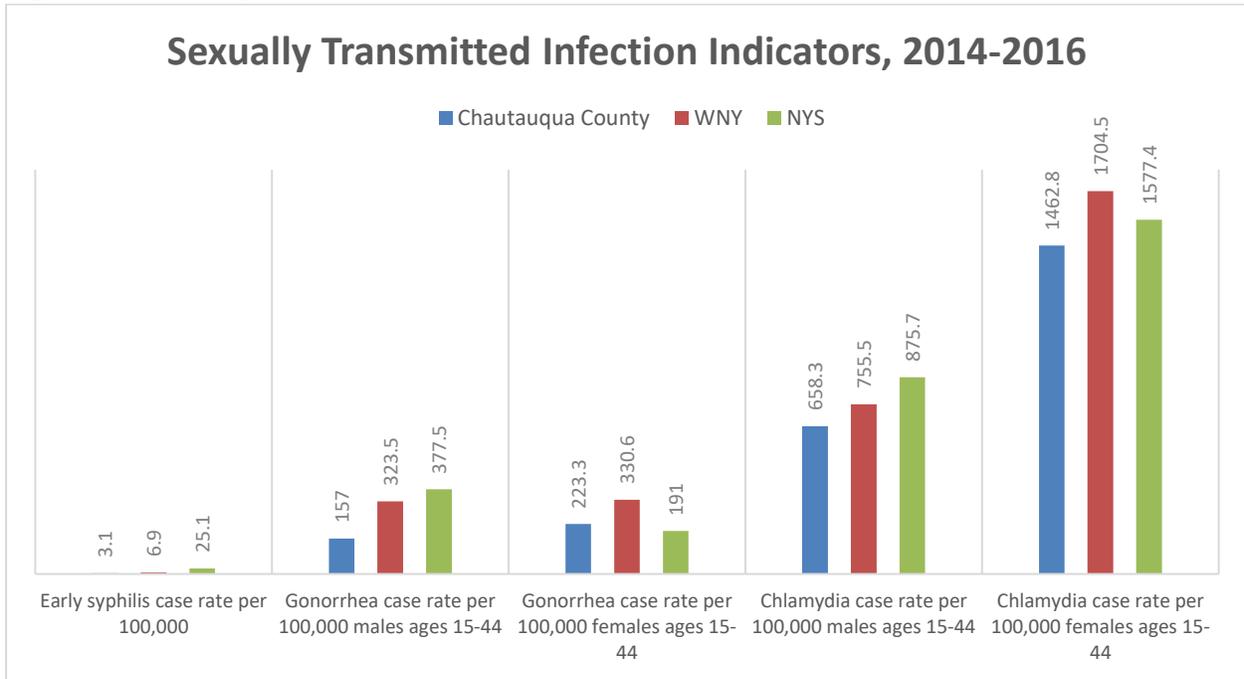


Source: NYSDOH Community Health Indicator Reports: HIV and AIDS and Other Sexually Transmitted Infections Indicators, 2014-2016

### Sexually Transmitted Infections

During 2014-2016, rates of Gonorrhea, Chlamydia and Early Syphilis were significantly lower in Chautauqua County than New York State as a whole. Rates for Gonorrhea and Early Syphilis were lower in Chautauqua County than New York State excluding New York City. Chlamydia was the most common STI, as well as the most common reportable communicable disease other than influenza, in Chautauqua County with 1,022 cases among females ages 15-44 and 478 cases among males ages 15-44 from 2014 to 2016.

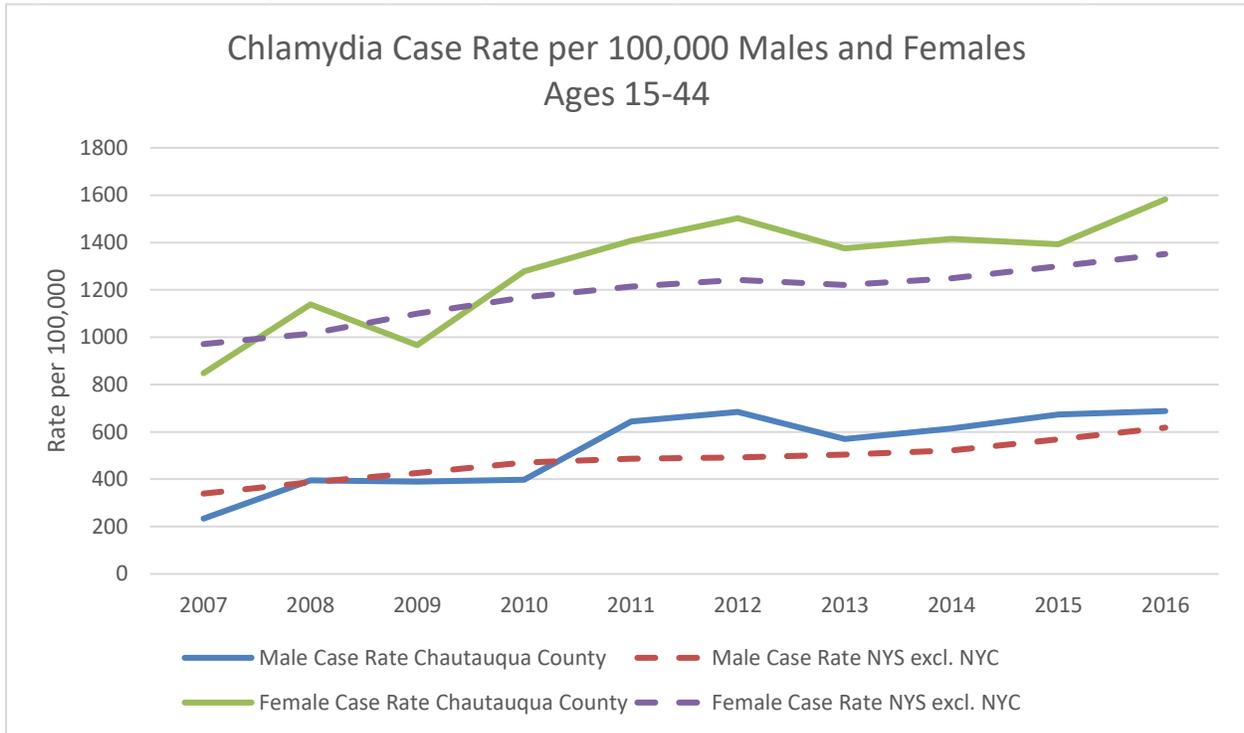
Figure 103. Sexually Transmitted Infection Indicators, 2014-2016



Source: NYSDOH Community Health Indicator Reports: HIV and AIDS and Other Sexually Transmitted Infections Indicators, 2014-2016

Figure 104 provides crude chlamydia rates among females and males ages 15-44 in Chautauqua County and New York State excluding New York City from 2007 to 2016, demonstrating an observable upward trend. This increase is consistent with statewide Chlamydia trends. From 2011 to 2016, Chautauqua county rates exceeded the “rest of state” values.

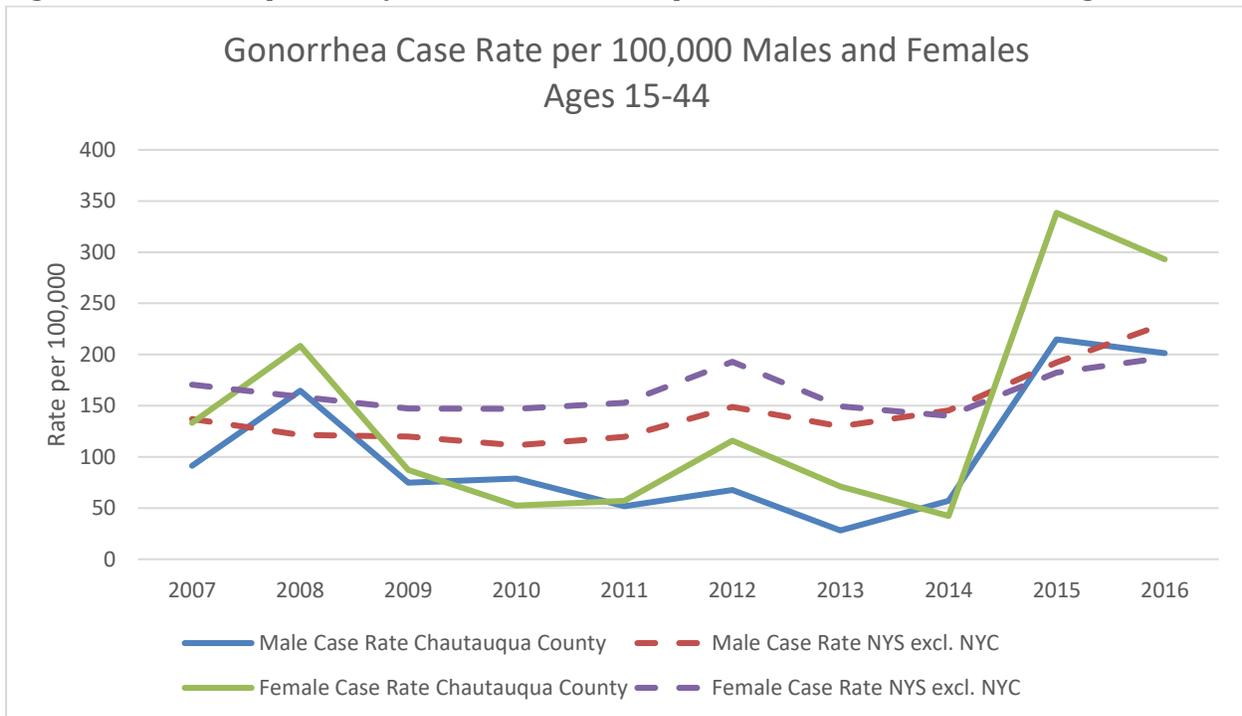
Figure 104. Chautauqua County Chlamydia Case Rate per 100,000 males and females ages 15-44



Source: NYSDOH Community Health Indicator Reports: HIV and AIDS and Other Sexually Transmitted Infections Indicators, 2014-2016

Figure 105 provides crude Gonorrhea rates among females and males ages 15-44 in Chautauqua County and New York State excluding New York City from 2007 to 2016. Gonorrhea rates spiked in Chautauqua County in 2015, exceeding the New York State excluding New York City values for both males and females. Figures declined for both males and females in Chautauqua County in 2016.

Figure 105. Chautauqua County Gonorrhea Case Rate per 100,000 males and females ages 15-44

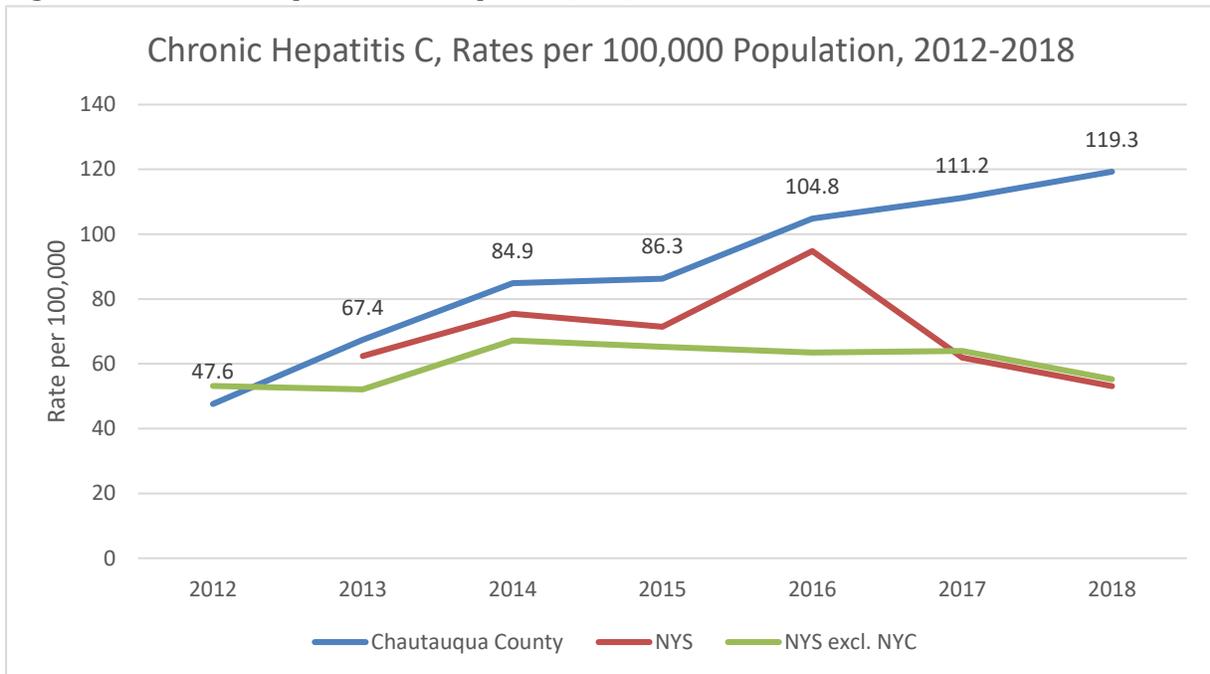


Source: NYSDOH Community Health Indicator Reports: HIV and AIDS and Other Sexually Transmitted Infections Indicators, 2014-2016

### Hepatitis C Virus (HCV)

The New York State Department of Health Communicable Disease Reports provide numbers and rates for reportable communicable diseases in New York State. The annual number of acute Hepatitis B cases experienced in Chautauqua County are generally fewer than 10, and therefore result in an unstable rate. The rate of acute Hepatitis C for Chautauqua County also trends very low; however, the rate of chronic Hepatitis C is high compared to state rates and is on the rise. Figure 106 below demonstrates the upward trend for Chautauqua County, with a rate of 119.3 cases per 100,000 in 2018, compared to 53.1 in New York State and 55.2 in New York State excluding New York City. The increase in Hepatitis C cases is likely a reflection of both an increase in screening, and an increase in drug use in the community.

Figure 106. Chronic Hepatitis C Rates per 100,000, 2012-2018



Source: NYSDOH Communicable Disease Annual Reports

## Hospital-Acquired Infections

Hospital-acquired infections (HAI) are infections that patients can get as a result of receiving treatment in a hospital. NYSDOH monitors HAI to ensure patient safety and provide the public with data to compare hospital infection rates. *Hospital-Acquired Infections in New York State, 2018, Part 1: Summary for Consumers* provides an overview of hospital-acquired infections in New York State at the individual hospital level. Chautauqua County Hospitals included in this report are Brooks Memorial Hospital and UPMC Chautauqua.

Both Brooks Memorial Hospital and UPMC Chautauqua experienced similar surgical site infection rates for colon, coronary artery bypass graft, hip replacement and hysterectomy procedures as New York State in 2017 and 2018. Brooks Memorial Hospital also experienced rates similar to New York State for central line-associated bloodstream infections and *Clostridioides difficile* infections. In 2017, UPMC Chautauqua had a better *Clostridioides difficile* infection rate than New York State, and in 2018, its central line-associated bloodstream infections was slightly worse than the New York State rate.

## Health Challenges in Chautauqua County

Examination of statistics presented in the health profile reveals that Chautauqua County faces many health challenges.

These health challenges include:

- Fourth quartile distribution for percentage of population in poverty – highest in WNY and second highest county in NYS excluding NYC.
- Declining population with increasing percentage of the population aged 65 years and older.
- Percentage of premature deaths (aged less than 75 years) is worsening, and corresponding years of potential life lost is increasing.
- High rates of morbidity and mortality resulting from preventable chronic diseases, including heart disease, cancer, and diabetes.
- Corresponding rates of tobacco use and overweight and obesity.
- Many women having children at a young age, and not seeking out early prenatal care during pregnancy.
- Low breastfeeding rates at 6 months.
- Many residents suffering from poor mental health, and appearing to turn to self-medication for these problems.
- Substance abuse among residents of all types, and particularly among pregnant women.

## Behavioral Risk Factors

Poor behaviors and personal choices regarding tobacco use, food choices, and level of physical activity contribute to the problem of chronic disease in Chautauqua County.

The Expanded Behavioral Risk Factor Surveillance System (eBRFSS) augments the CDC Behavioral Risk Factor Surveillance System (BRFSS), which is conducted annually in New York State. Expanded BRFSS is a random-digit-dialed telephone survey among adults 18 years of age and older representative of the non-institutionalized civilian population with landline and cellular telephones living in New York State. The goal of Expanded BRFSS surveys is to collect county-specific data on preventive health practices, risk behaviors, injuries and preventable chronic and infectious diseases.

Data from the 2013-2014 New York State eBRFSS Survey and the 2016 Behavioral Risk Factor Surveillance System were used to help identify behavioral risk factors in Chautauqua County.

### **Tobacco use**

Self-reported tobacco use among adults is available through behavioral risk factor surveillance systems. NYSDOH estimated that 25.8% of Chautauqua County adults were smokers in the 2016 Expanded Behavioral Risk Factor Surveillance System (eBRFSS); this is an increase from the 2013-2014 estimated rate of 24.7, and much higher than the NYS rate of 14.2 (2016). E-cigarette use was measured at 6.1% for the Chautauqua County population surveyed (2016), while NYS estimated 4.1% use for the same period.

Chautauqua County adults aged 18-24 years who are current smokers is 20.3% (2016); the NYS rate is estimated at 11.7%. The percentage of adults with a disability who smoke is 34.2% in Chautauqua County, and the percentage of adults with annual household income less than \$25,000 who are current smokers is 34.6%. The NYS rates for the same indicators were 20.1% and 19.8% respectively. The percentage of cigarette smoking adults who report poor mental health in Chautauqua County is 40.9%; in NYS, it is 26%.

### **Overweight and Obesity, Nutrition and Physical Activity**

Self-reported weight statuses, along with related behaviors, are provided by the New York State Expanded Behavioral Risk Factor Surveillance System. In 2016, slightly more adults (ages 18 and older) in Chautauqua County reported consuming less than one fruit and less than one vegetable daily (no fruits and vegetables) (36.3%) than New York State (31.2%). At 72.4%, the majority of Chautauqua County adult residents did not participate in leisure time physical activity in the last 30 days. Figures for state comparison was relatively similar.

The percentage of adults who self-reported a BMI of 30 or higher was slightly greater in Chautauqua County (31.5%) than New York State (25.5%). The percent of adults who reported overweight or obese in Chautauqua County was 64.7%.

According to the US Centers for Disease Control and Prevention (CDC) Youth Online Youth Risk Behavior Surveillance System, in 2017 30.4% of United States high school students were overweight or obese. The same survey found that among US high school students, 5.6% did not eat fruit or drink 100% fruit juice during the 7 days before the survey, 7.2% did not eat vegetables during the 7 days before the survey, and 7.1% drank 3 or more servings of soda or pop per day in the 7 days before the survey.

Sugar-loaded beverages are a major contributor to obesity and chronic disease in NYS and the United States. In Chautauqua County, 30.6% of adults consumed at least one soda or sugary drink per day in 2016. This is higher than the reported rate in 2013-2014, 27.9%.

## Health Screenings

### *Cardiovascular Disease Screenings*

Data from the NYSDOH eBRFSS presents behaviors of Chautauqua County residents in accessing cardiovascular disease screening health care services. In 2016, 37.1% of county residents had physician-diagnosed high blood pressure, higher than rate for New York State. 71.3% of the adults in Chautauqua County with diagnosed high blood pressure take their high blood pressure medication; this is lower than the NYS average of 76.9. The rate in Chautauqua County is less than reported in 2013-2014, 82.5%. The NYS rate remained stable from 2013-2014 to 2016 reporting.

In 2013-2014, age-adjusted rates show that 81.5% of Chautauqua County residents had their cholesterol checked. During the same time frame, and using the same adjustment, 29.2% of adults reported having elevated cholesterol levels. More adults in Chautauqua County had a diagnosis of angina, heart attack or stroke at 7.9%, compared to 7% statewide (2016).

### *Cancer Screenings*

In Chautauqua County in 2016, based on 2012 guidelines (Pap test within past three years for women aged 21-65, or Pap test plus HPV test within past five years for women aged 30-65) 84.7% of women aged 21-65 years received cervical cancer screening, compared to 82.2% in New York State as a whole. During the same time frame, 81.2% of women aged 50-74 received breast cancer screening based on recent guidelines. This figure was slightly higher than the state comparison. Colorectal cancer screening rates improved from 69.8% of adults ages 50-75 years old (based on recent guidelines) to 77.5% in 2016. This figure exceeds the New York State rate of 68.5%.

### *Lead Screenings*

As identified in the demographic profile and in the child health section, 70.2% of homes in Chautauqua County were built prior to 1970. Because lead paint is more common among older homes, childhood lead poisoning is a concern in the county. The rate of lead screening, aged 9-17 months, was 69.5%, which is lower than both the NYS (74.8%) and the WNY (78.5%) rates. The lead screening rate for children aged 18-35 months, is only slightly lower than NYS, with rates of 74.9 and 75.4 respectively; the WNY percentage rate was higher at 80.4. The percentage of children born in 2013 with at least two lead screenings by 36 months was 60.1 in Chautauqua County, 62.8 in NYS, and 67.9 in WNY. The incidence of confirmed elevated blood lead levels ( $\geq 10$  mg/dl) among children less than 72 months old was 12.9 per 1,000, which was higher than the New York State rate of 4.3 but lower than the WNY rate of 16.

Chautauqua County has seen significant improvement in children born in 2013 with a lead screening, aged 9-17 months and with at least two lead screenings by 36 months, as shown in Figures 73 and 74 on pages 89-90.

### **Adolescent Substance Abuse Behaviors**

In February 2019, 8 of the 18 Chautauqua County school districts participated in the Pride Survey, which measures teen substance use. Conducted by Prevention Works of Chautauqua County, the survey found that both lifetime prevalence and past 30-day prevalence increased with each grade level. Comparison figures are provided by the University of Michigan's Monitoring the Future study, which measures the behaviors, attitudes, and values of Americans from adolescence through adulthood. These US figures are calculated for students in grades 8, 10, and 12. Chautauqua County rates for lifetime prevalence and past 30-day prevalence exceeded national figures in grades 8, 10, and 12. Of all students surveyed, 53% had ever used alcohol, and 26.2% had used alcohol within the last 30 days. Of all students surveyed about marijuana use, 29% of 7-12<sup>th</sup> graders had ever used marijuana, and 17.3% of students had used it within the last 30 days.

### **Environmental Risk Factors**

#### **Air Quality**

CDC WONDER Environmental Data provides measures of Outdoor Air Quality- Fine Particulate Matter. The County Health Rankings website provides a comparison of daily fine particulate matter with an aerodynamic diameter less than 2.5 micrometers (PM2.5) ( $\mu\text{g}/\text{m}^3$ ) at the county level across the United States. Negative health outcomes of ambient air pollution include decreased lung function, asthma, chronic bronchitis, and other pulmonary issues. According to the County Rankings, in 2014, average daily PM2.5 for Chautauqua County was measured at 9.6. During the same time period, the NYS average was 8.5. As Figure 60, on page 75 illustrates, measures for Chautauqua County are improving. With daily averages ranging from 8.5 - 11, all eight counties in Western New York are equal to or above the NYS average.

#### **Drug Trafficking**

Chautauqua County was designated as a High Intensity Drug Trafficking Area (HIDTA) in September 2014 by the United States Drug Enforcement Administration. HIDTAs are areas determined to be critical drug-trafficking regions of the United States. Chautauqua County law enforcement officials began seeing an increase in drug trafficking activity in 2010, and increases in drug overdose rates followed.

#### **Access to Healthy Foods**

According to the 2016 New York State Community Health Indicator Reports, 19.2% of Chautauqua County residents live below the federally determined guidelines for poverty.

12.7% of County residents did not have access to a reliable source of food during the past year, and 18.9% of households received SNAP benefits in the past 12 months.

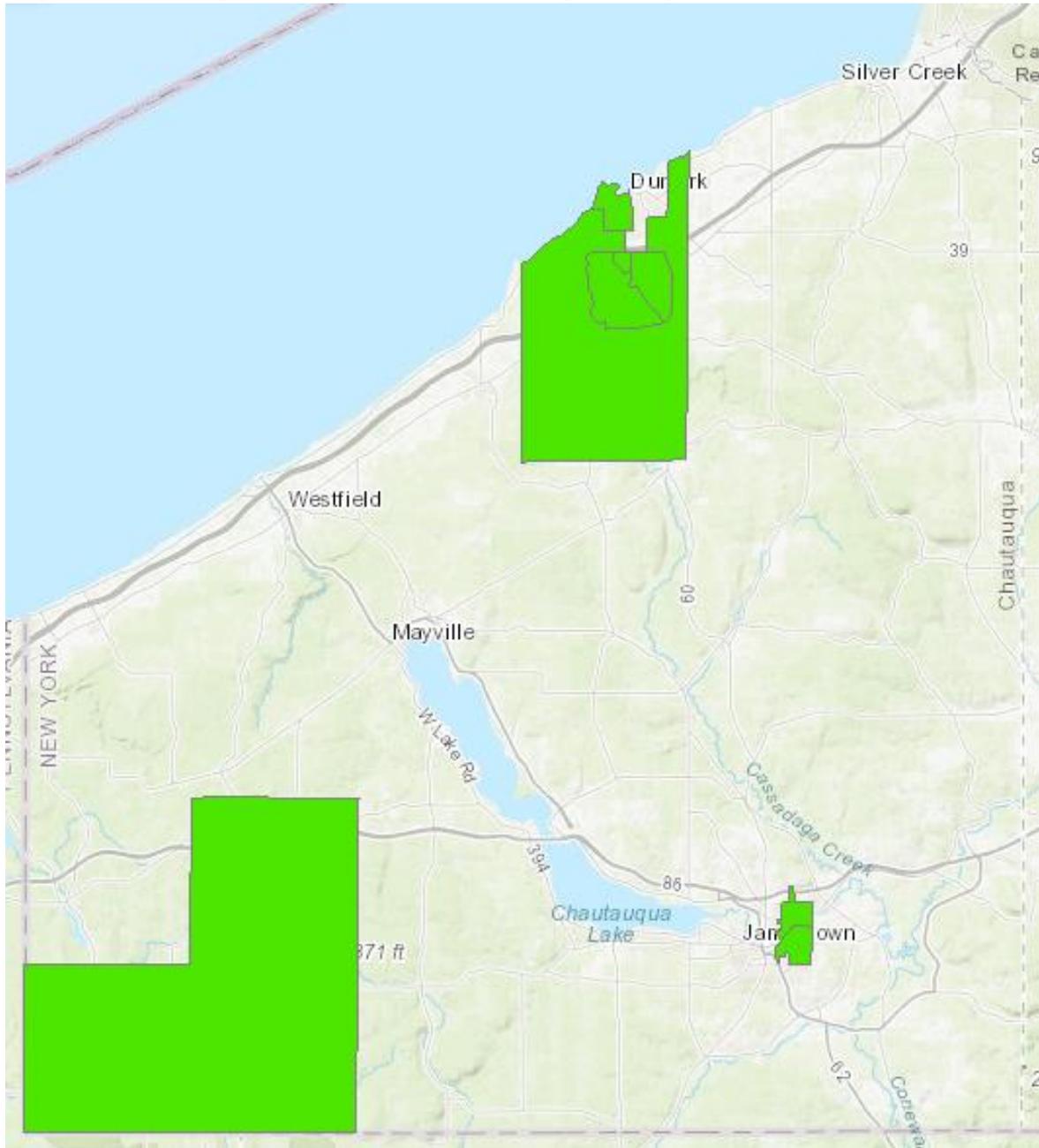
In 2015, 6.8% of Chautauqua County population had low income and low access to a supermarket or large grocery store. This is in the fourth quartile distribution in NYS and the highest percentage in WNY.

Data from the NYSDOH eBRFSS (2016) suggests that 77.3% of Chautauqua County adults had food security over the last 12 months. This is just slightly higher than the NYS rate of 75.8%.

The USDA's Food Access Research Atlas provides maps that identify food deserts throughout the United States. Food deserts indicate that the health of designated communities is affected by an inability to access fresh foods. In Chautauqua County, there were three USDA-designated "food desert" areas in 2015.

The map below highlights (green) low-income census tracts where a significant number or share of residents is more than one mile (urban settings) or ten miles (rural settings) from the nearest supermarket. The food desert in the southwest portion of the county spans the Towns of Clymer, French Creek, and Sherman. The food desert in the northern part of the county includes the Towns of Dunkirk, Pomfret, and Stockton, as well as portions of the City of Dunkirk and Village of Fredonia. The smaller food desert located in the southeast part of Chautauqua County includes a portion of the City of Jamestown. (USDA, 2015)

Map 15. USDA-designated food deserts in Chautauqua County, 2015

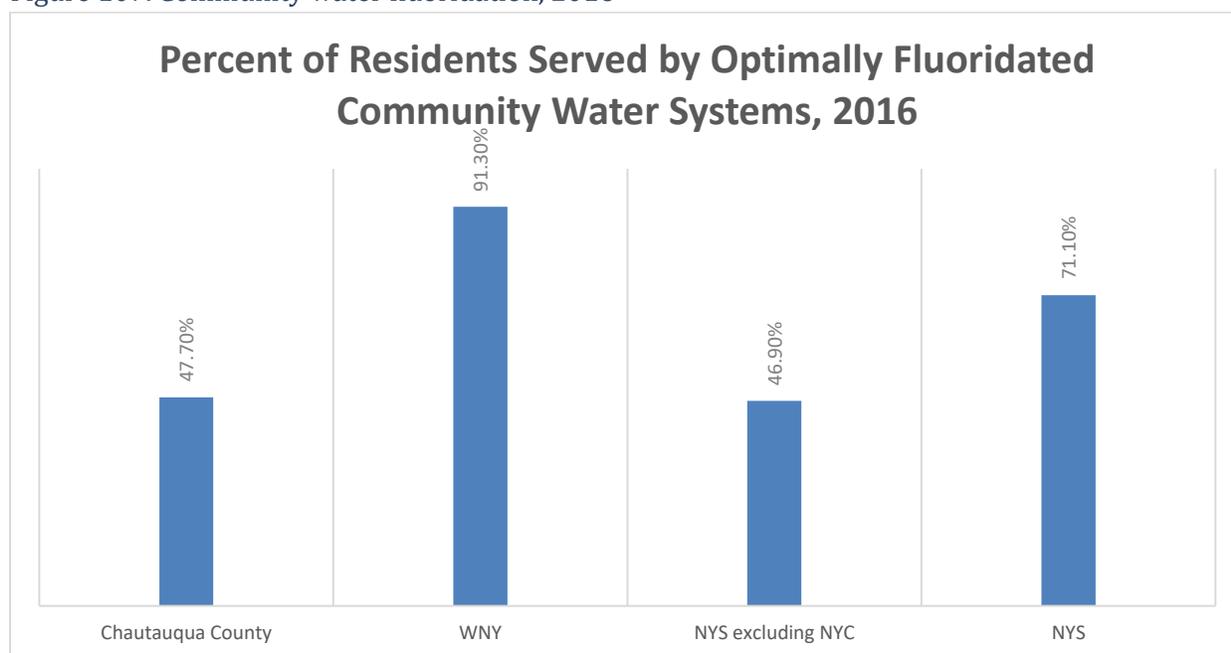


Source: USDA ERS Food Access Research Atlas, 2015 (Last updated October 2019)

### Community Water Fluoridation

According to the New York State Safe Drinking Water Information System (SDWIS), in 2016 47.7% of Chautauqua County residents served by community water systems had optimally fluoridated water. This figure was lower than the Western New York and New York State rates of 91.3% and 71.1%, and on par with the New York State excluding New York City rate of 46.9%.

Figure 107. Community water fluoridation, 2016



Source: NYSDOH Maternal and Child Health Dashboard; Safe Drinking Water Information System, 2016

Three authorities currently provide fluoridated water to Chautauqua County residents: Erie County Water Authority, Jamestown Board of Public Utilities, and Village of Westfield Water Department. Table 27 details municipalities and schools served by each water supplier.

Table 27. Fluoridated water supplies and populations served in Chautauqua County, 2019

Water Supplier	Municipalities Served	Schools Served
<b>Erie County Water Authority</b>	Town of Hanover (portions), Village of Silver Creek	Silver Creek CSD
<b>Jamestown BPU</b>	City of Jamestown, Villages of Lakewood, Falconer, Celoron, and portions of the Towns of Busti, Ellicott, North Harmony, and Kiantone	Jamestown City School District, Southwestern CSD, Falconer CSD
<b>Village of Westfield Water Department</b>	Village of Westfield, Town of Westfield (portions)	Westfield Academy and CSD

Source: Personal Correspondence with CCDHHS Environmental Health Unit, 2019

### Socioeconomic Factors

As indicated in the demographic profile, poverty is a major issue in Chautauqua County, with 18.5% of all residents living below the Federal Poverty Level (U.S. Census Bureau American Community Survey poverty rates for 2013-2017). Many residents struggle to find and keep jobs that pay enough to support their families, and live one paycheck to the next. Activities like seeking out and purchasing healthy foods, taking time to exercise, and regularly visiting a health

care provider are generally not very high on the priority list of residents struggling to survive. In addition, our growing Hispanic population faces many language and cultural barriers that make it difficult to live and adapt. These factors exacerbate the health issues outlined in the health profile, and present many challenges to service providers throughout Chautauqua County.

A detailed profile of the income and poverty data of Chautauqua County is available on pages 17-22.

### **Policy Environment**

Partners throughout Chautauqua County have been working to improve the policy environment over the past several years. Advocates and public health agencies have been working to increase the number of municipalities that have a complete streets policy in place. As of December 2019, Chautauqua County has a policy, as do the Cities of Jamestown and Dunkirk, and 7 other municipalities (Fredonia, Silver Creek, Cassadaga, Celoron, Lakewood, Falconer, Ripley). Complete streets activities are included in the Chautauqua County Health Network's Creating Healthy Schools and Communities workplan. In 2019, the County Executive for Chautauqua County passed an executive order to implement an Interdepartmental Workgroup for Complete Streets and earmarked local share funds for Complete Streets roadway projects in the County.

In 2019, a food policy council was established through a resolution passed by the Chautauqua County Legislature.

Through the efforts of the Tobacco-Free Chautauqua, Cattaraugus, and Allegany Program and public and private officials, there has been an increase in tobacco-free outdoor areas in Chautauqua County. In particular, tobacco-free outdoor policies have increased among playgrounds, libraries, government buildings, private businesses, and health care organizations.

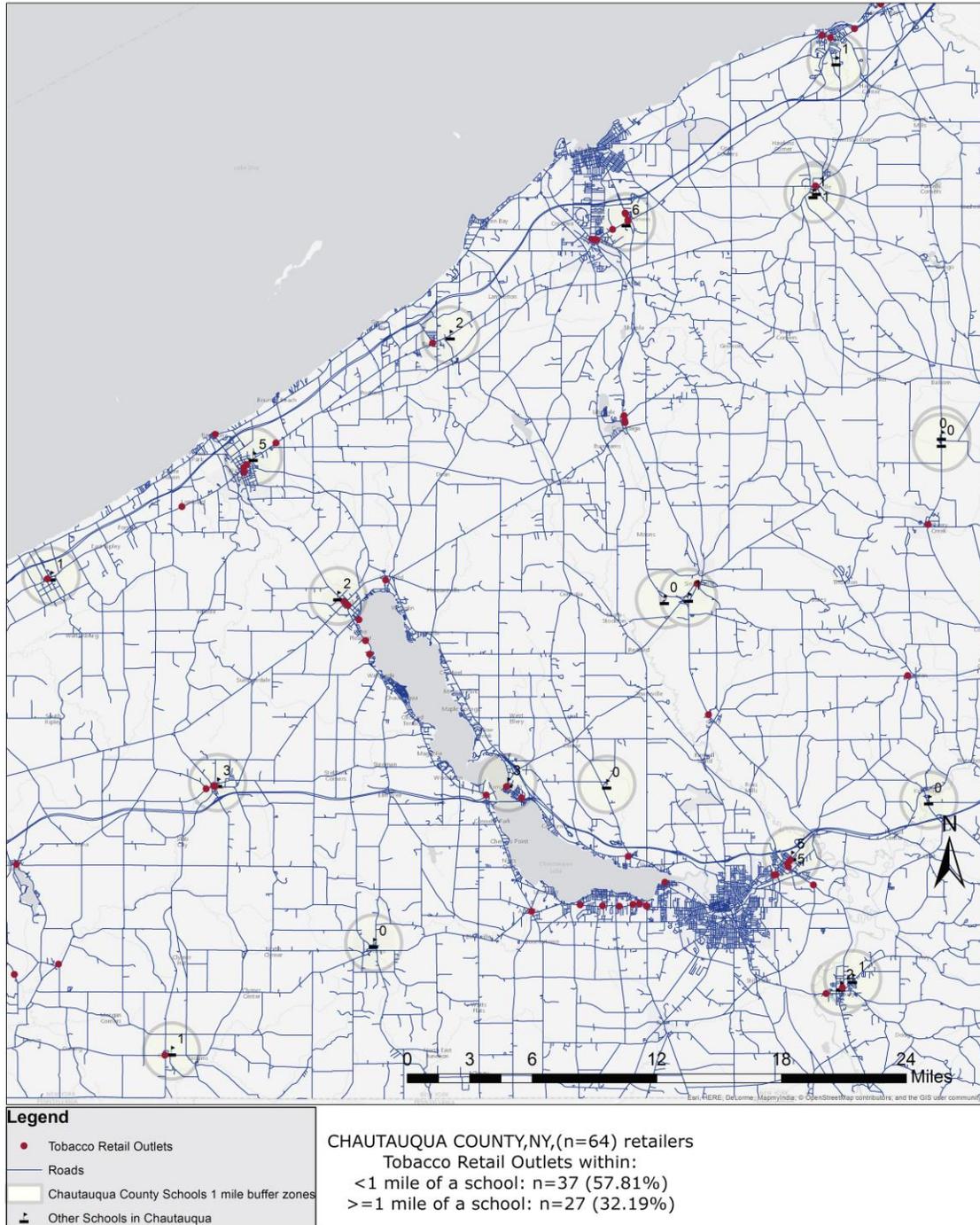
In accordance with the Clean Indoor Air Act, all indoor public spaces and workplaces are smoke-free. Each of the hospitals in Chautauqua County has passed and implemented a tobacco-free campus policy. Several other health care facilities, such as nursing homes, have also implemented tobacco-free policies. In November 2013, the Chautauqua County Legislature implemented a local law banning tobacco use on all county properties, excluding parks and trails. In 2016, all Jamestown Parks became tobacco-free and the Chautauqua County Legislature passed a Tobacco 21 Law. In 2019, all Chautauqua County Libraries implemented tobacco free grounds. The HUD smoke-free housing rule went into effect in July of 2018; other housing complexes in Chautauqua County voluntarily enacted these rules.

Tobacco use behaviors are almost exclusively developed during adolescence. Therefore, the proximity of tobacco outlets near schools also can promote the accessibility and availability of tobacco products, potentially influencing initiation of tobacco use among youth. Further, large

disparities in tobacco use exist between rural and urban areas, which may result in youth being differentially exposed to tobacco product marketing based on geographic area. The report, New York State Tobacco Control Evaluation Program Retail Store Observations: A Comparison of Point-of-Sale Between Rural and Urban Areas, Chautauqua County NY, prepared by the Department of Health Behavior, Division of Cancer Prevention and Population Sciences at Roswell Park Cancer Institute provides an update on the distribution of tobacco retail outlets near schools in urban and rural areas of Chautauqua County, New York. Maps 16, 17, and 18 show that 72% of tobacco retailers in Chautauqua County are located within one mile of a school. The proportion of retailers within one mile of a school in urban communities (Jamestown and Dunkirk) was significantly higher than the proportion of retailers within one mile of a school in rural communities (anywhere else in the County).

Map 16. Proximity of Tobacco Retailers to Schools in Chautauqua County, 2017

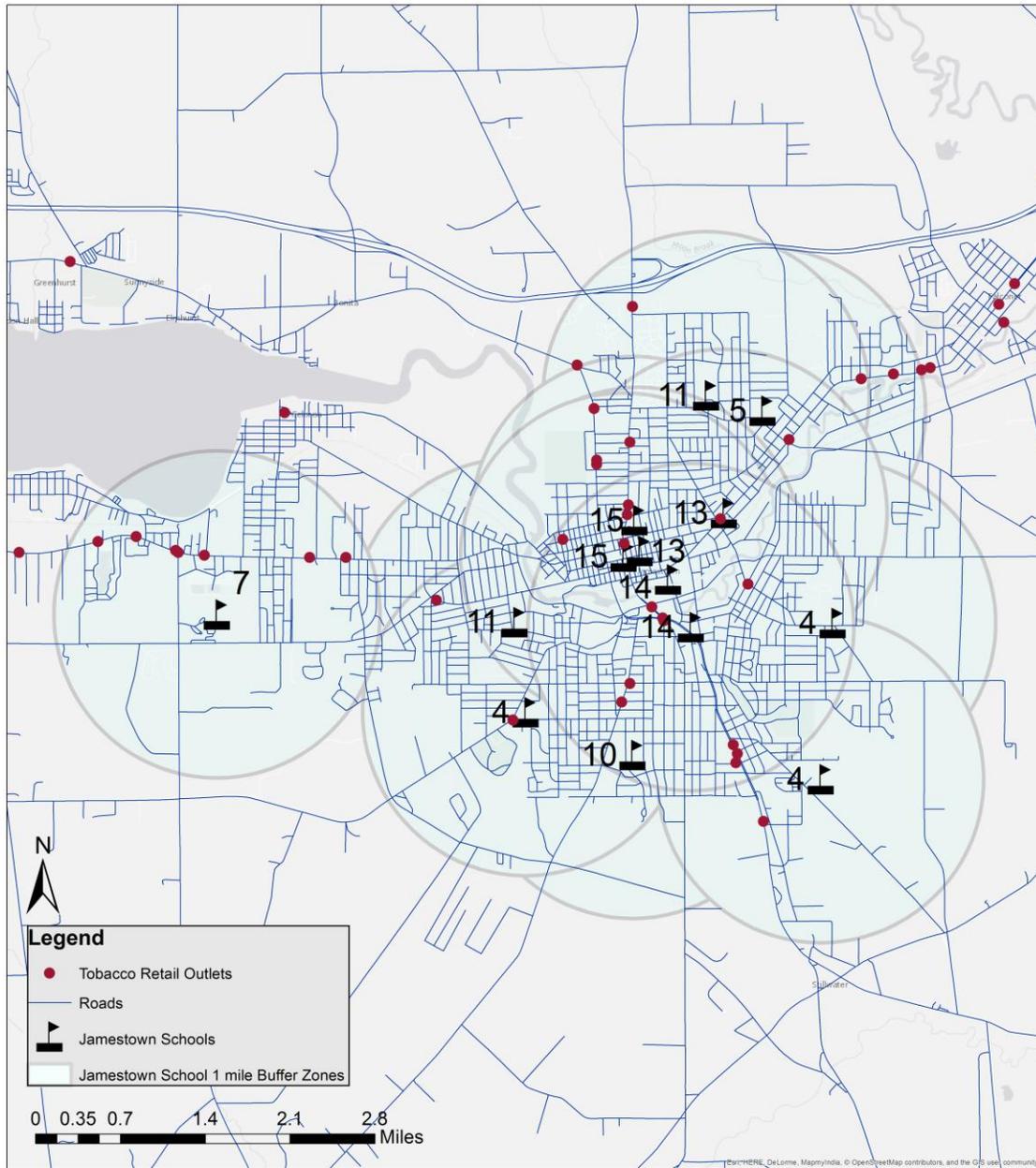
### Proximity to Schools in Chautauqua, NY, 2017



Source: Tobacco-Free Chautauqua, Cattaraugus and Allegany

Map 17. Proximity of Tobacco Retailers to Schools in Jamestown, NY, 2017

### Proximity to Schools in City of Jamestown Chautauqua, NY, 2017

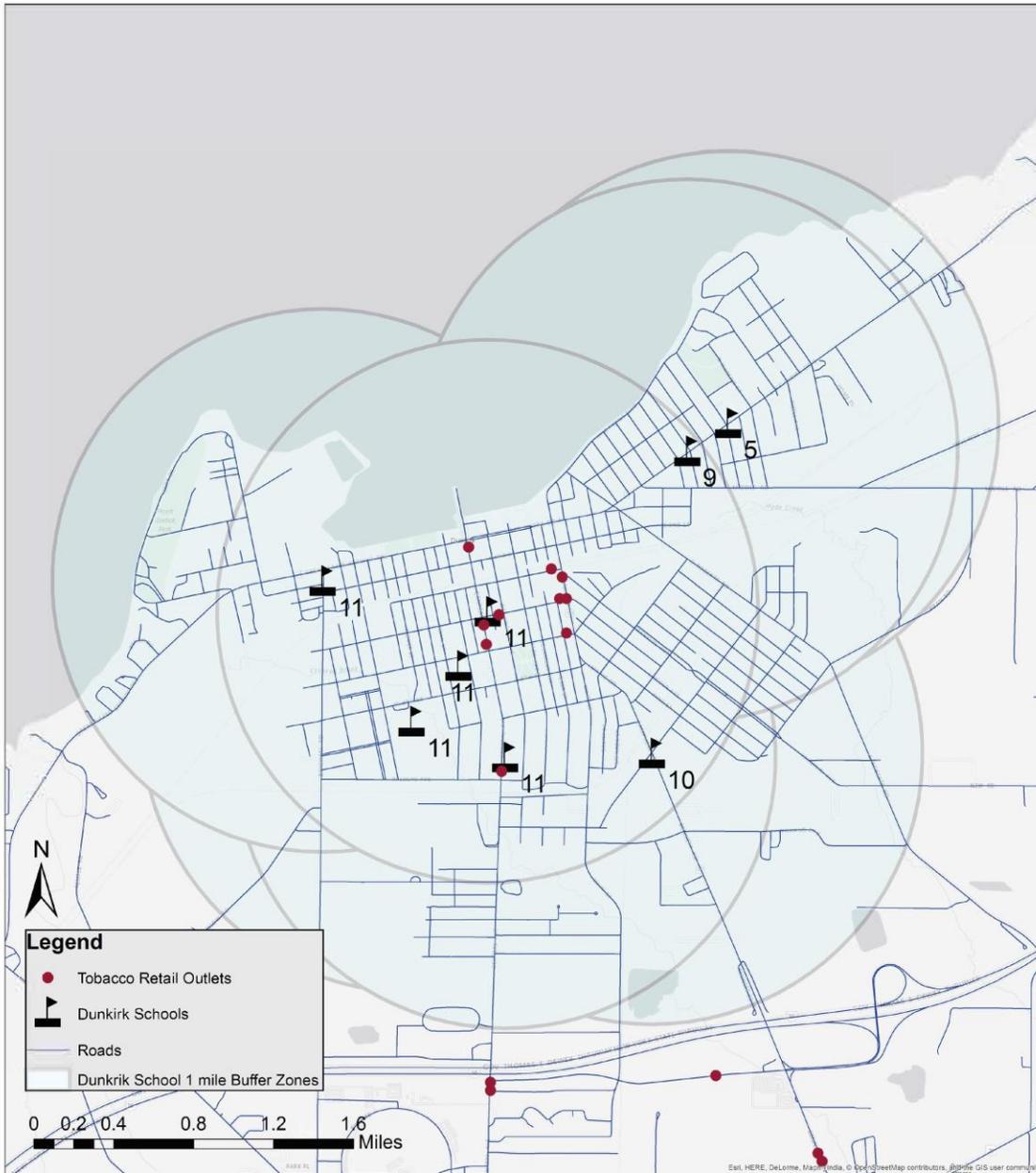


JAMESTOWN, CHAUTAUQUA COUNTY, NY, (n=29) retailers  
Tobacco Retail Outlets within:  
<1 mile of a school: n=29 (100%)  
>=1 mile of a school: n=0 (0%)

Source: Tobacco-Free Chautauqua, Cattaraugus and Allegany

Map 18. Proximity of Tobacco Retailers to Schools in Dunkirk, NY, 2017

### Proximity to Schools in City of Dunkirk Chautauqua, NY, 2017



DUNKIRK, CHAUTAUQUA COUNTY, NY, (n=14) retailers  
Tobacco Retail Outlets within:  
<1 mile of a school: n=11 (78.57%)  
>=1 mile of a school: n=3 (21.43%)

Source: Tobacco-Free Chautauqua, Cattaraugus and Allegany

Every school district in Chautauqua County has a school wellness policy, with varying levels of enforcement and implementation. Policies cover topics such as food and beverage offerings on campus, physical activity opportunities, and smoking policies. The USDA Food and Nutrition Service required all local educational agencies to revise local school wellness policies by June 2017; all 18 school districts in Chautauqua County are in compliance with this regulation.

### **Other Unique Characteristics of the Community that Contribute to Health Status**

Health issues in Chautauqua County are exacerbated by and in some cases created by a combination of trauma, poverty, cultural norms, language and literacy barriers, and education levels. The rural nature of Chautauqua County presents another layer of difficulty accessing services and health care, because of an aging population and limited public transportation.

The U.S. Census Bureau's 2013-2017 American Community Survey 5-year estimates indicate that 6.6% of the county's population is uninsured; 18.5% of Chautauqua County residents are 65 years or older; 15.8% of the County population is disabled; the unemployment rate in the County is 7.7%; the median household income in Chautauqua County is \$44,304; and 28.6% of children under 18 are living in poverty.

Chautauqua County faces challenges from the physician shortage phenomenon faced by large and small communities across the nation. In addition, inappropriate use of hospital Emergency Departments has placed a significant burden on the healthcare delivery system. Hospitals experience excessive use of Emergency departments with an average of approximately 50% of visits for minor acute illnesses and ambulatory acute sensitive conditions according to data collected in 2013.

### **Access to Care**

#### *Health Professional Shortage Area Designations*

Access to health care is often an issue for many county residents, as evidenced by the fact that Chautauqua County is designated as a Health Resources & Services Administration (HRSA) Health Professional Shortage Area (HPSA). Chautauqua County has six federal HPSA designations including two primary care, two dental health and two mental health. According to the Community Needs Assessment 2017 published by Chautauqua Opportunities, Inc., there are significant challenges in Chautauqua County in terms of health and mental health care access, exacerbated by a shortage of practitioners, lack of transportation and an ever-increasing elderly population.

Chautauqua County's geographic, social and political landscape creates complexities for government and service providers to equitably meet individual's needs. There are two population centers - Dunkirk in the north and Jamestown in the south - that serve as the economic and social hubs of the county. The two cities are connected by only one major highway, and each community has its own

identity and economy. Countywide service providers must often duplicate resources such as staff and facilities in order to effectively provide services. In addition, Chautauqua County is made up of multiple townships, municipalities, and school districts that require their own administrations, facilities, and staff, resulting in a high tax burden.

With a limited number of physicians and a high volume of individuals needing care, physicians are limited in terms of whom they continue to treat. This will be further impacted as additional individuals seek a primary care doctor after obtaining coverage through the Health Insurance Marketplace. There are very few primary care, medical specialty care, or dental providers in the County who are willing to serve low-income, Medicaid insured or uninsured adult patients in significant numbers on a routine basis. The growing Hispanic population is especially at-risk as they are most often uninsured and particularly disconnected from the health care system. Often patients with a history of no-show or poor payment records are dropped from the patient roster, leaving many with limited options to receive routine care.

#### *Health Care Safety Net*

The safety net in Chautauqua County consists of three emergency departments – AHN Westfield Memorial Hospital, Brooks-TLC Hospital System, Inc. and UPMC Chautauqua, and four NYSDOH Article 28 clinics, which includes one Federally Qualified Health Center (FQHC). During the 2014-2017 health assessment, local emergency departments indicated that about half of departmental visits were for minor acute illnesses and ambulatory care sensitive conditions. Recent (2019) anecdotal reports from local emergency rooms indicate that there has been a shift in the patient population. While no specific data points were available, personnel indicate that they have seen a greater proportion of higher acuity cases and a decrease in minor acute illnesses and ambulatory acute sensitive conditions over the last three years. Affecting this positive trend are the work of transitional care coordinators who contact frequent ER patients with Medicaid as their health insurance provider to help connect them with primary care providers. These coordinators were supported by the Delivery System Reform Incentive Payment (DSRIP) Program. Additionally, the relatively new presence of an FQHC has increased access to affordable primary care, mental health, and dental health care services.

In the past ten years, three state supported clinics in the area have closed due to the high levels of uncompensated care and insufficient re-imbusement formulas. Eight Article 28 Diagnostic and Treatment Center clinics operate within Chautauqua County: The Chautauqua Center FQHC (primary, mental health, and dental clinics located in Dunkirk and Jamestown), the Chautauqua County Department of Health and Human Services Public Health Clinics, the Clymer Health Center, Dunkirk Dialysis, Evergreen Health Services, Inc., Jamestown Dialysis Center, The Resource Center primary, mental health, and dental clinics located in both Jamestown and

Dunkirk, and the University at Buffalo School of Dental Medicine *S-Miles To Go* pediatric mobile dental unit.

In 2007, Chautauqua County was cited by HRSA's Bureau of Primary Health Care as one of the 200 poorest counties in the United States without a Federally Qualified Health Center (FQHC). To address this need, local stakeholders convened to submit a successful New Access Point application for the development of The Chautauqua Center (TCC). TCC is a NYSDOH Article 28 clinic and FQHC that opened in 2013 and is currently providing care to approximately 10,000 residents of Chautauqua County. The FQHC serves all patients regardless of insurance status or ability to pay, and no-shows, or patients who have poor payment records are not turned away. Services are available on a sliding fee scale based on income and family size and include primary care, pediatrics, women's health, family planning, dental care, behavioral health, and substance abuse treatment. An onsite pharmacy is available for patients and discounts are offered through the federal 340b Drug Pricing Program. Free support services include care coordination and health insurance enrollment. TCC is the only primary care provider in the County that has Spanish-speaking staff at every level of the organization and offers medical translation services.

The center uses an integrated care model that focuses on the quality of services as well as inclusion of the social determinants of health into care plans. It employs a team-based approach to address a wide range of patient needs during a single visit. A large new site in Jamestown was opened during the summer of 2019 that will improve integration of care as it allows more providers to work together in one space. A similar project is underway to consolidate the FQHC's clinics in Dunkirk under one roof. Access to care will be increased through enhanced coordination of appointment times with a variety of providers on the same day in the same building. TCC is working with other social service organizations to locate either within or near their buildings, in order to create a corridor of services. The FQHC's goals include expanded behavioral health crisis services, increased number of patients referred directly from hospital Emergency Departments as part of an ED triage program and improved clinical metrics including reduced premature births and avoidable hospitalizations for pregnant mothers.

### *Aging Physician Base*

Chautauqua County is also facing the issue of an aging physician base. Using age data collected in 2009, it is estimated that over 40% of primary care providers and specialists are in the 55-64 age group, with the latter average being slightly higher. Projections for 2019 put the majority of PCP's in the 55-64 age range and the majority of specialist will be 65+. Recruiting new physicians to the area has proven a challenge and is compounded by the fact that much of the

County remains in the lowest Medicare Wage Index classification in the Nation, which has a negative impact on provider reimbursement. The inherent challenges associated with serving Chautauqua County (e.g., low Medicaid payment rates, high proportions of uninsured, high morbidity, the rural nature of the County) deter health care providers, particularly those working in private practice, from locating their operations in the area.

### *Health Care Workforce Development*

Physician recruitment has become increasingly competitive with innumerable subtleties and complexities involved in “making a good match.” Community attractiveness including, the health of the local economy, climate, the demographic and cultural mix of the population, social and lifestyle preferences and the all-important practice considerations are major factors which influence location decisions. Perceptions of professional isolation, lower fees for services, lack of access to hospitals and technology, a shortage of entertainment and cultural opportunities are all attributes that often make rural recruitment a “hard sell.”

While the county is rich in natural resources, recreational and cultural activities, and educational opportunities it does lag behind the rest of the country on a number of significant factors including economic growth, employment, and housing development.

Workforce development is critical for Chautauqua, and as such, a collaborative, multi-pronged strategy has been developed that includes but is not limited to the following activities: establishment of a countywide Health Care Workforce Advisory Committee; development of a health care professional talent pipeline for homegrown students; development and maintenance of provider databases; skill and capacity gap analyses including oversight for the submission of federal Health Care Professional Shortage designation applications; facilitating applications for National Health Service Corps site designations; technical assistance for loan repayment and scholarship applications, establishment of the Stan Lundine Health Care Professional Endowment; organizing medical student mixers and community supports for physician recruitment visits; and development of shadowing, internship and rotation experiences.

Since the establishment of these initiatives, steady gains have been made: at the FQHC, each practice site is recognized as an access point to receive loan repayment incentives from the National Health Service Corps, resulting in the successful recruitment and retention of over 35 clinical providers to the County. With the exception of The Chautauqua Center FQHC, loan replacement capacity is not as competitive in the county as compared to other areas of the state and nation. In the last two years, TCC secured two physicians from the talent pipeline established by CCHN, allowing homegrown talent to return to the area despite having

completed a residency program out of state. The JAMA-GLPP medical practice has recruited several health care professionals, including family medicine providers and internists.

Provider retention continues to present health challenges to our community; there has been considerable provider turnover across medical practices and at our hospitals.

## Assets and Resources

Chautauqua County is fortunate to have a great number of public and private organizations aware of the importance of collaboration toward community and health improvement in a rural population. Many assets and resources for health improvement in the three selected priority areas are available. Several of these community services, resources and programs are described below; however, this is not an exhaustive list.

### Community Services and Programs

#### ***Chautauqua County Department of Health and Human Services (CCDHHS), Division of Public Health***

- **Cancer Services Program (CSP):** While no longer managed by CCDHHS, the program is still in operation with grant activities carried out by St. James Hospital in Hornell, NY. The hospital manages the CSP grant for Chautauqua, Cattaraugus, Allegany, and Steuben Counties. CSP provides breast, cervical and colorectal cancer screenings at no cost to women and men who do not have health insurance or have health insurance that does not cover these screenings, meet age and income eligibility requirements and live in New York State.
- **Childhood Lead Poisoning Prevention and Primary Prevention Programs:** Provides lead poisoning prevention education, nurse case management, environmental investigation, lead hazard assessment, and abatement follow up activities. The Lead Primary Prevention provides free in home testing, free renovation, repair and painting training, free paint and cleaning supplies for landlords and homeowners in the Jamestown area.
- **Early Intervention, Children’s Health Homes, Preschool Special Education and Children with Special Health Care Needs Programs:** Serves children who have or are at high risk for developmental delays (Early Intervention/Health Homes: birth to age 3, Preschool Special Education: ages 3 to 5, Children with Special Health Care Needs: birth to 21).
- **Chronic Disease Prevention:** Provides no-cost assistance to communities, schools, employers, and organizations in making policy, systems, and environment-level changes to help prevent chronic diseases and improve community health outcomes.
- **Immunization Program:** Provides community immunization information for parents, area schools, day care centers, private provider offices and the general public, free childhood vaccinations to eligible children through the Center for Disease Control Vaccines for Children (VFC) program, community outreach clinics to immunize groups at risk for vaccine preventable diseases.
- **Maternal and Infant Community Health Collaborative Grant Program:** Working to improve maternal and infant health outcomes for Medicaid-eligible, high-need, low-income women and their families while reducing racial and economic health disparities.

This initiative aims to improve health outcomes including preterm births, low birth weight, infant mortality, and maternal mortality.

- Nurse Family Partnership: Provides nurse home visitation services to first time mothers who qualify. Nurses begin home visits early in the mothers pregnancy and continue visits until the child's second birthday.
- Title 10 Family Planning Reproductive Health Clinics: Provides confidential services to males and females of reproductive age. Birth control methods/contraception counseling, emergency contraception, pregnancy testing, STD/HIV testing, counseling and referrals.
- NYSDOH Opioid Overdose Prevention Program: Trains community members, fire departments, and law enforcement agencies how to administer naloxone to an individual who has experienced an overdose.
- Chautauqua County Jail Medical Services: Provides primary care services at the Chautauqua County Jail, including medications for addiction treatment.
- Chautauqua County Coroner Program: Responds to reportable deaths in the community, refers cases to the Erie County Medical Examiner's Office for autopsy as appropriate, and completes the manner and cause of death sections of death certificates for appropriate cases.

***Chautauqua County Department of Mental Hygiene***

- Single Point of Access (SPOA) for Children and Adults
- Children's Health Homes of Upstate NY (CCHUNY)
- Community Opioid Education and Mitigation Efforts through HRSA Rural Communities Opioid Response Program
- Crisis Services
  - Crisis Hotline
  - Mobile Crisis Team
- Health Homes of Upstate NY (HHUNY)
- Medication for Assisted Treatment (MAT) of Opioid Use Disorder
- Outpatient Chemical Dependency Clinics
- Outpatient Mental Health Clinics
- Suicide Prevention

***Chautauqua County Office for the Aging***

- Caregiver Services
- Health and Wellness programming
- In-Home/Community Services

- Legal Assistance
- Medicare Insurance Counseling
- Nutrition Services
- NY Connects: Aging & Disability Resource Center (in conjunction with DHHS)
- Senior employment and training
- Transportation
- Volunteer Opportunities

### ***Chautauqua County Health Network***

The Chautauqua County Health Network, Inc. (CCHN) was created in 1995 and is a New York State designated Rural Health Network. CCHN has been working in for over 20 years to support the integrated systems strengthening required to provides access to and development of quality healthcare services in Chautauqua County, NY. As a not-for-profit comprised of over 140 physicians, 2 hospitals, and collaboration with numerous community-based organizations, CCHN implements programs and projects in the Chautauqua County community that address the health of the County as a whole.

- The CCHN organizational mission is to strengthen the local health and wellness delivery systems in Chautauqua County, engaging and advancing the interests of healthcare consumers, providers, and civic and political leadership. Through planning and partnerships, CCHN is seeking to pursue and leverage resources to promote the integration of clinical and social services to improve the health and wellness delivery system overall. The Chautauqua Health Network is an evidence promotion and data use organization that leverages its representation of the medical leadership of two hospital systems and 90%+ of primary care physicians in Chautauqua County to improve population health. Among its operational priorities are: Healthcare Work Force Development: With support from the NYSDOH Office of Rural Health, the Chautauqua County Health Network works with partners to address the challenges that rural areas in recruiting, training, and retaining healthcare workers, including the national shortage of primary care doctors and nurses. In partnership with other local community-based organizations, CCHN advances strategies to help train and retain the next generation of health care by collaborating with local and regional educational systems.
- Creating Healthy Schools and Communities: With the support of the NYSDOH, the Chautauqua County Health Network is leveraging existing relationships with school districts, community-based organizations and municipalities to improve health by producing sustainable policy, systems, and environmental changes in the areas of physical activity and

nutrition. Some accomplishments include: collaboration with Chautauqua Planning Department in the creation of the first Food Policy Council in Chautauqua County; partnership with school administration for implementation of the Daily Mile in local school districts; and the creation of a group of local stakeholders made up of officials from the City of Jamestown and local CBOs to oversee the creation of the Chadakoin Adventure Trail.

- Nutrition and Food Security Promotion: With support from NYSDOH and the Mother Cabrini Health Foundation, the Chautauqua County Health Network implements healthy worksite initiatives, improves access to nutritional foods, promotes active transportation between everyday destinations, and implements healthful nutrition and physical activity standards. Activities are focused in Jamestown, Dunkirk, Ripley, Silver Creek, Pine Valley, Cassadaga school districts and ‘food deserts’ in Chautauqua County and partner with local and regional food markets and food banks to provide additional support to these efforts.
- Integrated Analytics and Data Exchange: The Chautauqua County Health Network continues to support health service practices to expand existing technology infrastructure to assist in the referral and subsequent communication between medical care providers and community-based organizations as a strategy to addressing population health and addressing its social determinants. CCHN provides data aggregation capabilities, claims and clinical utilization analytics, as well as a Master Patient Index feature that offers providers a more complete view of where patients are in the health care delivery system. This allows collaborating health services to share clinical and claims data, evaluate performance, monitor quality assessment and improvement activities, and measure whether population-based activities have shown improved health outcomes.
- Evidence-based Quality Improvement in Health Care: The Chautauqua County Health Network promotes the use of evidence-based programs and tools, especially those that assist primary care providers to identify, target, and manage the most chronically-ill patient populations through best practices and interventions aimed at standardizing and improving the quality of care and overall patient outcomes. Specific initiatives include: the NCQA designations for Patient Centered Medical Home (PCMH) and Diabetes Recognition Program (DRP); the incorporation of a variety of assessment and screening tools including those for depression and fall prevention; the use of registries to assist providers with the identification and management of patients with specific treatable chronic diseases and in promoting the Million Hearts initiative; and supporting Chronic Condition Special Needs Plans (C-SNPs) which target treatment to individuals with specific medical conditions by linking patients with specialists and clinical case management services.

- Health Services Strengthening: The Chautauqua County Health Network continuing efforts to contribute to health systems strengthening have include: participation in the Delivery System Reform Incentive Payment Program (DSRIP), promoting community-level collaborations and focuses on system reform; and assisting local medical practices achieve New York State Patient Centered Medical Homes (NYS PCMH) recognition as a step towards achieving the triple aim of healthcare (improving the patient experience, improving population health, and reducing health costs).

***Allegheny Health Network (AHN) Westfield Memorial Hospital***

- Cardiac Rehabilitation
- Cataract and Glaucoma Treatment
- Colonoscopy
- Diabetes Education
- Physical Therapy
- Primary Care
- Sleep Lab
- Women’s Wellness Suite

***Brooks-TLC Hospital System, Inc.***

- Cardiac Rehabilitation
- Certified Tobacco Cessation Program
- Chemical Dependency Programs
- Diabetic Education/Nutrition Counseling
- Falls Prevention Class
- Mammography
- Medication for Assisted Treatment (MAT) of Opioid Use Disorder
- Medical Rehabilitation/Physical Therapy
- Obstetrics/Gynecology
- Pediatric Care
- Prepared Child Birth Classes
- Speech/Language Services

***The Chautauqua Center***

- Behavioral Health
- Certified Patient Centered Medical Home
- Dental Care

- Family Planning Benefit Provider
- Medication for Assisted Treatment (MAT) of Opioid Use Disorder
- Medical Translation Services
- Pediatric Care
- Pharmacy
- Primary Care
- Substance Abuse Services
- Women's Health Care

***The Resource Center***

- Children's Health Homes
- Counseling and Psychiatric Services
- Dental Care
- Health Homes
- Medication for Assisted Treatment (MAT) of Opioid Use Disorder
- Non-Site-Based Disability Services
- Primary Care
- Personalized Recovery Oriented Services (PROS)
- School Based Health Center
- Site-based Disability Services

***UPMC Chautauqua Hospital***

- Cancer Care Program and Treatment Center
- Cardiac Rehabilitation and Navigation Services
- Case Management
- Certified Tobacco Cessation Program
- Chemical Dependency program - Inpatient and Outpatient
- Diabetes Education/Nutrition Services
- Mammography (3D)
- Maternity Care Center - prenatal care through delivery
- Medical Rehabilitation/Physical Therapy
- Medication for Assisted Treatment (MAT) of Opioid Use Disorder
- Mental Health Services - Inpatient and Outpatient, Adolescent - Adult
- Nutrition Services
- Palliative Care Program
- Patient Navigator Program
- Prepared Child Birth Classes

- Tobacco Cessation
- TPA for Stroke; Stroke Rehabilitation
- Wellness Screenings and Chronic Disease Management

***Additional Community Organizations and Programs***

- Advocacy Services
- American Cancer Society
- Assertive Community Treatment Team
- Catholic Charities
- Chautauqua Opportunities, Inc.
- Chautauqua County Rural Ministry
- Chautauqua Children’s Safety Education Village
- Chautauqua Mental Health Association
- Citizens for a Better Cassadaga
- Community Connections at Findley Lake
- Community Helping Hands
- Cornell Cooperative Extension of Chautauqua County
- Erie-2 Chautauqua-Cattaraugus BOCES
- Family Services of the Chautauqua Region
- Family Support Partners
- Home and Community Based Waiver Services
- Jamestown Community Learning Council
- Mental Health Legal Aid Services
- National Alliance for Mental Illness- Family Services
- Personalized Recovery Oriented Services
- Prevention Works
- Respite Services
- Revitalize Dunkirk
- Southern Tier Environments for Living Compeer Program
- Single Point of Access for Adults and Children
- Tapestry for Families and Youth
- Tobacco Free WNY
- United Way of Northern Chautauqua County
- United Way of Southern Chautauqua County
- Women, Infants, and Children Supplemental Nutrition Program (WIC): Operated by Catholic Charities of Buffalo
- Wraparound for Children and Families

- YMCA of Jamestown
- YWCA of Jamestown
- YWCA of Westfield

### Physical Assets and Resources

Chautauqua County is fortunate to have several trail systems and parks that provide recreational opportunities for residents.

Trail systems include:

- Chautauqua Rails to Trails, including a newly paved 1.5 mile Village of Mayville Trail
- Great Lakes Seaway Trail
- Fred J. Cusimano Westside Overland Trail
- Earl Cardot Eastside Overland Trail
- Abe Mattison Millrace Park Trail
- Jamestown Riverwalk Trail, including the new 1.25 mile Chadakoin Park Trail

Not including city and village parks, there are over 20 parks in the county that fall into the following categories:

- Regional Parks
- Lake Erie Beaches and Parks
- Chautauqua and Cattaraugus Lake Beaches and Parks
- State Parks

The Chautauqua County Department of Planning and Economic Development completed a Greenways and Trails Plan in 2012 to inventory current assets and develop plans for future trail development and maintenance in Chautauqua County.

The number of weekly community farmer's markets has more than doubled since the last Community Health Assessment. There are several farmers' markets available to residents throughout the County, in addition to numerous farm stands that provide access to fresh, local produce.

Farmer's Markets include:

- Cassadaga Farmer's Market in Cassadaga, NY
- Chautauqua Institution Farmer's Market, Chautauqua, NY
- Chautauqua Produce Auction in Clymer, NY
- Downtown Jamestown Farmer's Market in Jamestown, NY (accepting SNAP and offering Double Up Food Bucks)

- Jamestown Mobile Farmers Market providing produce to food desert areas of Jamestown
- Dunkirk Farmer's Market in Dunkirk, NY (accepting SNAP and offering Double Up Food Bucks)
- Falconer Farmer's Market in Falconer, NY
- Fredonia Farmer's Market in Fredonia, NY (Summer and Winter markets) (accepting SNAP and offering Double Up Food Bucks)
- Lakewood Farmer's Market in Lakewood, NY
- Mayville Farmer's Market in Mayville, NY
- Westfield Farmer's Market in Westfield, NY

## Methodology

The 2019-2021 community health assessment process involved a great deal of collaboration with hospitals and community partners. The Chautauqua County Community Health Planning Team (CCCHPT) that first convened during the 2010-2013 joint Community Health Assessment/Community Service Plan process joined forces to make this assessment possible. Additional community partners joined the team to adjust for community needs.

The CCCHPT core group included the following organizations and representatives:

- Brooks-TLC Hospital System, Inc.
  - Sheila Walier, Director of Marketing and Community Relations
  - Holly DeGolyer, DSRIP Project Manager/Case Manager
- Chautauqua County Department of Health and Human Services
  - Breeanne Agett, Epidemiologist
  - Shelly Wells, Public Health Planner
  - Christine Schuyler, Director of Health and Human Services
- Chautauqua County Department of Mental Hygiene
  - Pat Brinkman, Director of Mental Hygiene
  - Rachel Mesmer-Ludwig, Project Coordinator
- Chautauqua County Health Network
  - Jim Sherry, Executive Director
- Population Health Collaborative of Western New York
  - John Craik, Executive Director
  - Karen Hall, Director of Programs
  - Michael Nanfara, Program Coordinator
- The Chautauqua Center
  - Mike Pease, Executive Director
  - Rebecca Ruiz, COO

- UPMC Chautauqua
  - Toni DeAngelo, Director of Community Wellness
- Allegheny Health Network Westfield Memorial Hospital
  - Edward Brooks, Director of Business Operations
  - Kim Greiner, Registered Dietitian and Certified Diabetes Educator

The CCCHPT held periodic planning meetings, where the group discussed progress and developed action steps to complete before the next meeting. Between meetings, members corresponded through email and phone conversations.

Formal Planning Meetings were held on the following dates: 12/10/2018, 4/23/19 (after States of Solution), 6/14/2019, 6/25/19 (after CHILA 3), and 7/12/2019.

The initial meeting of the CCCHPT involved an overview of the 2019-2021 Community Health Assessment, Community Health Improvement Plan, and Community Service Plan guidance and process. The group developed a plan for obtaining input from the community and professionals. The meetings were spent designing a community health survey, planning community conversations, reviewing community responses and health data, selecting priority areas, discussing health improvement strategies, and drafting the Community Health Improvement Plan.

Meeting dates and locations were set by the Chautauqua County Department of Health and Human Services. The Population Health Collaborative of Western New York's Community Health Improvement Team shared guidance from NYSDOH and provided technical assistance to the CCCHPT.

CCCHPT team members and community partners gathered several times in 2019 for western regional informational sessions regarding "Building Community Wealth and Resilience", "States of Solution", LiveWell WNY Conference focusing on 3-4-50 community health improvement strategy, and Community Health Improvement Leadership Academy.

The 2019-2021 Community Health Assessment was written by CCDHHS Epidemiologist Breeanne Agett, who holds a Master of Public Health degree from SUNY Albany School of Public Health in Epidemiology and Public Health Planner Shelly Wells, who holds a Bachelor of Science Degree from Houghton College and is a NY Registered Nurse. Core CCCHPT organizations and community partners provided narrative and data upon request. The Community Health Improvement Plan was developed collectively by the core group and partners and compiled by the CCDHHS.

## Collaboration

### Identifying Health Issues

To gauge health issues in Chautauqua County the CCCHPT adopted a three-pronged approach, taking into consideration: input from community members, secondary data from NYSDOH and other health resources, and input from local content area experts. Community input was gathered through a primarily web-based survey and multiple community conversations of varying focus.

### Public Input

The Chautauqua County Community Health Survey was open for responses from January 15, 2019 to March 15, 2019. The survey asked residents what issues they considered to be community problems, what health issues were most concerning, about their personal health, and requested demographic information. The Population Health Collaborative of WNY provided technical assistance in designing the survey. Eight questions were universal to each of the eight counties of WNY. Multiple meetings were held in the second half of 2018 to discuss and decide on the universal questions. Survey results were automatically analyzed by Survey Monkey programming, with access available to both Population Health Collaborative and the CCDHHS. The teams were able to use filter functions on the website to look at trends in the data by specific population groups and identified behaviors.

The link for the survey was widely distributed through Facebook, the CCDHHS website, was featured in a press release to local newspapers, and sent electronically to a number of employee and community-based email distribution lists. All CCCHPT partners participated in electronic distribution of the survey. The web-based format successfully reached White, middle class, employed, and insured residents. Paper copies of the survey were made available throughout the community to reach special population groups, who were less likely to respond to the web-based survey.

In order to obtain input from hard-to-reach residents, the CCCHPT made efforts to target the following population groups:

- Chautauqua County's federally qualified health center- The Chautauqua Center- serves a large Hispanic patient population. Center staff assisted patients in filling out the surveys and also provided translation services.
- Paper copies of the survey, adapted to fit their lifestyle, were provided to the local Amish population at a blood drive in Sherman, an event known to attract Amish adults.
- Paper copies of the survey were provided to inmates of the Chautauqua County Jail to gain input from incarcerated residents. Jail staff assisted in this process by encouraging participation and providing assistance when necessary.

- Paper copies of the survey were available to low-income residents in CCDHHS Temporary Assistance Offices, the reproductive health clinics, the federally qualified health center, hospital emergency rooms, and mental health clinics.

From January 15 to March 15, 2019, 2140 survey responses were collected. The majority of the respondents self-identified as Female (76.85%) and White/Caucasian (93.84%) and reported having some form of private health insurance (97.97%).

Community members' perceptions of health issues were also gathered at numerous community conversations/dialogues sponsored by various agencies in the County – Chautauqua County Health Network, Hispanic Education Coalition, Northern Chautauqua Community Foundation, Northern Chautauqua Community Foundation Local Economic Development Initiative, Southern Tier Health Care System, Mental Health Association, National Council on Aging, and Maternal and Infant Community Health Collaborative. These conversations spanned Chautauqua County's geographic and cultural separations, covering the "North County" in Dunkirk, Silver Creek, and Fredonia, the "South County" in Jamestown, Ashville, and the "West County" in Cherry Creek. These diverse locations were able to capture the County's rural and urban populations. Community members were asked to give their perspective on community health and wellness, economic, safety, and substance use disorder issues and offer solutions in an open discussion.

After identifying potential health improvement strategies for the proposed collaborative priority areas, the CCDHHS reached out to the CCCHPT and held one-on-one conversations with local content area experts to ensure that these strategies were logical in the context of the community and current efforts.

### **Secondary Data**

The New York State Department of Health's Community Health Indicator Reports and Tracking Indicators for Public Health Priority Areas were extensively used to identify health issues in Chautauqua County. These figures compiled by New York State were pulled from many different data sources, including NYS Vital Statistics Data, NYS Expanded Behavioral Risk Factor Surveillance System (eBRFSS), Statewide Planning and Research Cooperative System (SPARCS) the US Census Bureau, and the Student Weight Status Category Reporting System (SWSCRS). The Keys to Health data dashboard operated by Population Health Collaborative was used to view data (initially distributed by NYSDOH), and export relevant data visualizations.

Demographic and socioeconomic data were gleaned from the U.S. Census Bureau website, and the NYS Education Department School Report Cards website. Table 28 provides a summary of data sources that were used to identify health issues in Chautauqua County.

Table 28. Health and demographic data sources used

<i>Topic</i>	<i>Dates</i>	<i>Source</i>	<i>Website</i>
<b>NYS Community Health Indicator Reports (CHIRS)</b> <a href="https://www.health.ny.gov/statistics/chac/indicators/">https://www.health.ny.gov/statistics/chac/indicators/</a>			
<b>Cancer Indicators</b>			
Incidence and Mortality Rates	2013-2015	New York State Cancer Registry	<a href="http://www.health.ny.gov/statistics/cancer/registry/">http://www.health.ny.gov/statistics/cancer/registry/</a>
Screening Rates	2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
<b>Cardiovascular Disease Indicators</b>			
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Physician Diagnoses and Screening Rates	2016, 2013-2014	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
<b>Child and Adolescent Health Indicators</b>			
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Blood lead levels and Screening Rates	2013, 2014-2016	NYS Child Health Lead Poisoning Prevention Program	<a href="http://www.health.ny.gov/environmental/lead/programs_plans/">http://www.health.ny.gov/environmental/lead/programs_plans/</a>
<b>Cirrhosis/Diabetes Indicators</b>			
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Physician Diagnoses	2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
<b>Communicable Disease Indicators</b>			
Incidence Rates	2014-2016	NYSDOH Bureau of Communicable Disease Control	<a href="http://www.health.ny.gov/diseases/communicable/control/">http://www.health.ny.gov/diseases/communicable/control/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Immunization Rates	2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
<b>Family Planning/Natality Indicators</b>			
Pregnancy, birth, fertility and abortion Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
<b>HIV/AIDS and STDs Indicators</b>			

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HIV/Aids Case Rates	2014-2016	NYS AIDS Case Surveillance Registry, Bureau of HIV/AIDS Epidemiology	<a href="http://www.health.ny.gov/diseases/aids/about/surveillance.htm">http://www.health.ny.gov/diseases/aids/about/surveillance.htm</a>
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
STD Case Rates	2014-2016	Sexually Transmitted Disease Surveillance System, Bureau of STD Prevention and Epidemiology	<a href="http://www.health.ny.gov/statistics/diseases/communicable/std/">http://www.health.ny.gov/statistics/diseases/communicable/std/</a>
<b><i>Injury Indicators</i></b>			
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Motor Vehicle Related Injury and Death Rates	2014-2016	New York State Governor's Traffic Safety Committee Institute for Traffic Safety Management and Research, NYS Department of Motor Vehicles	<a href="http://www.dmv.ny.gov/">http://www.dmv.ny.gov/</a>
<b><i>Maternal and Infant Health Indicators</i></b>			
Birth, Prematurity, Low birthweight Data	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
WIC Indicators	2009-2011, 2010-2012, 2014-2016	NYS Pregnancy Nutrition Surveillance System (PNSS), WIC Program	<a href="http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm">http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm</a>
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
<b><i>Obesity and Related Indicators</i></b>			
School Student Weight Status	2014-2016	Student Weight status Category Reporting System (SWSCRS)	<a href="http://www.schoolhealthservicesny.com/datareporting.cfm?subpage=244">http://www.schoolhealthservicesny.com/datareporting.cfm?subpage=244</a>
WIC Indicators	2010-2012, 2014-2016	NYS Pregnancy Nutrition Surveillance System (PNSS), WIC Program	<a href="http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm">http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm</a>
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b><i>Occupational Health Indicators</i></b>			
Cancer Incidence Rate	2013-2015	New York State Cancer Registry	<a href="http://www.health.ny.gov/statistics/cancer/registry/">http://www.health.ny.gov/statistics/cancer/registry/</a>
Hospitalization Rates	2014-2016, 2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>

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Elevated Blood Lead Level Rates	2014-2016	New York State Department of Health Heavy Metals Registry	<a href="http://www.health.ny.gov/environmental/workplace/heavy_metals_registry/">http://www.health.ny.gov/environmental/workplace/heavy_metals_registry/</a>
Fatal Work-Related Injuries	2014-2016	NYS Census for Occupational Injuries (CFOI) and NYC CFOI	<a href="http://www.health.ny.gov/statistics/chac/general/g83.htm">http://www.health.ny.gov/statistics/chac/general/g83.htm</a>
<b>Oral Health Indicators</b>			
3rd Grade Survey Data	2009-2011	Bureau of Dental Health, Oral Health Survey of 3rd Grade Children	<a href="http://www.health.ny.gov/prevention/dental/">http://www.health.ny.gov/prevention/dental/</a>
Adult Dental Visits	2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
Emergency Department Rate	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Medicaid Enrollee Data	2015-2017	NYS Medicaid Program	<a href="https://www.health.ny.gov/health_care/medicaid/">https://www.health.ny.gov/health_care/medicaid/</a>
Oral Cancer Mortality Rates	2013-2015	New York State Cancer Registry	<a href="http://www.health.ny.gov/statistics/cancer/registry/">http://www.health.ny.gov/statistics/cancer/registry/</a>
<b>Respiratory Disease Indicators</b>			
Mortality Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Hospitalization Rates	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Adult Asthma Rates	2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
<b>Health Status and Social Determinants of Health</b>			
Access to Care, Poor Mental Health Days Data	2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
Overall Birth, Mortality, and Premature Death Rates	2014-2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Emergency Department Utilization Rates	2016	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/vital_statistics/">http://www.health.ny.gov/statistics/vital_statistics/</a>
Population, Poverty, Health Insurance, Housing, Languages, Disability	2016, 2012-2016	U.S. Census Bureau: Small Area Income and Poverty Estimates American Community Survey	<a href="https://www.census.gov/programs-surveys/sahie.html">https://www.census.gov/programs-surveys/sahie.html</a> <a href="https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml">https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</a>
Population and Race	2016	CDC National Center for Health Statistics	<a href="https://www.cdc.gov/nchs/nvsr/bridged_race.htm">https://www.cdc.gov/nchs/nvsr/bridged_race.htm</a>
Food Insecurity	2015	Map the Meal Gap	<a href="https://www.feedingamerica.org/research/map-the-meal-gap/by-county">https://www.feedingamerica.org/research/map-the-meal-gap/by-county</a>
Unemployment	2017	United States Bureau of Labor Statistics	<a href="https://www.bls.gov/data/#unemployment">https://www.bls.gov/data/#unemployment</a>
High School Dropout Rates	2015-2017	New York State Department of Education	<a href="http://www.nysed.gov/">http://www.nysed.gov/</a>
Disconnected youths	2012-2016	Measure of America	<a href="http://measureofamerica.org/download-agreement/">http://measureofamerica.org/download-agreement/</a>

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Crime Rates	2016	New York State Office of Justice Research and Performance	<a href="https://www.criminaljustice.ny.gov/">https://www.criminaljustice.ny.gov/</a>
Food Access	2015	USDA Food Environment Atlas	<a href="https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads/">https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads/</a>
<b>Tobacco, Alcohol and Other Substance Abuse Indicators</b>			
Hospitalization Rates	2014-2016	NYS Governor's Traffic Safety Committee	<a href="https://trafficsafety.ny.gov/?utm_medium=301&amp;utm_source=www.safeny.ny.gov">https://trafficsafety.ny.gov/?utm_medium=301&amp;utm_source=www.safeny.ny.gov</a>
Alcohol Related Motor Vehicle Injury and Death Rates	2014-2016	NYS Department of Motor Vehicles	<a href="http://www.dmv.ny.gov/">http://www.dmv.ny.gov/</a>
Behavioral Cigarette and Alcohol Use Data	2008-2009, 2016	NYS Expanded Behavioral Risk Factor Surveillance System	<a href="http://www.health.ny.gov/statistics/brfss/expanded/">http://www.health.ny.gov/statistics/brfss/expanded/</a>
<b>New York State Maternal and Child Health (MCH) Dashboard</b> <a href="https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/mch_dashboard/mch_dashboard&amp;p=sh">https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/mch_dashboard/mch_dashboard&amp;p=sh</a>			
<b>Maternal and Women's Health</b>			
Preventive Medical Visits	2016	CDC Behavioral Risk Factor Surveillance System	<a href="https://www.cdc.gov/brfss/index.html">https://www.cdc.gov/brfss/index.html</a>
Consultation with provider about healthy pregnancy	2014	NYS Behavioral Risk Factor Surveillance System	<a href="https://www.health.ny.gov/statistics/brfss/">https://www.health.ny.gov/statistics/brfss/</a>
Dental Cleanings	2015	NYS Pregnancy Risk Assessment Monitoring System	<a href="https://apps.health.ny.gov/public/tabvis/PHIG_Public/prams/">https://apps.health.ny.gov/public/tabvis/PHIG_Public/prams/</a>
Prenatal Care, Maternal Mortality	2016, 2012-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Maternal morbidity, Newborns with withdrawal symptoms	2014	Healthcare Cost and Utilization Project- State Inpatient Database, Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="https://www.hcup-us.ahrq.gov/reports/methods/2014-03.pdf">https://www.hcup-us.ahrq.gov/reports/methods/2014-03.pdf</a> <a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Non-medically indicated early elective deliveries	2016-2017	CMS Hospital Compare	<a href="https://www.medicare.gov/hospitalcompare/search.html">https://www.medicare.gov/hospitalcompare/search.html</a>
<b>Perinatal and Infant Health</b>			
Infant, preterm, neonatal, post-neonatal, perinatal mortality rates, Sudden Unexpected Infant Death rates, very low birth weight rates, tooth decay or cavities experience, physical activity	2014, 2015	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Percentage of infants placed to sleep on their backs	2015	NYS Pregnancy Risk Assessment Monitoring System	<a href="https://apps.health.ny.gov/public/tabvis/PHIG_Public/prams/">https://apps.health.ny.gov/public/tabvis/PHIG_Public/prams/</a>
Maternal morbidity, Newborns with withdrawal symptoms	2014	Healthcare Cost and Utilization Project- State Inpatient Database,	<a href="https://www.hcup-us.ahrq.gov/reports/methods/2014-03.pdf">https://www.hcup-us.ahrq.gov/reports/methods/2014-03.pdf</a>

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		Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Child Health</b>			
Excellent or good health status, developmental screenings, mental/behavioral treatment or counseling, preventive dental visits, obesity among 10-17 year olds, supportive and safe neighborhoods	2016	National Survey on Children's Health	<a href="https://www.childhealthdata.org/browse/survey">https://www.childhealthdata.org/browse/survey</a>
Community water fluoridation	2016	Safe Drinking Water Information System (SDWIS)	<a href="https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information-system-sdwis-federal-reporting">https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information-system-sdwis-federal-reporting</a>
Child mortality rate	2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
WIC obesity data for 2-4 year olds	2014	Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	<a href="https://www.fns.usda.gov/wic">https://www.fns.usda.gov/wic</a>
<b>Children with Special Health Care Needs</b>			
Children with special health care needs receiving care, receiving transition services, children ages 3-17 with autism or autism spectrum disorders, children with mental/behavioral conditions who received professional counseling	2016	National Survey on Children's Health	<a href="https://www.childhealthdata.org/browse/survey">https://www.childhealthdata.org/browse/survey</a>
Families in Early Intervention Program who meet or exceed state standards	2015-2016	Early Intervention New York Family Survey	<a href="https://www.health.ny.gov/community/infants_children/early_intervention/outcomes_survey/">https://www.health.ny.gov/community/infants_children/early_intervention/outcomes_survey/</a>
Infants receiving a follow-up hearing screening after initial fail	2015	Early Hearing Detection Intervention Program (EHDI)	<a href="https://www.health.ny.gov/community/infants_children/early_intervention/newborn_hearing_screening/">https://www.health.ny.gov/community/infants_children/early_intervention/newborn_hearing_screening/</a>
<b>Adolescent Health</b>			
Adolescents with preventive medical visits, physical activity among adolescents, children with mental/behavioral conditions who received professional counseling, preventive dental visits, cavities experience, obesity rates, adolescents without special health care needs who received service transition, supportive neighborhoods, safe neighborhoods	2016	National Survey on Children's Health	<a href="https://www.childhealthdata.org/browse/survey">https://www.childhealthdata.org/browse/survey</a>
Adolescents who felt sad or hopeless, obesity rates	2015	Youth Risk Behavior Surveillance System	<a href="https://www.cdc.gov/healthyouth/data/yrbs/index.htm">https://www.cdc.gov/healthyouth/data/yrbs/index.htm</a>
Child and adolescent mortality rate, suicide mortality rate	2016, 2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Community water fluoridation	2016	Safe Drinking Water Information System (SDWIS)	<a href="https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information-system-sdwis-federal-reporting">https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information-system-sdwis-federal-reporting</a>

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<p style="text-align: center;"><i>New York State Opioid Data Dashboard</i>  <a href="https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/opioid_dashboard/op_dashboard&amp;p=sh">https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/opioid_dashboard/op_dashboard&amp;p=sh</a></p>			
<b>Opioid Data Overview</b>			
Opioid overdose deaths, synthetic opioid overdose deaths, opioid burden	2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Emergency department visit for opioid overdoses, heroin overdoses, opioid abuse or dependence , and hospital discharges involving opioid use, opioid burden	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
Clients admitted to OASAS-certified chemical dependence treatment programs	2016	Office of Alcoholism and Substance Abuse Services	<a href="https://oasas.ny.gov/">https://oasas.ny.gov/</a>
<b>Prescription Monitoring Program</b>			
Opioid prescribing rates, Buprenorphine prescribing rates, Benzodiazepine prescribing rates	2017	NYS Prescription Monitoring Program Registry	<a href="https://www.health.ny.gov/professionals/narcotic/prescription_monitoring/">https://www.health.ny.gov/professionals/narcotic/prescription_monitoring/</a>
<b>Overdose Deaths Related to Opioids</b>			
Overdose deaths involving any drug, any opioid, heroin, opioid pain relievers, methadone, and synthetic opioids	2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
<b>Emergency Department Visits Related to Opioids</b>			
Emergency Department visits involving any drug overdose, any opioid overdose, heroin overdose, and opioids excluding heroin	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Hospital Discharges Related to Opioids</b>			
Hospital discharges involving any drug overdose, any opioid overdose, heroin overdose, and opioids excluding heroin, newborns with neonatal withdrawal syndrome and/or affected by maternal use of drugs of addiction	2016	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Office of Alcoholism and Substance Abuse Services</b>			
Unique clients admitted to OASAS-certified chemical dependence treatment programs for any opioid, and for heroin	2016	Office of Alcoholism and Substance Abuse Services	<a href="https://oasas.ny.gov/">https://oasas.ny.gov/</a>
<b>Youth Risk Behavior Surveillance System</b>			
Percentage of high school students reporting ever injecting an illegal drug, ever using heroin, or begin offered, sold, or given illegal drugs on school property	2009, 2015	Youth Risk Behavior Surveillance System	<a href="https://www.cdc.gov/healthyouth/data/yrbs/index.htm">https://www.cdc.gov/healthyouth/data/yrbs/index.htm</a>
<b>National Survey on Drug Use and Health</b>			
Prevalence of use of illicit drugs, illicit drugs other than marijuana, non-medical pain reliever, drug dependence, drug dependence or abuse	2013-2014	National Survey on Drug Use and Health	<a href="https://nsduhweb.rti.org/respweb/homepage.cfm">https://nsduhweb.rti.org/respweb/homepage.cfm</a>
<p style="text-align: center;"><i>County Health Indicators by Race/Ethnicity (CHIRE)</i>  <a href="https://www.health.ny.gov/statistics/community/minority/county/index.htm">https://www.health.ny.gov/statistics/community/minority/county/index.htm</a></p>			
<b>Socio-Demographic Indicators</b>			

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Population, race and ethnicity	2016	CDC National Center for Health Statistics	<a href="https://www.cdc.gov/nchs/nvss/bridged_race.htm">https://www.cdc.gov/nchs/nvss/bridged_race.htm</a>
Household income, poverty	2012-2016	U.S. Census Bureau	<a href="https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml">https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</a>
<b>General Health Indicators</b>			
Mortality rate, premature deaths, years of potential life lost	2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
<b>Birth-Related Indicators</b>			
Births, early prenatal care, adequate prenatal care, premature births, low birthweight births, teen pregnancies, pregnancies, fertility, and infant mortality	2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
<b>Injury-Related Indicators</b>			
Motor vehicle-related mortality, suicide mortality	2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Falls hospitalizations, poisoning and unintentional injury hospitalizations	2012-2014	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Respiratory Disease Related Indicators</b>			
Chronic lower respiratory disease mortality	2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Asthma and Chronic lower respiratory disease hospitalizations	2012-2014	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Heart Disease and Stroke Indicators</b>			
Diseases of the heart, cerebrovascular disease, coronary heart disease, and congestive heart failure mortality	2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Diseases of the heart, cerebrovascular disease, coronary heart disease, and congestive heart failure hospitalizations	2012-2014	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Diabetes Indicators</b>			
Diabetes mortality	2014-2016	NYS Vital Statistics Event Registry	<a href="https://www.health.ny.gov/statistics/vital_statistics/">https://www.health.ny.gov/statistics/vital_statistics/</a>
Diabetes and diabetes short-term complications hospitalizations	2012-2014	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	<a href="http://www.health.ny.gov/statistics/sparcs/">http://www.health.ny.gov/statistics/sparcs/</a>
<b>Cancer Indicators</b>			
Lung cancer incidence, colorectal cancer incidence and mortality, female breast cancer incidence and mortality, cervical cancer incidence and mortality	2013-2015	New York State Cancer Registry	<a href="http://www.health.ny.gov/statistics/cancer/registry/">http://www.health.ny.gov/statistics/cancer/registry/</a>
<b>Demographic and Economic Data from Various Sources</b>			
Population over time	1820-2010	New York State Department of Economic Development, State Data Center, 2000; US Census Bureau American Fact Finder 2	<a href="http://esd.ny.gov/nysdatacenter/data/population_housing/countypohistory.pdf">esd.ny.gov/nysdatacenter/data/population_housing/countypohistory.pdf</a> ; <a href="http://www.census.gov">www.census.gov</a>

## Chautauqua County Community Health Assessment 2019-2021

Population estimates, Seasonal Homes, Disability Data	2018	U.S. Census Bureau American Community Survey 1-year estimates	<a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>
Population estimates of incorporated places	2010-2018	U.S. Census Bureau	<a href="https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html">https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html</a>
Age and sex distributions, race and ethnicity, language, housing, transportation, income, employment, education, health insurance	2013-2017	U.S. Census Bureau American Community Survey 5-year estimates	<a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>
Migrant population	2019	Personal correspondence with Lucy Johnson of SUNY Fredonia Migrant Education and Outreach Program, December 2019	N/A
Amish population	2009	Amish America Website	<a href="http://www.Amishamerica.com/new-york-amish/">http://www.Amishamerica.com/new-york-amish/</a>
Homeless population	2018	Chautauqua County Homeless Management Information System (Personal correspondence with Josiah Lamp at Chautauqua Opportunities, Inc. November 2019)	N/A
Per capita personal income county rankings	2012	Empire State Development, NYS Data Center	<a href="http://esd.ny.gov/NYSDataCenter/PersonalIncomeData.html">http://esd.ny.gov/NYSDataCenter/PersonalIncomeData.html</a>
County economy figures	2012	U.S. Census Bureau Quick Facts	<a href="https://www.census.gov/quickfacts/fact/table/US/PST045218">https://www.census.gov/quickfacts/fact/table/US/PST045218</a>
Agricultural economy data	2017	USDA Agricultural Census 2017	<a href="https://www.nass.usda.gov/Publications/AgCensus/2017/index.php">https://www.nass.usda.gov/Publications/AgCensus/2017/index.php</a>
School enrollment, demographics	2018-2019	New York State Education Department School Report Cards	<a href="https://data.nysed.gov/essa.php?year=2018&amp;state=yes">https://data.nysed.gov/essa.php?year=2018&amp;state=yes</a>
Need/Resource Capacity Index	2009-2010	New York State Education Department Need/Resource Capacity Index	<a href="http://www.p12.nysed.gov/irs/accountability/2011-12/NeedResourceCapacityIndex.pdf">http://www.p12.nysed.gov/irs/accountability/2011-12/NeedResourceCapacityIndex.pdf</a>
<i>Health Outcomes, Behaviors, and Environment Data from Various Sources</i>			
Perceptions of health needs, Fruit and vegetable intake, Tobacco/Nicotine and marijuana use, participation in physical activity	2019	Chautauqua County Community Health Survey 2019	N/A
Suicide deaths, drug overdose deaths	2012-2018	Death Certificates submitted to Chautauqua County DHHS	N/A
Depression in the Medicare Population	2009-2017	Centers for Medicare and Medicaid Services	<a href="https://data.cms.gov/">https://data.cms.gov/</a>
Air pollution- particulate matter, alcohol-impaired driving deaths	2002-2014 2013-2017	County Health Rankings	<a href="https://www.countyhealthrankings.org/">https://www.countyhealthrankings.org/</a>

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Hepatitis C counts and rates	2012-2018	NYSDOH Communicable Disease Reports	<a href="http://www.health.ny.gov/statistics/diseases/communicable/">http://www.health.ny.gov/statistics/diseases/communicable/</a>
Teens' fruit and vegetable consumption, high school obesity rates	2017	U.S. Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System	<a href="https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/2017_US_Obesity.pdf">https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/2017_US_Obesity.pdf</a>
Young adults driving while intoxicated	2017	Kids' Wellbeing Indicators Clearinghouse, Council on Children and Families	<a href="https://www.nyskwic.org/">https://www.nyskwic.org/</a>
Alcohol, drug, and tobacco use among middle and high schoolers	2019	Prevention Works: Pride New York State Youth Development Survey	N/A
Hospital-acquired infections	2017, 2018	NYSDOH Hospital-Acquired Infections in New York State, 2018: Summary for Consumers	<a href="https://health.ny.gov/statistics/facilities/hospital/hospital_acquired_infections/2018/docs/hospital_acquired_infection_p1.pdf">https://health.ny.gov/statistics/facilities/hospital/hospital_acquired_infections/2018/docs/hospital_acquired_infection_p1.pdf</a>
Air quality data rankings	2008	County Health Rankings	<a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a>
Food Deserts	2015	USDA ERS Food Research Atlas	<a href="https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/">https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/</a>
Fluoridated water systems in Chautauqua County	2019	CCDHHS Environmental Health Unit (Personal Correspondence with Bill Boria, December 2013)	N/A
Behavioral data regarding nutrition; public opinion regarding sugary drinks	2013	Community Transformation in Small Communities Grant (CTG) Population Survey Preliminary Frequencies from Baseline Data Collection- Chautauqua Co.	N/A
Proximity of tobacco retailers to school buildings	2017	Department of Health Behavior, Division of Cancer Prevention and Population Sciences, at Roswell Park Cancer Institute (Personal correspondence with Ken Dahlgren, November 2019)	N/A

## Community Health Improvement Plan

### Process for Selecting Priority Areas

In order to identify needs and prioritize the data, the CCCHPT looked at conditions for which Chautauqua County was significantly worse than New York State or categorized in the 4<sup>th</sup> quartile. Issues that affected large numbers of people, but were not necessarily different from state averages, such as obesity, were also flagged as important.

In addition to identifying overall burden of health issues and discrepancies when compared to New York State, the core group took into consideration needs identified in the community health survey and at the community conversations. Existing infrastructure, support, and funding were also considered in the selection process. The following framework describes how priority areas were selected.

To be selected, priority areas:

- Must include data that indicates great burden to Chautauqua County (high case numbers) or great exceedance over state averages
- Must have been identified as a need in the community health survey and at community conversations
- Must include relevant actionable steps for agencies involved
- Were bolstered by existing resources to support action items

### Results from Public Input Efforts

The top four family and/or community health issues identified as concerns in the Chautauqua County Community Health Survey were medical health (heart disease – high blood pressure, stroke, heart attack; diabetes; obesity; cancer; asthma; chronic lung disease; chronic pain management; etc. (75.55%), mental health (stress; anxiety; depression; suicide; etc.) (66.52%), environmental safety (food/water, neighborhood; roadway; safe and clean housing; etc. (56.75%), and drug/alcohol use disorders (49.45%).

The top four suggestions that might help families/communities make healthy choices/changes identified in the Community Health Survey were having groups in the community that encourage healthy habits (physical activity, nutrition, stress reduction, diabetes prevention, fall prevention, quitting tobacco/nicotine, etc. (53.48%), having safe areas to play and exercise in the community (51.86%), having more healthy food choices at local convenience stores (48.79%), and getting information about how to make healthy changes from social media, internet, newspapers and TV (44.05%).

## Priority Areas Selected

All hospitals and the CCDHHS agreed to collaborate to address the Prevent Chronic Diseases and Promote Well-Being and Prevent Mental and Substance Use Disorders priority areas. Hospitals that provide labor and delivery services (Brooks/TLC Hospital System and UPMC Chautauqua) and the CCDHHS additionally agreed to collaborate on the Healthy Women, Infants, and Children priority area. Justifications for selecting priority areas are listed.

### Agenda Priority Area: Prevent Chronic Diseases

- Demonstrated burden for obesity across all ages, as well as high mortality rates for cardiovascular disease, stroke, and cancer
- Supported by health behavior data
- Identified both in survey and at community conversations
- All agencies are affected by and have a stake in chronic disease prevention and management
- Infrastructure, funding, and support in place through several grants in Chautauqua County (e.g. Creating Healthy Schools and Communities)

### Prevention Agenda Priority Area: Promote Healthy Women, Infants, and Children

- Demonstrated discrepancies from state averages for early prenatal care, maternal health, birth spacing, breastfeeding rates, and newborn drug-related hospital discharges
- Identified both in survey and at community conversations
- Both Brooks TLC Hospital System and UPMC Chautauqua Hospital provide labor and delivery services and CCDHHS provides community programming in this area. Westfield Memorial Hospital was excluded from this priority area action plan because they do not provide labor and delivery services.
- CCDHHS receives Maternal and Infant Community Health Collaborative funds from NYSDOH to run a community health worker based maternal support program, and delivers the evidence-based Nurse Family Partnership in this priority area, in conjunction with local hospitals, community agencies, and prenatal care providers.

### Prevention Agenda Priority Area: Promote Well-Being and Prevent Mental and Substance Use Disorders

- Demonstrated rates of poor mental health days, relatively high suicide mortality rates, elevated rates of fatal and non-fatal overdoses in the County, and a high rate of babies born with prenatal exposure to harmful substances support selection of this priority area.
- Identified both in survey and at community conversations

- Brooks TLC Hospital System and UPMC Chautauqua Hospital provide mental health and chemical dependency services.
- Collaboration with the Chautauqua County Department of Mental Hygiene will help to bolster this initiative.
- The Chautauqua County Department of Mental Hygiene holds a Rural Communities Opioid Response Program grant from the Health Resources Services Administration grant to address the opioid crisis. Prevention Works holds a Drug-Free Communities grant from the Substance Abuse and Mental Health Services Administration to address alcohol, marijuana, and opioid use among 12-18 year old residents. CCDHHS holds an Overdose Data to Action grant from NYSDOH to address the opioid crisis with a public health perspective.

After identifying potential health improvement strategies for the proposed collaborative priority areas, the CCCHPT reached out to local content area experts to ensure that these strategies were logical in the context of the community and current efforts. Professionals working in the fields of chronic disease prevention, mental health and substance use disorders, and prenatal care were interviewed and provided specific guidance for the Community Health Improvement Plan.

Table 29 provides a list of organizations and representatives who were interviewed and helped guide the planned interventions of the Community Health Improvement Plan.

The Chautauqua County Community Health Improvement Plan workplan document outlines selected priorities, goals and objectives, intervention strategies, and process measures with measurable and time-framed targets that will be used to track progress over the three-year period. The workplan is available as a separate document posted alongside this document on websites for CCDHHS, AHN Westfield Memorial Hospital, Brooks-TLC Hospital System, Inc., and UPMC Chautauqua.

Table 29. Organizations and representatives who reviewed CHIP activities

Organizations	Representative
Brooks TLC Hospital System	Holly Degolyer
Chautauqua County Department of Health and Human Services	Cathy Burgess
Chautauqua County Department of Health and Human Services	Breeanne Agett
Chautauqua County Department of Health and Human Services	Christine Schuyler

Chautauqua County Department of Health and Human Services, Early Intervention Program	Denise Nichols
Chautauqua County Department of Mental Hygiene	Victoria Patti
Chautauqua County Health Network	Lynn Wigren
Chautauqua County Health Network	Jim Sherry
Chautauqua County Health Network	Mikayla Certo
Chautauqua County Health Network	Jen Graham
Chautauqua Lake Child Care Center	Beth Starks
Cornell Cooperative Extension of Chautauqua County	Emily Reynolds
Erie2-Chautauqua-CattaraugusBOCES	Brady Deuink
Office For the Aging	MaryAnn Spanos
Office For the Aging	Dana Corwin
Population Health Collaborative	John Craik
Prevention Works	Laurie Reynolds
Prevention Works	Kelley Potter
Prevention Works	Melanie Witkowski
Roswell Park Cancer Institute	Annamaria Masucci
The Chautauqua Center	Mike Pease
The Resource Center	Donna Trusso
Tobacco Free Chautauqua, Cattaraugus, Allegany	Ken Dahlgren
UB School of Dental Medicine, Rural Dentistry Program	Paula Fischer
WCA Hospital	Toni DeAngelo
Westfield Memorial Hospital	
Westfield Memorial Hospital	Kim Greiner

### Plans for Distribution

The Chautauqua County Department of Health and Human Services, in partnership with the Chautauqua County Community Health Planning Team, will make the 2019-2021 Community Health Assessment and Community Health Improvement Plan available to the community through a number of means.

These include:

## Chautauqua County Community Health Assessment 2019-2021

- Posting the CHA and CHIP documents on the County website
- Posting the CHA and respective CSPs on hospital websites (AHN Westfield Memorial Hospital, Brooks-TLC Hospital System, Inc., and UPMC Chautauqua)
- Developing a press release and distributing to all local media
- Posting links to the CHA, CHIP, and CSPs on CCDHHS Facebook and Twitter pages
- Emailing links to CHA and CHIP to all Chautauqua County Government employees
- Sharing documents and links to documents with community partners at various coalition and workgroup meetings
- Forwarding links to CHA, CHIP, and CSPs to various community email lists (e.g. faith-based organizations, local physicians, youth-serving organizations, wellness coordinators at worksites, school administrators, etc.)

The CCDHHS and CCCHPT will additionally respond to any earned media requests generated from this outreach.

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