

CHAUTAUQUA COUNTY

Chautauqua County Community Health Assessment 2014-2017

Chautauqua County
Department of Health and Human Services

November 15, 2013



The 2014-2017 Community Health Assessment was developed in conjunction with the New York State Department of Health Prevention Agenda. Guidance and support was provided by the New York State Department of Health and the P² Collaborative of Western New York. This assessment and the Chautauqua County Community Health Improvement Plan were established as result of collaboration with local hospitals and community health partners.

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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 stakeholder meetings.

We must also recognize and thank the New York State Department of Health staff for providing extensive guidance and data, and for answering the numerous questions.

Executive Summary

In conjunction with the New York State Department of Health's (NYSDOH) Prevention Agenda 2013-2017, the Chautauqua County Department of Health and Human Services (CCDHHS) and local hospital partners collaborated to complete the Community Health Assessment, Community Service Plans, and the Community Health Improvement Plan for 2014-2017.

The Prevention Agenda 2013-2017 is New York State's health improvement plan that was developed by the New York State Public Health and Health Planning Council in partnership with 140 diverse organizations across New York State. 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. The Prevention Agenda envisions New York becoming the Healthiest State in the Nation, and designates five priority areas:

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

The New York State Department of Health outlines goals and objectives, as well as appropriate and 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 the Community Health Assessment 2010-2013 process, local health departments across New York State were again required to work collaboratively with county hospitals. In Chautauqua County, partner hospitals included:

- Brooks Memorial Hospital (BMH), located in Dunkirk, NY
- TLC Health Network (TLC), located in Irving, NY
- WCA Hospital (WCA), located in Jamestown, NY
- Westfield Memorial Hospital (WMH), located in Westfield, NY

Disclaimer: On October 16, 2013, TLC Health Network announced that Lakeshore Hospital will close January 31, 2014.

Key stakeholders for public health and health care were also 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)
- P² Collaborative of Western New York (P² of WNY), WNY region technical support
- The Chautauqua Center (TCC), federally qualified health center

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 three community conversations. The team thoroughly examined secondary health data provided by the NYSDOH, and selected collaborative and individual priorities. The CCCHPT also selected health disparities to focus on and collaborative interventions. Collaborative priorities, along with background data and potential interventions were presented at a community stakeholder meeting attended by local content area experts. Feedback and guidance was provided by community stakeholders. 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 health and prevent substance abuse (CCDHHS and all hospitals)

The Community Health Assessment 2014-2017 provides a demographic profile of Chautauqua County, a health profile divided into 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 of this assessment.

Findings from the Community Health Assessment were used to develop the Community Health Improvement Plan, which is available as a separate document.

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Demographic Profile

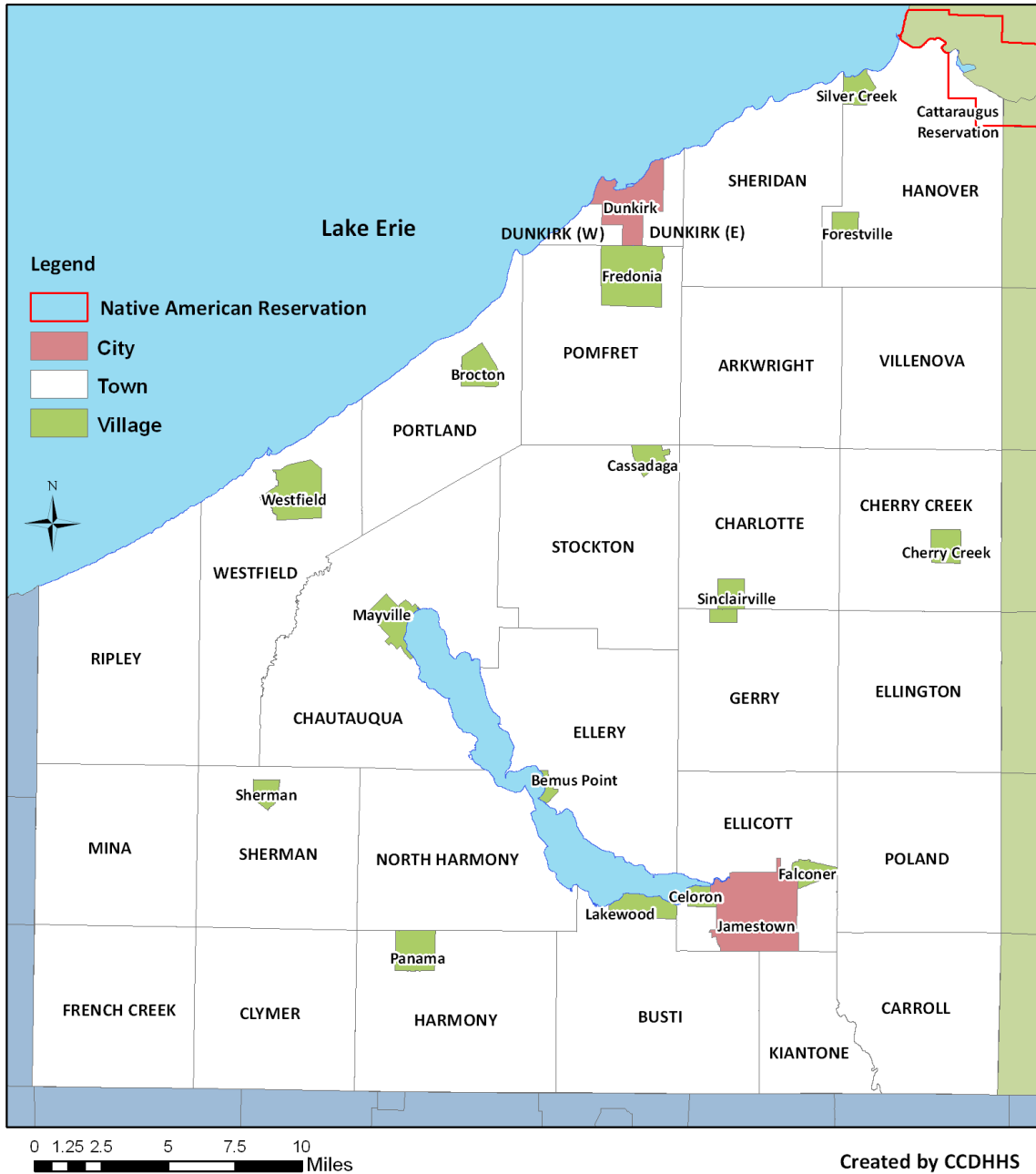
Geographic Location and Overall Population Size

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.

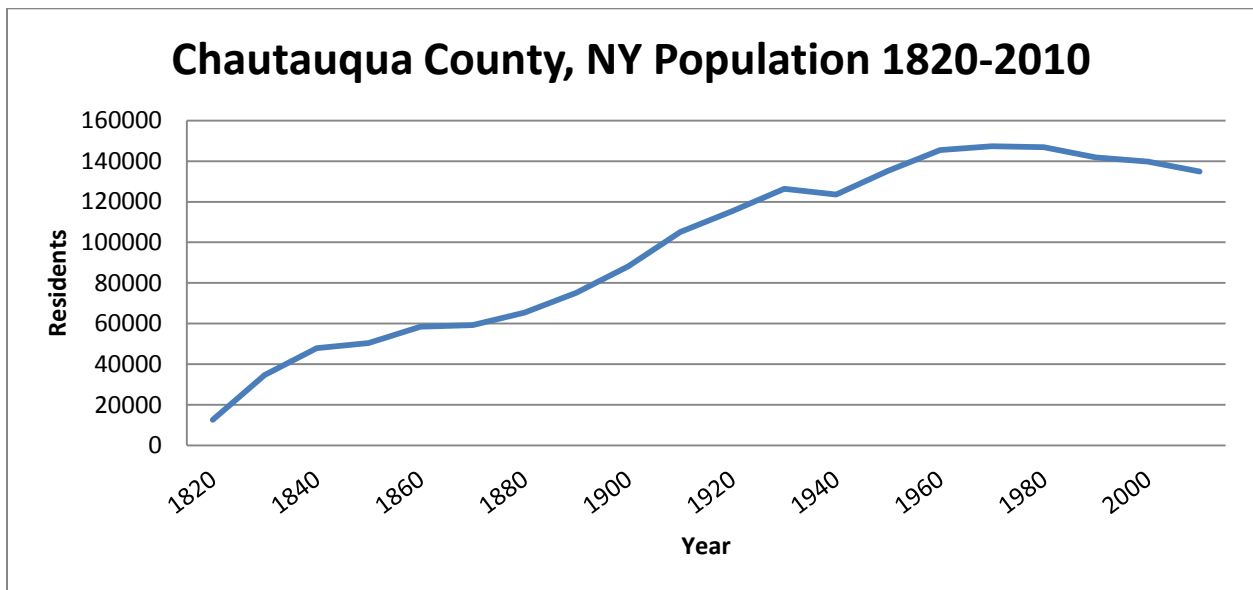
The following map provides a visual of the towns, cities, villages, and Native American reservations that comprise Chautauqua County.

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



Chautauqua County is made up of two cities, Dunkirk and Jamestown, twenty-seven towns, and fifteen villages that cover 1,060 square miles with a population of 134,905 at the time of the 2010 census. A 2012 population projection by the U.S. Census Bureau indicates that the County population declined to 133,539 (-1.0%) by 2012, ranking as the 23rd 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 that census was taken.

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 time frame, 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 12,382 in 2012) and the Village of Fredonia (population of 11,047 in 2012). The "south county" region encompasses the City of Jamestown, the County's largest population center of 30,767 (American Community Survey 2012 estimates). 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 from 2010 to 2012 for specific villages, cities, and towns within Chautauqua County. The temporal trend depicted by this data reflects the general County decline in population since the 2010 Census.

Table 1. U.S. Census population estimates for incorporated places and minor civil divisions, 2010-2012

Name	Population				Name	Population			
	2010	2010	2011	2012		2010	2010	2011	2012
Arkwright town	1061	1060	1057	1055	Lakewood village	3002	2998	2980	2978
Bemus Point village	364	371	369	366	Balance of Busti town	4349	4345	4338	4318
Balance of Ellery town	4164	4162	4155	4140	Mayville village	1711	1710	1696	1689
Brocton village	1486	1485	1478	1468	Balance of Chautauqua	2753	2751	2746	2734
Balance of Portland town	3341	3339	3478	3394	Mina town	1106	1104	1100	1096
Carroll town	3524	3521	3511	3491	North Harmony town	2267	2265	2264	2257
Cassadaga village	634	633	630	625	Panama village	479	479	475	471
Balance of Stockton town	1614	1613	1602	1590	Balance of Harmony town	1727	1725	1716	1707
Cattaraugus Reservation	38	38	38	38	Poland town	2356	2352	2338	2323
Celoron village	1112	1111	1104	1096	Ripley town	2415	2411	2404	2389
Cherry Creek village	461	461	457	454	Sheridan town	2673	2671	2656	2642
Balance of Cherry Creek	657	656	653	648	Sherman village	730	729	725	720
Clymer town	1698	1699	1694	1693	Balance of Sherman town	923	922	919	919
Dunkirk city	12563	12542	12467	12382	Silver Creek village	2656	2651	2635	2616
Dunkirk town	1318	1317	1310	1302	Balance of Hanover town	3774	3773	3767	3754
Ellington town	1643	1642	1639	1628	Sinclairville village (pt.)	513	513	509	507
Falconer village	2420	2416	2405	2387	Balance of Charlotte town	1216	1217	1214	1213
Balance of Ellicott town	5182	5180	5174	5153	Sinclairville village (pt.)	75	75	75	74
Forestville village	697	696	692	687	Balance of Gerry town	1830	1828	1824	1813
Fredonia village	11230	11225	11100	11047	Villanova town	1110	1109	1106	1098
Balance of Pomfret town	3735	3732	3728	3724	Westfield village	3224	3219	3200	3178
French Creek town	906	907	908	902	Balance of Westfield town	1672	1669	1667	1662
Jamestown city	31146	31096	30909	30767	Chautauqua County	134905	134767	134264	133539
Kiantone town	1350	1349	1352	1344					

Source: US Census Bureau Annual Estimates of Incorporated Places 2010 Through 2012

Age and Sex Distributions

According to American Community Survey 2007-2011 5-year estimates, the distribution of genders in the County is approximately equal overall, comprised of 49.2% males and 50.8% 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 70.28% females and only 29.72% males.

The median age of Chautauqua County residents is 40.5 years, slightly higher than the New York State median of 37.8 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 (16.4% compared to 13.4% and 2.57% compared to 1.96%, respectively). These statistics are outlined in Table 2.

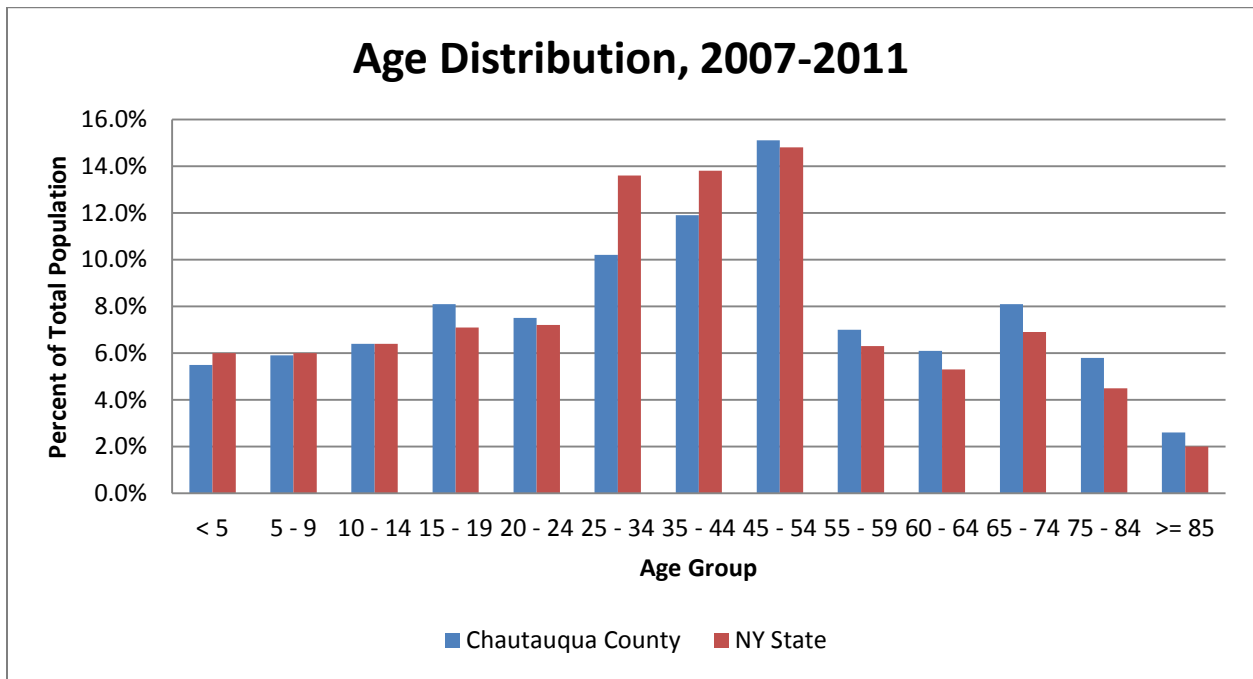
Table 2. Comparison of selected age and gender statistics, 2007-2011

	Chautauqua County		New York State	
Median age (years)	40.5		37.8	
Selected Age Groups	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
18 years and over	105,224	77.90%	14,954,839	77.50%
21 years and over	97,289	72.10%	14,082,112	73.00%
62 years and over	26,776	19.80%	3,171,366	16.40%
65 years and over	22,150	16.40%	2,590,899	13.40%
85 years and over	3,472	2.57%	378,090	1.96%
18 years and over	105,224	100.00%	14,954,839	100.00%
Male	51,120	48.60%	7,117,756	47.60%
Female	54,104	51.40%	7,837,083	52.40%
65 years and over	22,150	100.00%	2,590,899	100.00%
Male	9,468	42.70%	1,069,715	41.30%
Female	12,682	57.30%	1,521,184	58.70%
85 years and over	3,472	100.00%	378,090	100.00%
Male	1,032	29.72%	117,940	31.19%
Female	2,440	70.28%	260,150	68.81%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

The distribution of ages among Chautauqua County and New York State residents is presented in Figure 2.

Figure 2. Age distribution for Chautauqua County and New York State, 2007-2011

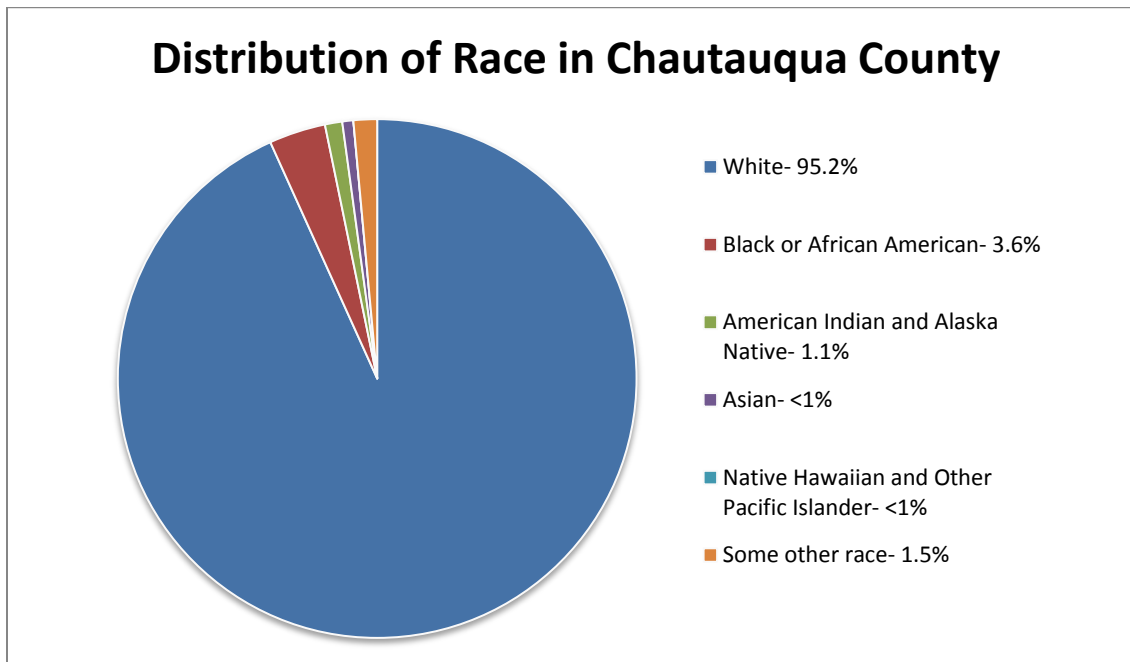


US Census Bureau American Community Survey 2007-2011

Race and Ethnicity

While Chautauqua County residents are primarily Caucasian, diversity has gradually increased over the past several years. Figure 3 and Table 3 present the racial distribution of Chautauqua County residents according to the U.S. Census Bureau American Community Survey 5-year population estimates 2007-2011.

Figure 3. Distribution of race in Chautauqua County, 2007-2011



Source: U.S. Census Bureau, 2007-2011 American Community Survey

Table 3. Racial distribution of persons in Chautauqua County, 2007-2011

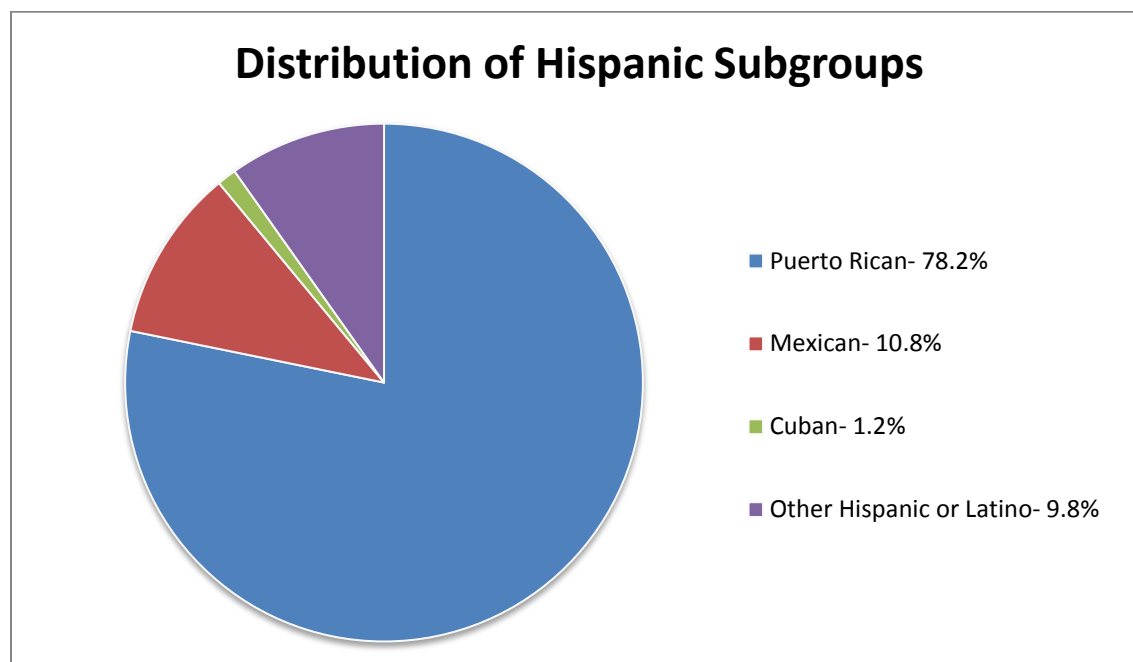
Race	Chautauqua County		New York State	
	Number	Percent	Number	Percent
Total population	135,018	100.00%	19,302,448	100%
One race	132,261	98.00%	18,860,781	97.70%
Two or more races	2,757	2.00%	441,667	2.30%
Race alone or in combination with one or more other races				
Total population	135,018	100%	19,302,448	100%
White	128,537	95.20%	13,101,179	67.90%
Black or African American	4,867	3.60%	3,239,219	16.80%
American Indian and Alaska Native	1,430	1.10%	161,091	0.80%
Asian	978	0.70%	1,530,670	7.90%
Native Hawaiian and Other Pacific Islander	27	0.00%	17,062	0.10%
Some other race	2,050	1.50%	1,726,729	8.90%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Hispanics are the fastest growing ethnic group in the County and in the nation, currently making up 5.9% of the County's population, compared to 4.7% observed during the last Community Health Assessment conducted in 2008. According to the U.S. Census Bureau's American Community Survey, the majority of Hispanic residents live in the County's urban areas: with 38% residing in Dunkirk and 30% living in Jamestown. The remaining 32% are scattered throughout Chautauqua County. The largest subgroups of the County's

Hispanic/Latino population are Puerto Rican (78%), followed by Mexican (11%). These statistics are presented in Figure 4 and Table 4.

Figure 4. Distribution of Hispanic subgroups in Chautauqua County, 2007-2011



Source: U.S. Census Bureau, 2007-2011 American Community Survey

Table 4. Distribution of Hispanic or Latino ethnicity among Chautauqua County races, 2007-2011

	Chautauqua County		New York State	
	Number	Percent	Number	Percent
Hispanic or Latino (of any race)				
Total population	135,018	100%	19,302,448	100%
Hispanic or Latino (of any race)	7,950	5.90%	3,356,747	17.40%
Mexican	860	0.60%	435,820	2.30%
Puerto Rican	6,216	4.60%	1,115,555	5.80%
Cuban	94	0.10%	71,778	0.40%
Other Hispanic or Latino	780	0.60%	1,733,594	9.00%
Not Hispanic or Latino	127,068	94.10%	15,945,701	82.60%
White alone	120,840	89.50%	11,330,687	58.70%
Black or African American alone	2,560	1.90%	2,792,043	14.50%
American Indian and Alaska Native alone	620	0.50%	46,452	0.20%
Asian alone	865	0.60%	1,404,325	7.30%
Native Hawaiian and Other Pacific Islander alone	27	0.00%	5,115	0.00%
Some other race alone	125	0.10%	91,688	0.50%
Two or more races	2,031	1.50%	275,391	1.40%
Two races including Some other race	33	0.00%	30,079	0.20%
Two races excluding Some other race, and Three	1,998	1.50%	245,312	1.30%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

There is a strong migrant presence in the area's agricultural workforce. The SUNY Fredonia Migrant Educational Opportunity Program reports that approximately 300 migrants were present in the County in 2013. The majority of the migrant population originates from 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 indicates that only 38 Native Americans residing in the County actually live on the reservation, which spans 3 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 come by because religion is not addressed in the U.S. Census Bureau's questionnaires. 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 liberal 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).

Language and cultural differences can create barriers to the provision of health knowledge, health education and service delivery. U.S. Census Bureau 2007-2011 American Community Survey indicates that 7.2% of the County's population older than 5 years identifies a language other than English as the primary language spoken at home. Of those, 57.1% primarily speak Spanish.

Table 5. Languages spoken in the homes of Chautauqua County residents, 2007-2011

Language Spoken at Home	Chautauqua County		New York	
	Number	Percent	Number	Percent
Population 5 years and over	127,542	100.00%	18,144,441	100.00%
English only	118,330	92.80%	12,798,327	70.50%
Language other than English	9,212	7.20%	5,346,114	29.50%
Speak English less than "very well"	3,069	2.40%	2,416,773	13.30%
Spanish	5,271	4.10%	2,640,614	14.60%
Speak English less than "very well"	1,922	1.50%	1,225,812	6.80%
Other Indo-European languages	3,234	2.50%	1,602,964	8.80%
Speak English less than "very well"	730	0.60%	625,917	3.40%
Asian and Pacific Islander languages	571	0.40%	846,507	4.70%
Speak English less than "very well"	326	0.30%	480,377	2.60%
Other languages	136	0.10%	256,029	1.40%

Speak English less than "very well"	91	0.10%	84,667	0.50%
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Source: U.S. Census Bureau, 2007-2011 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 2007-2011 indicate that during that time period there were 54,499 households in Chautauqua County (Table 6). The average household size was 2.31 people, which is comparable to, but slightly lower than, the state average of 2.59 people. The majority of households were families (63.4%), which include married-couple families (47.2%), and other families (16.6%). Nonfamily households made up 36.6% of all households in the County. The remaining nonfamily households were made up of unrelated individuals living together. These proportions are approximately equal to those of New York State.

Table 6. Chautauqua County households by type, 2007-2011

Households by Type	Chautauqua County		New York	
	Number	Percent	Number	Percent
Total households	55,499	100.00%	7,215,687	100.00%
Family households (families)	35,189	63.40%	4,656,855	64.50%
With own children under 18 years	14,578	26.30%	2,118,154	29.40%
Married-couple family	26,202	47.20%	3,244,977	45.00%
With own children under 18 years	9,362	16.90%	1,405,328	19.50%
Male householder, no wife present, family	2,326	4.20%	348,486	4.80%
With own children under 18 years	1,085	2.00%	145,834	2.00%
Female householder, no husband present, family	6,661	12.00%	1,063,392	14.70%
With own children under 18 years	4,131	7.40%	566,992	7.90%
Nonfamily households	20,310	36.60%	2,558,832	35.50%
Householder living alone	16,790	30.30%	2,101,673	29.10%
65 years and over	6,947	12.50%	752,316	10.40%
Households with one or more people under 18 years	16,040	28.90%	2,345,755	32.50%
Households with one or more people 65 years and over	15,536	28.00%	1,860,363	25.80%
Average household size	2.31	(X)	2.59	(X)
Average family size	2.87	(X)	3.24	(X)

Source: U.S. Census Bureau, 2007-2011 American Community Survey

According to reports from the Homeless Management Information System for Chautauqua County, from January 1, 2011 through December 31, 2012, there were 303 homeless families in the county. Of homeless families, 125 (41.3%) included dependent children, 38 (12.5%) were

military veterans, 10 (3.3%) were pregnant women, and 62 (20.5%) had a disabling condition. The majority of families, 215 or 71.0%, listed their last fixed address as Jamestown or Dunkirk (HMIS, 2011-2012).

The U.S. Census Bureau 2007-2011 American Community Survey estimates that there are 66,854 housing units in Chautauqua County, 83.0% of which are occupied, leaving 17.0% vacant. Of those units, the majority (67.2%) are one-unit detached single family homes. The remaining housing units are mostly buildings containing two or more units and 6.4% are mobile homes. Most housing units are inhabited by the owners (69.2%) but still many are rented out (30.8%).

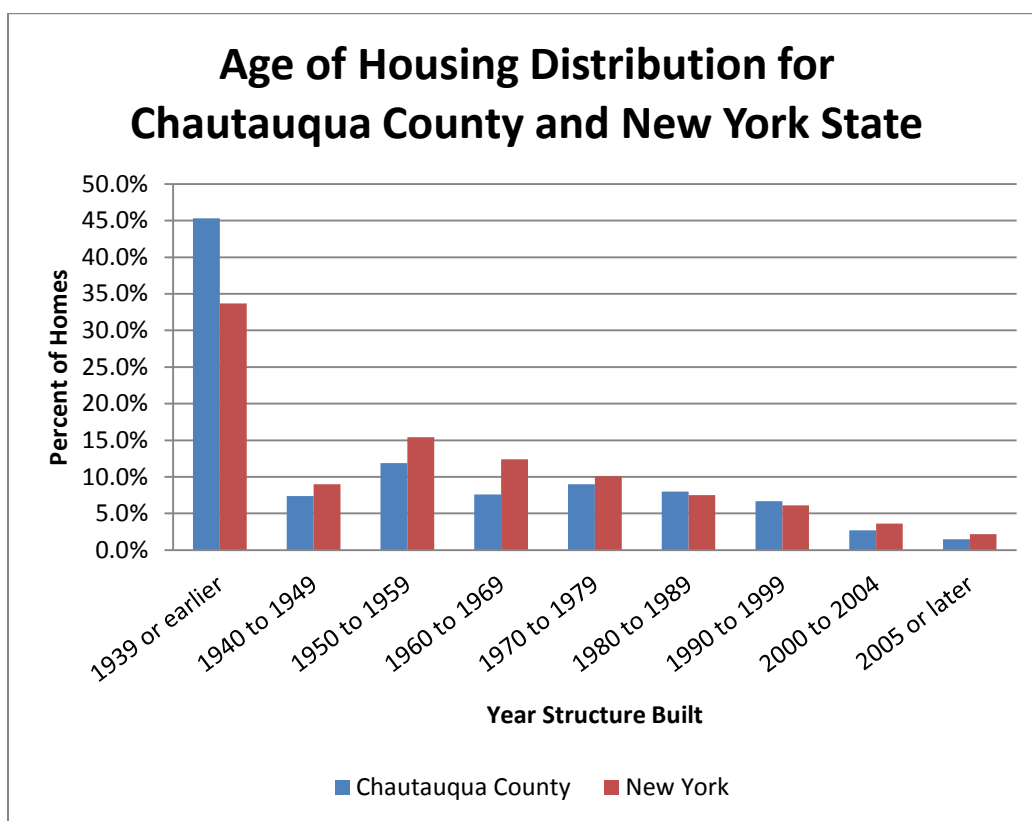
Table 7. Characteristics of housing units in Chautauqua County and New York State, 2007-2011

Housing Occupancy	Chautauqua County		New York	
	Number	Percent	Number	Percent
Total housing units	66,854	100.00%	8,081,303	100.00%
Occupied housing units	55,499	83.00%	7,215,687	89.30%
Vacant housing units	11,355	17.00%	865,616	10.70%
Units in Structure				
Total housing units	66,854	100.00%	8,081,303	100.00%
1-unit, detached	44,903	67.20%	3,400,678	42.10%
1-unit, attached	913	1.40%	392,846	4.90%
2 units	8,183	12.20%	872,040	10.80%
3 or 4 units	3,266	4.90%	597,327	7.40%
5 to 9 units	2,075	3.10%	430,219	5.30%
10 to 19 units	1,121	1.70%	332,979	4.10%
20 or more units	2,106	3.20%	1,851,046	22.90%
Mobile home	4,284	6.40%	200,756	2.50%
Boat, RV, van, etc.	3	0.00%	3,412	0.00%
Housing Tenure				
Occupied housing units	55,499	100.00%	7,215,687	100.00%
Owner-occupied	38,383	69.20%	3,955,232	54.80%
Renter-occupied	17,116	30.80%	3,260,455	45.20%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Housing structures in the County are relatively old with 45.3% 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 42.7% 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. 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, 2007-2011



Source: U.S. Census Bureau, 2007-2011 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, 18.9% were valued at less than \$50,000 in Chautauqua County, compared to 5.2% in New York State. The majority of owner-occupied units in the County were valued between \$50,000 and \$99,999 (44.9%). In New York State, most homes fell into the ranges of \$300,000 to \$499,999 (24.4%) and \$500,000 to \$999,999 (20.8%). Table 8 and Figure 6 present the disparity in home values in Chautauqua County compared to the rest of the state.

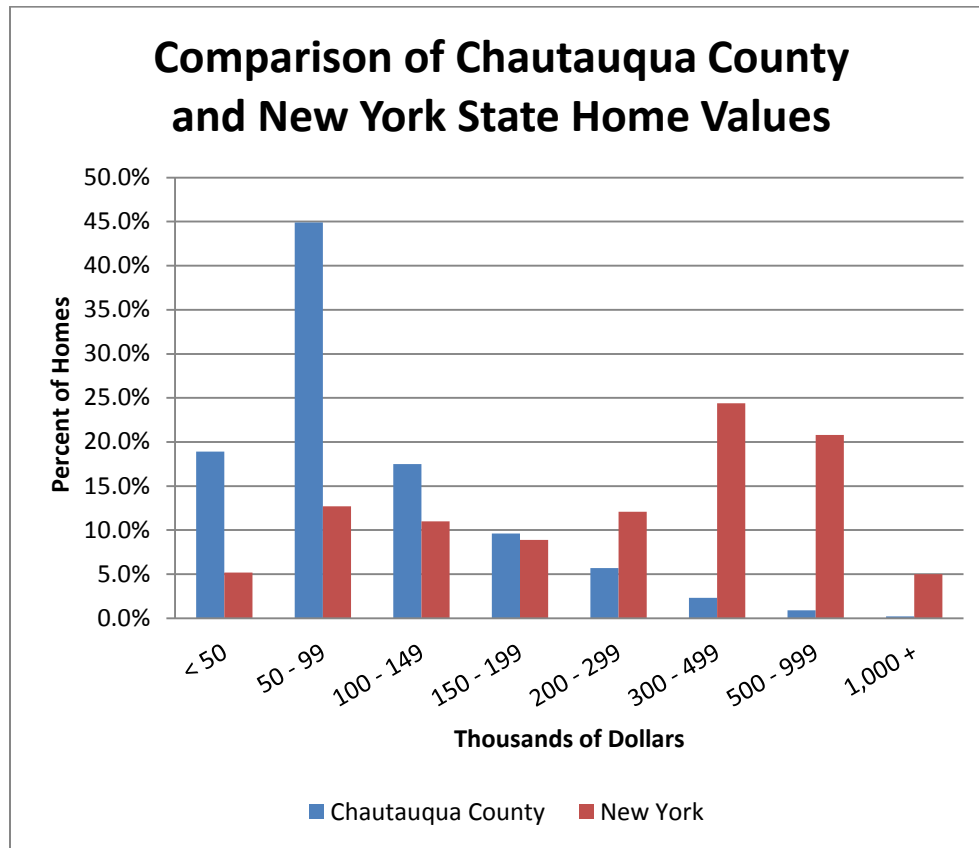
Table 8. Comparison of Chautauqua County and New York State housing values

Value	Chautauqua County		New York	
	Number	Percent	Number	Percent
Owner-occupied units	38,383	100.00%	3,955,232	100.00%
Less than \$50,000	7,244	18.90%	207,032	5.20%
\$50,000 to \$99,999	17,226	44.90%	502,723	12.70%
\$100,000 to \$149,999	6,731	17.50%	433,998	11.00%
\$150,000 to \$199,999	3,680	9.60%	351,731	8.90%
\$200,000 to \$299,999	2,172	5.70%	476,937	12.10%
\$300,000 to \$499,999	886	2.30%	963,566	24.40%

\$500,000 to \$999,999	363	0.90%	821,392	20.80%
\$1,000,000 or more	81	0.20%	197,853	5.00%
Median (dollars)	80,900	(X)	301,000	(X)

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Figure 6. Comparison of Chautauqua County and New York State home values



Source: U.S. Census Bureau, 2007-2011 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 2007-2011 American Community Survey revealed that 11% of County households did not have access to a vehicle, compared to 17.7% in the City of Dunkirk, and 21% in the City of Jamestown. This figure is much greater for New York State at 28.8%, 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, 2007-2011

Vehicles Available	City of Dunkirk		City of Jamestown		Chautauqua County		New York	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied housing	5,722	100.00%	13,595	100.00%	55,499	100.00%	7,215,687	100.00%
No vehicles	1,014	17.70%	2,859	21.00%	6,128	11.00%	2,077,343	28.80%
1 vehicle	2,507	43.80%	6,047	44.50%	21,114	38.00%	2,340,149	32.40%
2 vehicles	1,553	27.10%	3,604	26.50%	20,194	36.40%	1,954,301	27.10%
3 or more vehicles	648	11.30%	1,085	8.00%	8,063	14.50%	843,894	11.70%

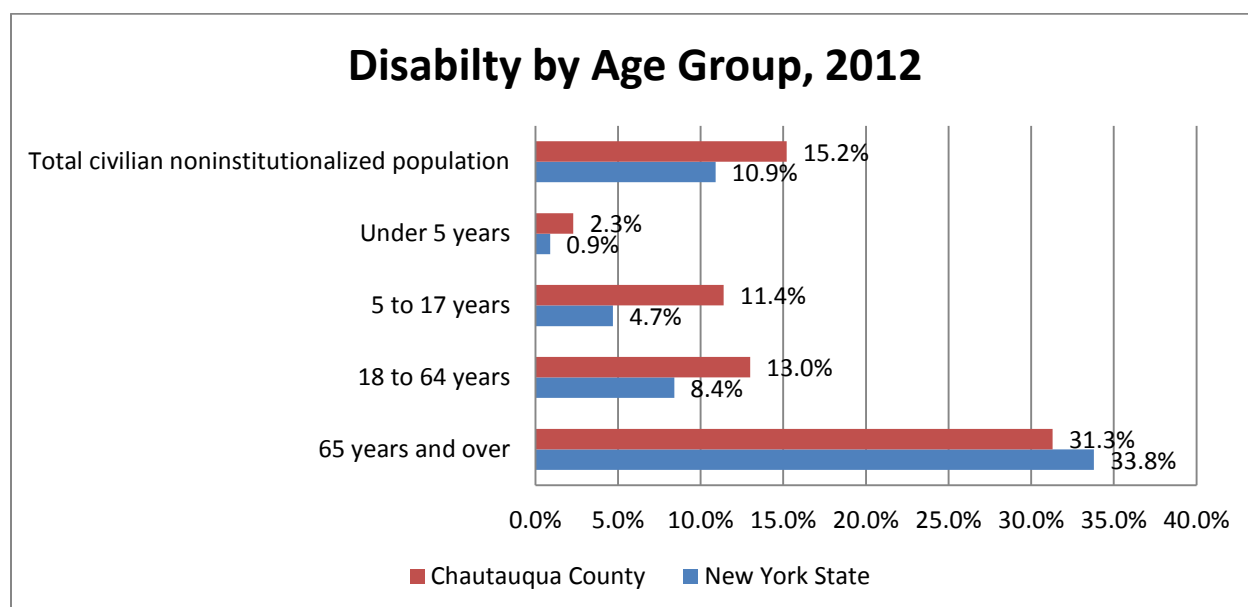
Source: U.S. Census Bureau, 2007-2011 American Community Survey

Disability

According to the U.S. Census Bureau American Community Survey 1-year estimates, in 2012, there were 19,884 non-institutionalized civilian persons with disabilities living in Chautauqua County. This population subgroup accounted for 15.2% of the county population, which was greater than the state rate of 10.9%.

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 65 years and over. The most notable difference between the two geographies was observed in the 5 to 17 age group, with 11.4% of Chautauqua County residents having a disability.

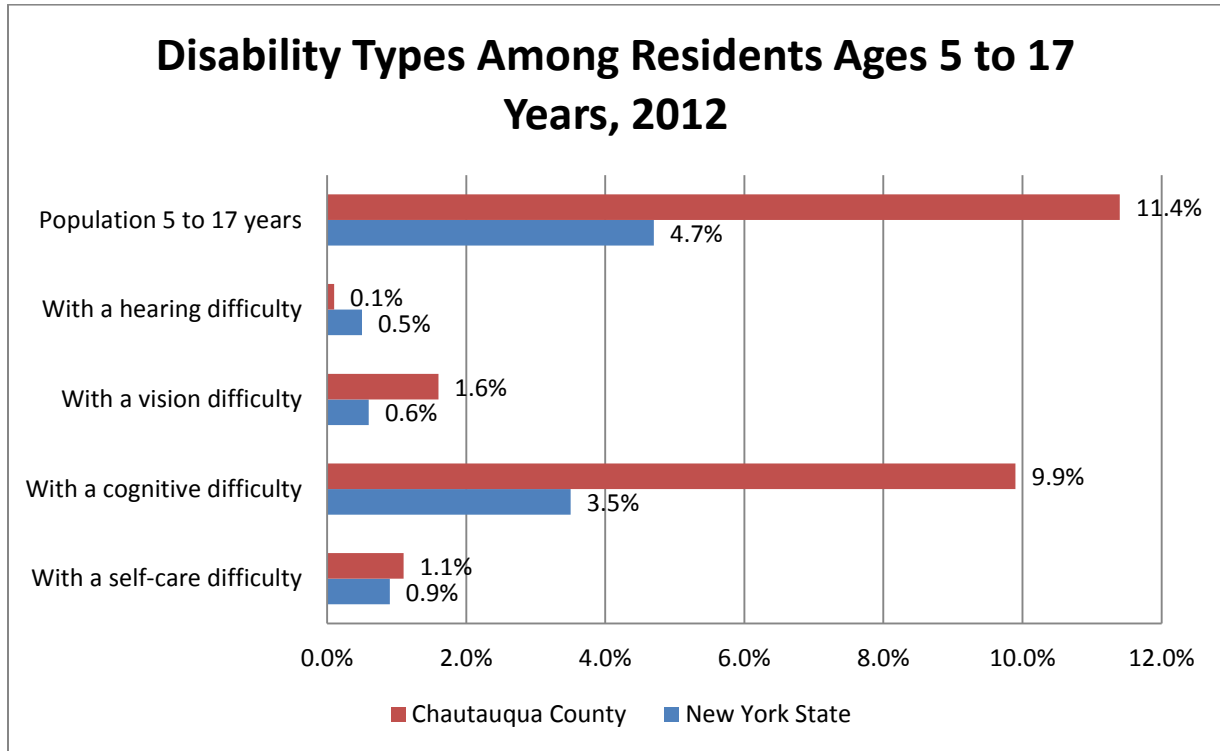
Figure 7. Disability by age group, 2012



Source: US Census Bureau American Community Survey 1-year estimates, 2012

Figure 8 provides a breakdown of types of disabilities for residents ages 5 to 17 in 2012. The most common disability type for this age group was cognitive difficulty at 9.9% compared to 3.5% in New York State as a whole. Vision difficulties were also slightly more common in Chautauqua County (1.6%) than New York State (0.6%).

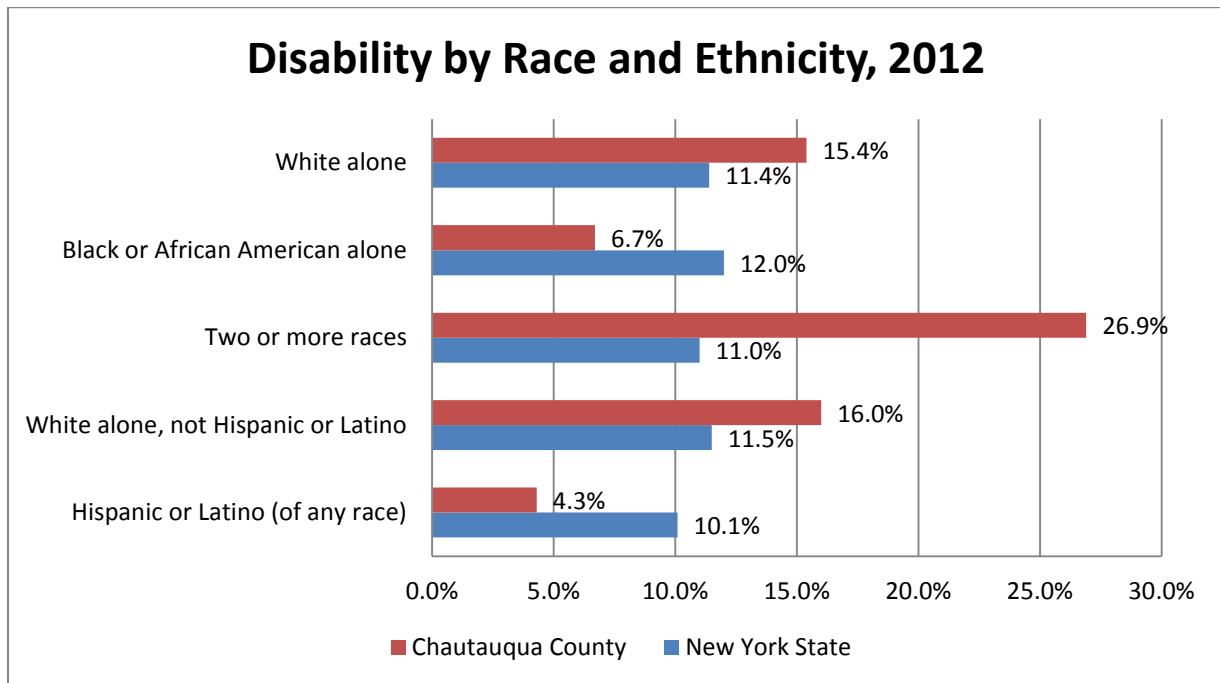
Figure 8. Disability types among residents ages 5 to 17 years, 2012



Source: US Census Bureau American Community Survey 1-year estimates, 2012

A breakdown of total disabilities in Chautauqua County by race and ethnicity is provided in Figure 9. Of all race and ethnicity subgroups, residents self-identifying as being of two or more races experienced the greatest rate of disability at 26.9%, compared to 11.0% in New York State. Disability was less common among Black or African American and Hispanic or Latino subgroups in Chautauqua County than NYS. Disability was more common in Chautauqua County among residents identified as White alone and White alone, not Hispanic or Latino than New York State.

Figure 9. Disability by race and ethnicity, 2012

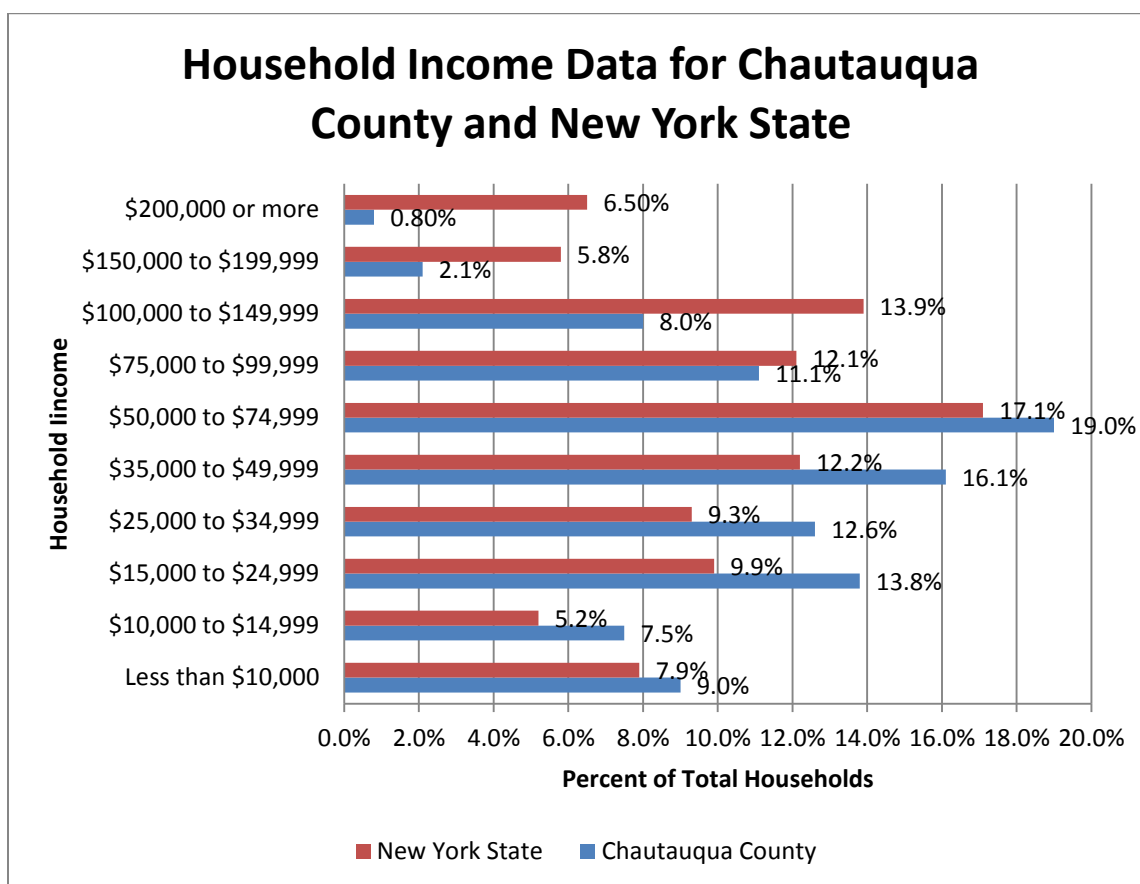


Source: US Census Bureau American Community Survey 1-year estimates, 2012

Income Level

Based on income and poverty data, Chautauqua County is one of the poorest counties in the state. The 2007-2011 median income for Chautauqua County's 55,499 households was \$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 2007-2011).

Figure 10. Household income data for Chautauqua County and New York State, 2007-2011



Source: U.S. Census Bureau, 2007-2011 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 (\$51,614) was greater than the median nonfamily household income (\$23,398) over 2007-2011. Overall, 9.0% of households had an income of less than \$10,000.

Table 10. Income in the past 12 months by household type (2011 inflation-adjusted dollars), 2007-2011

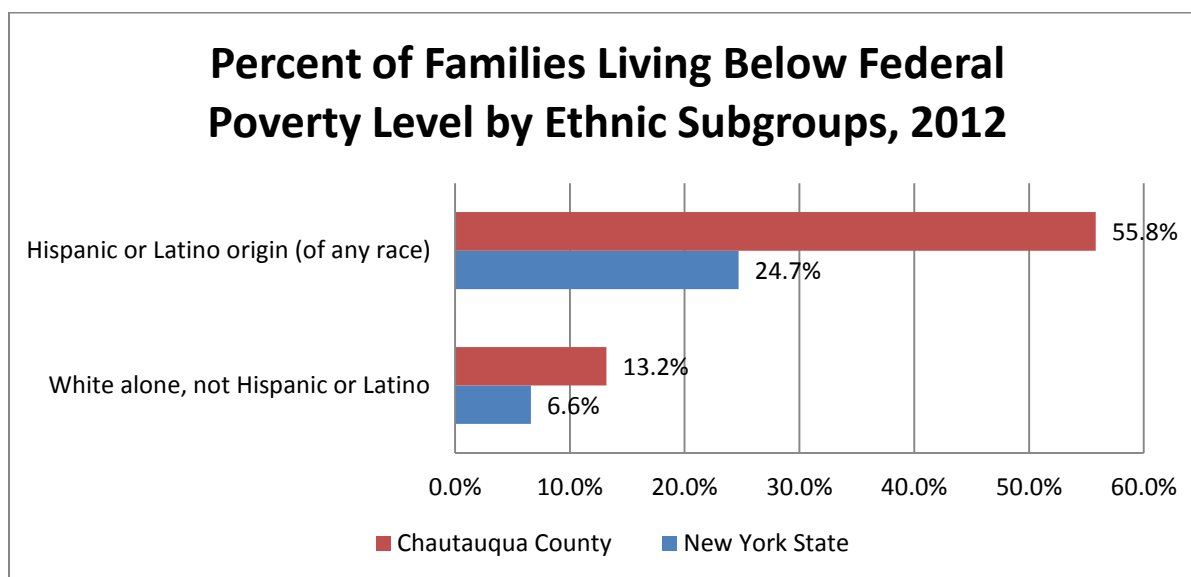
	Chautauqua County				New York State			
	Households	Families	Married-	Nonfamily	Households	Families	Married-	Nonfamily
Total	55,499	35,189	26,202	20,310	7,215,687	4,656,855	3,244,977	2,558,832
Less than \$10,000	9.00%	5.30%	1.30%	17.00%	7.90%	4.90%	1.50%	14.50%
\$10,000 to \$14,999	7.50%	4.80%	1.80%	13.20%	5.20%	3.40%	1.90%	8.90%
\$15,000 to \$24,999	13.80%	9.60%	7.10%	22.40%	9.90%	7.70%	5.10%	14.50%
\$25,000 to \$34,999	12.60%	11.10%	9.80%	15.20%	9.30%	8.30%	6.50%	11.50%
\$35,000 to \$49,999	16.10%	17.40%	17.30%	13.40%	12.20%	11.80%	10.40%	13.10%
\$50,000 to \$74,999	19.00%	22.30%	25.70%	11.70%	17.10%	17.60%	17.90%	15.60%
\$75,000 to \$99,999	11.10%	14.80%	17.80%	3.90%	12.10%	13.70%	15.40%	8.60%
\$100,000 to \$149,999	8.00%	10.70%	13.80%	2.50%	13.90%	16.90%	20.80%	7.40%

\$150,000 to \$199,999	2.10%	2.90%	3.80%	0.50%	5.80%	7.40%	9.50%	2.60%
\$200,000 or more	0.80%	1.20%	1.50%	0.20%	6.50%	8.20%	11.00%	3.20%
Median income	41,432	51,614	61,121	23,398	56,951	69,202	85,392	35,540
Mean income (dollars)	51,360	61,007	70,578	32,201	82,698	95,697	114,573	55,708

Source: U.S. Census Bureau, 2007-2011 American Community Survey

In 2012, 55.8% of the 1,600 Hispanic or Latino families in Chautauqua County of any race were living in poverty in the past 12 months, much greater than the New York State percentage of 24.7%. During the same time period, 13.2% of the 30,282 White, non-Hispanic or Latino families in Chautauqua County were living below the Federal Poverty Level within the past 12 months.

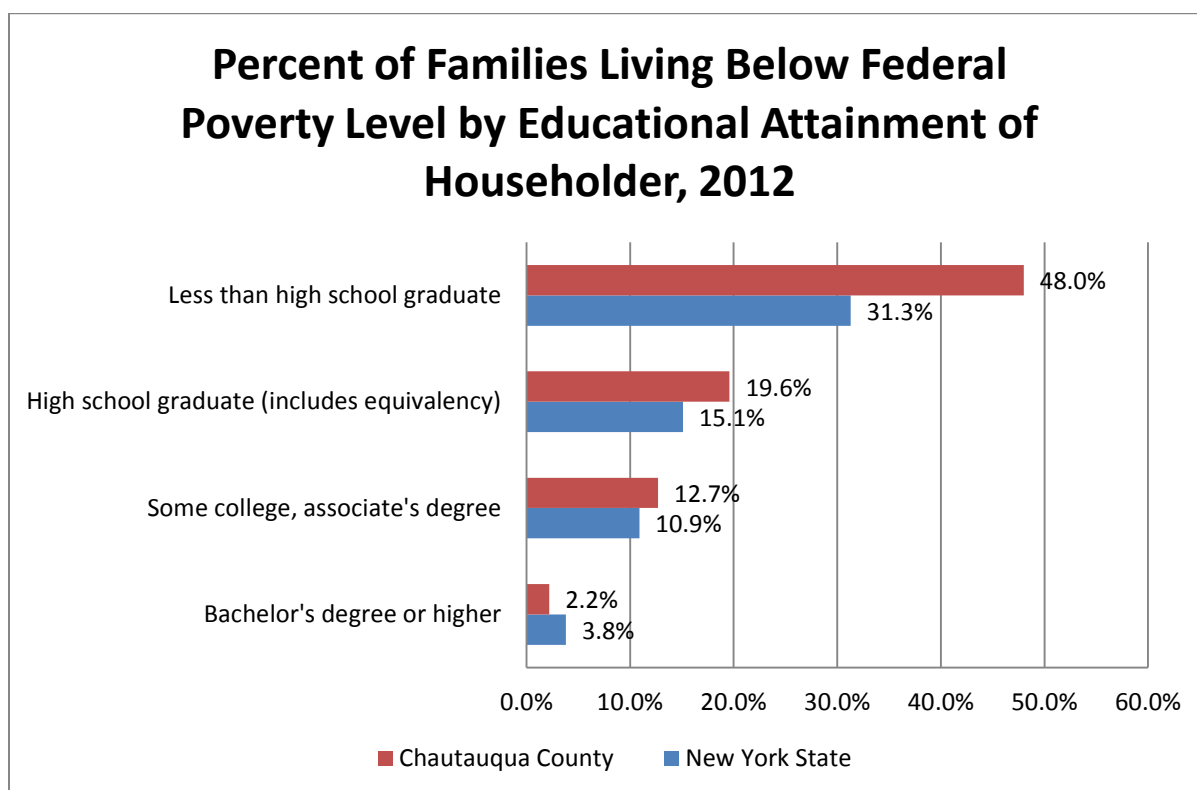
Figure 11. Percent of families living below the Federal Poverty Level by ethnic subgroups, 2012



Source: US Census Bureau American Community Survey 1-year estimates, 2012
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 2012. Of families in Chautauqua County with a householder having less than a high school diploma, 48% were living below the Federal Poverty Level within the past 12 months. Just 2.2% 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, 2012



Source: US Census Bureau American Community Survey 1-year estimates, 2012
Poverty Status in the past 12 Months of Families

According to the U.S. Census Bureau American Community Survey poverty rates for 2007-2011, 14.5% of all Chautauqua County residents live below the federal poverty level. Approximately 20.3% of children ages 0 to 17 years old and 22.7% of related children less than five years old are living in poverty, compared to 11.5% of people aged 65 and over. The Health and Human Services federal poverty guideline (2011) for a family of four was an income of \$22,350. Eleven percent of all families and 27.2% 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, 2007-2011

	Chautauqua County	New York State
All families	11.00%	12.70%
With related children under 18 years	16.90%	23.30%
With related children under 5 years only	16.60%	34.70%
Married couple families	5.40%	5.30%
With related children under 18 years	7.60%	9.60%
With related children under 5 years only	6.90%	17.20%
Families with female householder, no husband present	27.20%	38.00%

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With related children under 18 years	36.80%	49.70%
With related children under 5 years only	41.70%	67.70%
All people	14.50%	17.70%
Under 18 years	20.30%	26.90%
Related children under 18 years	20.10%	26.40%
Related children under 5 years	22.70%	32.10%
Related children 5 to 17 years	19.10%	24.40%
18 years and over	12.80%	15.10%
18 to 64 years	13.00%	16.80%
65 years and over	11.50%	8.30%
People in families	12.10%	14.40%
Unrelated individuals 15 years and over	24.40%	29.90%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Employment

The American Community Survey estimates that from 2007 to 2011 there were on average 65,315 (59.9%) Chautauqua County residents aged 16 years and older in the labor force and 76 (0.1%) in the armed forces. Of those in the labor force, 8.1% were unemployed.

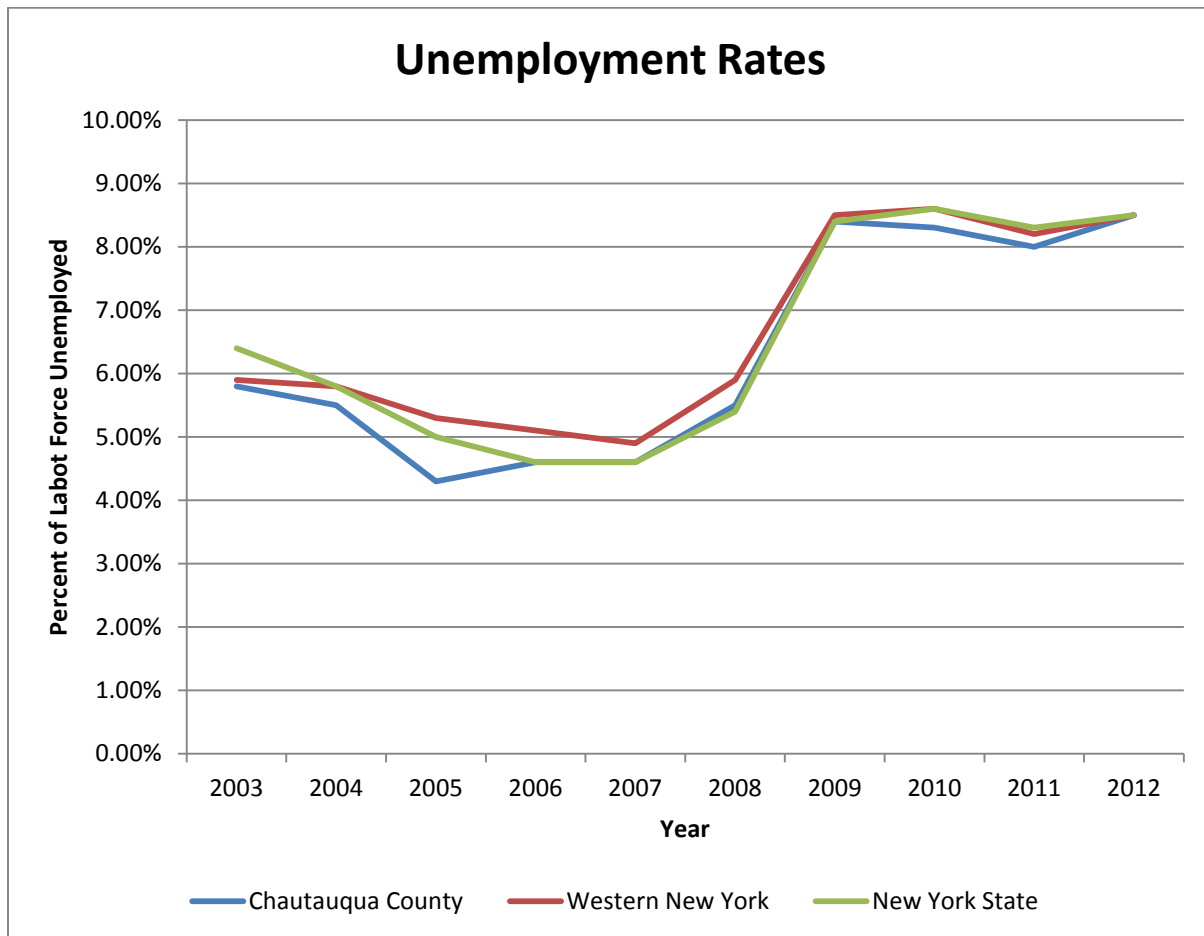
Table 12. Employment status of Chautauqua County residents, 2007-2011

	Chautauqua County		New York State	
	Number	Percent	Number	Percent
Population 16 years and over	109,064	100.00%	15,494,360	100.00%
In labor force	65,315	59.90%	9,881,672	63.80%
Civilian labor force	65,239	59.80%	9,855,104	63.60%
Employed	59,927	54.90%	9,051,668	58.40%
Unemployed	5,312	4.90%	803,436	5.20%
Armed Forces	76	0.10%	26,568	0.20%
Not in labor force	43,749	40.10%	5,612,688	36.20%
Civilian labor force	65,239	100.00%	9,855,104	100.00%
Percent Unemployed	(X)	8.10%	(X)	8.20%
Females 16 years and over	55,967	100.00%	8,099,470	100.00%
In labor force	31,117	55.60%	4,753,649	58.70%
Civilian labor force	31,106	55.60%	4,750,587	58.70%
Employed	28,615	51.10%	4,384,698	54.10%
Own children under 6 years	8,489	100.00%	1,338,581	100.00%
All parents in family in labor force	5,726	67.50%	827,605	61.80%
Own children 6 to 17 years	19,480	100.00%	2,812,187	100.00%
All parents in family in labor force	13,642	70.00%	1,955,310	69.50%

Source: U.S. Census Bureau, 2007-2011 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 unemployment rate was 8.5% in 2012, which matched the Western New York and New York State rates of 8.5%. Figure 13 shows unemployment rates from 2003 to 2012.

Figure 13. Unemployment rates for Chautauqua County, Western New York, and New York State, 2003-2012



Source: NYS Department of Labor Local Area Unemployment Statistics Program Unemployment Rates
<http://www.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 (30.6%). The next most common occupation categories were sales and office occupations (22.7%), and service occupations (19.2%). These top three occupations were consistent with those of New York State.

Table 13. Occupations of Chautauqua County and New York State residents, 2007-2011

Chautauqua County	New York State
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Chautauqua County Community Health Assessment 2014-2017

	Number	Percent	Number	Percent
Civilian employed population 16 years and over	59,927	100.00%	9,051,668	100.00%
Management, business, science, and arts occupations	18,363	30.60%	3,454,414	38.20%
Service occupations	11,505	19.20%	1,765,054	19.50%
Sales and office occupations	13,622	22.70%	2,254,494	24.90%
Natural resources, construction, and maintenance occupations	5,541	9.20%	693,011	7.70%
Production, transportation, and material moving occupations	10,896	18.20%	884,695	9.80%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Private wage and salary workers made up the majority of the workforce with 44,201 employees (73.8%), followed by government workers (19.4%). 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.

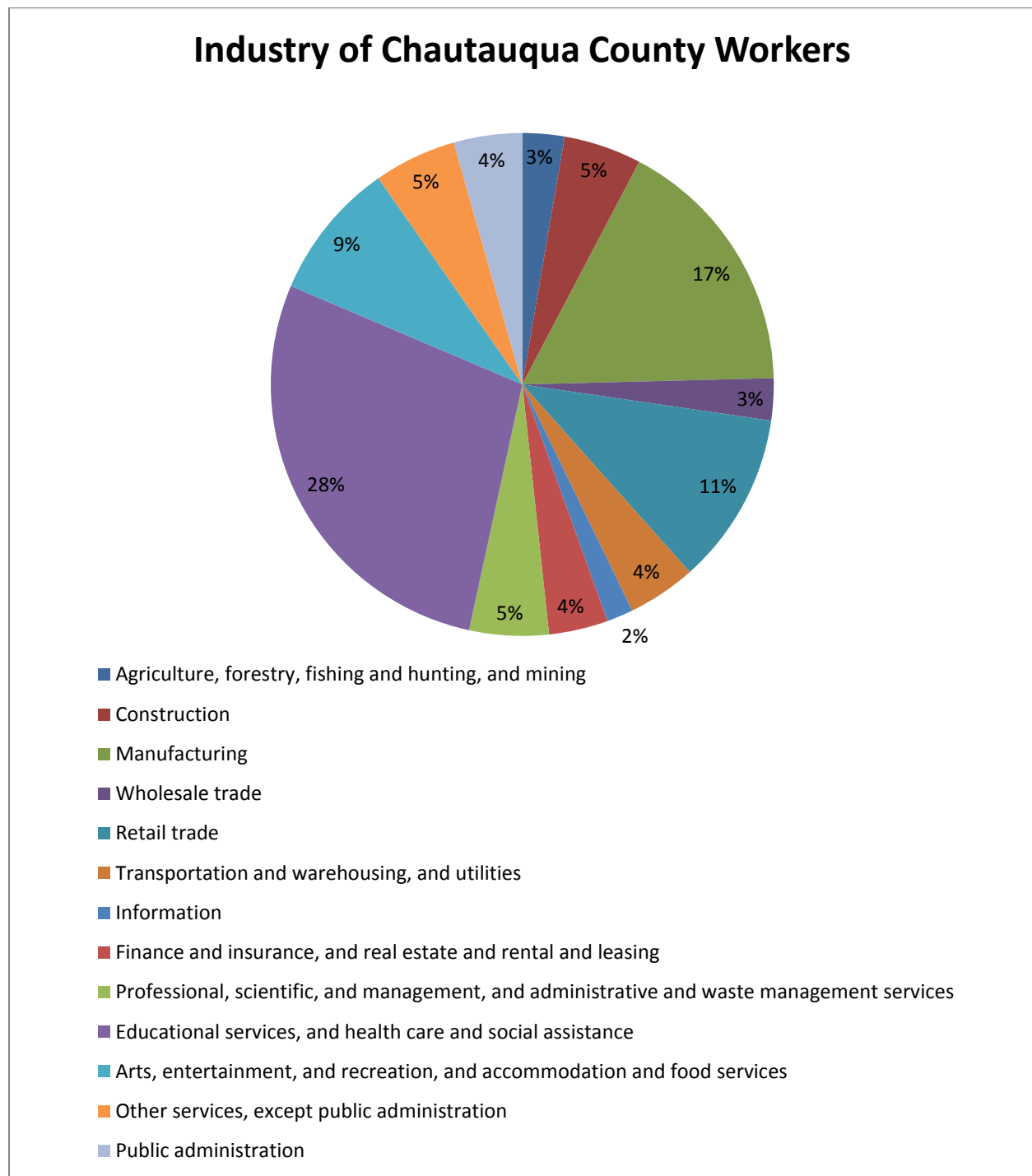
Table 14. Class of worker for Chautauqua County and New York State, 2007-2011

	Chautauqua County		New York State	
	Number	Percent	Number	Percent
Civilian employed population 16 years and over	59,927	100.00%	9,051,668	100.00%
Private wage and salary workers	44,201	73.80%	6,973,058	77.00%
Government workers	11,612	19.40%	1,514,208	16.70%
Self-employed in own not incorporated business workers	4,042	6.70%	553,818	6.10%
Unpaid family workers	72	0.10%	10,584	0.10%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

The educational services, and health care and social assistance industry employs the most residents of all industries in the County with 28.0%, similar to the state percentage of 27.0%. Manufacturing (16.9%), retail trade (11.1%), and arts, entertainment, and recreation, and accommodation and food services (8.9%) industries were the closest followers according to the 2007-2011 American Community Survey. The manufacturing and agricultural (2.7%) industries employ a greater proportion of the population in the County than in the state (7.1% and 0.6%, respectively). While only a small fraction of the County works in that 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 (5.1%) than state residents (10.9%). Figure 14 shows the distribution of industries for Chautauqua County workers.

Figure 14. Industry of Chautauqua County workers, 2007-2011



Source: U.S. Census Bureau, 2007-2011 American Community Survey

With \$4.5 billion in manufacturer's shipments in 2007, the manufacturing sector provides the base for the County's economy (US Census Quickfacts). Merchant wholesaler sales at \$2.6 billion and retail sales at \$1.3 billion, both in 2007 closely follow. Farming continues to contribute to the County's economy, as well as the associated food processing industry. With

1,658 farms (USDA Census of Agriculture 2007), approximately 22,000 acres of grapes, and thirteen 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.

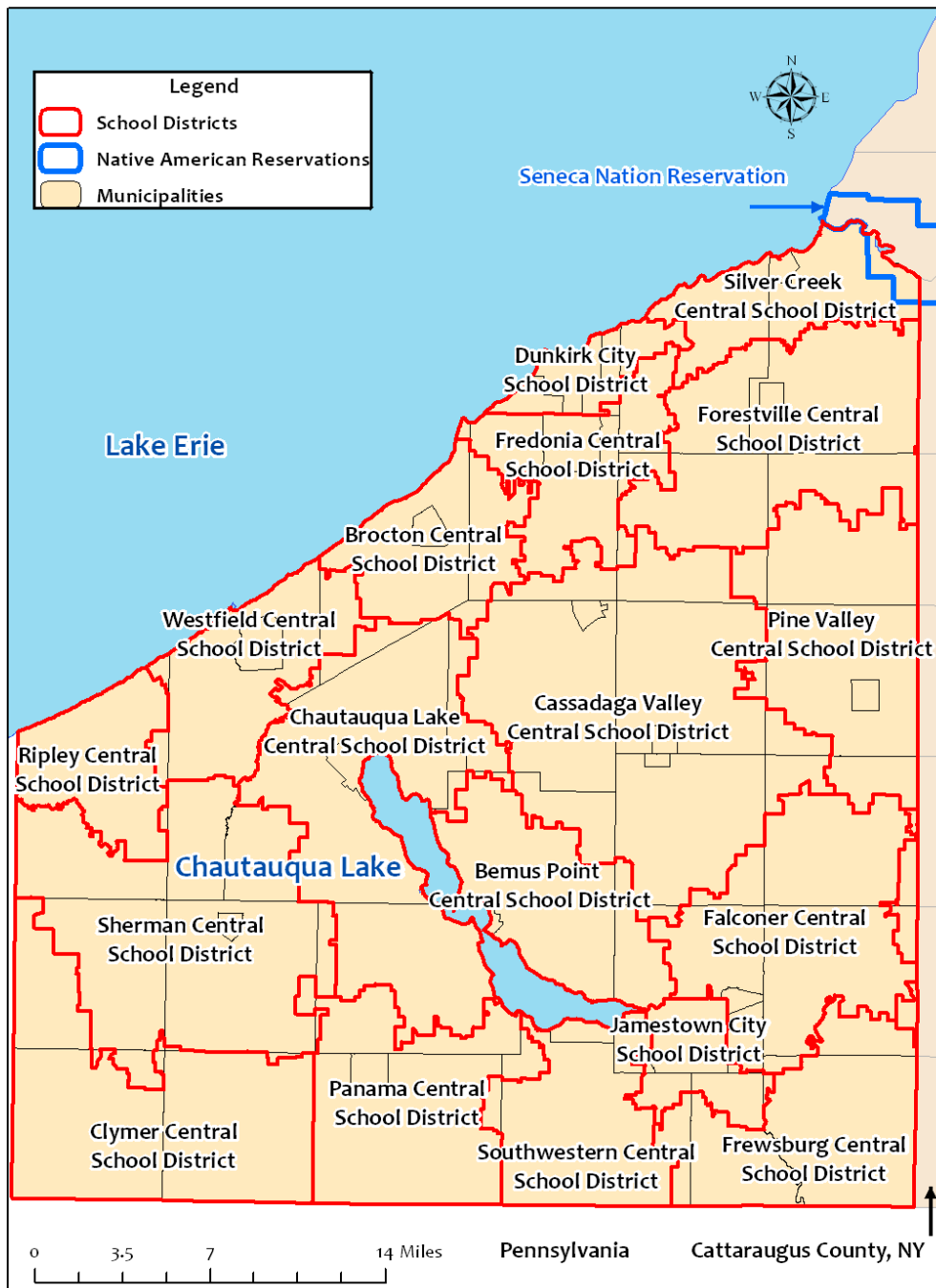
Educational Resources

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. In 2012, there were 8,424 housing units designated for seasonal, recreational, or occasional use, according to the US Census Bureau's American Community Survey 1-year estimates (Vacancy Status Table). With an average household size of owner-occupied units being 2.48 in 2012, the seasonal population of Chautauqua County in 2012 is estimated at 20,892 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



School Populations and Risk Indicators

Table 1 lists the total enrollment, racial distribution of students, and attendance rate in all public school districts in Chautauqua County. The total 2011-2012 public school population for Chautauqua County was 19,616 (elementary, middle, and high schools), a decrease from the 21,112 students in the 2007-2008 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, racial distribution of students and annual attendance percentage, 2011-2012

School District	Need/Resource Capacity (N/RC) level	Enrollment 2011-2012					Annual Attendance Percentage
		Total	% White	% Black	% Hisp	% Other	
Bemus Point	Average	749	96	1	1	2	96%
Brocton	High	556	89	1	6	2	94%
Cassadaga Valley	High	1030	95	1	2	1	95%
Chautauqua Lake	Average	741	95	1	1	2	95%
Clymer	Average	447	95	1	1	3	96%
Dunkirk	High	1991	46	9	43	2	93%
Falconer	Average	1210	96	1	1	1	96%
Forestville	Average	544	92	1	5	1	95%
Fredonia	Average	1521	87	1	8	4	95%
Frewsburg	Average	876	94	1	2	2	96%
Jamestown	High	4866	69	5	16	9	94%
Panama	Average	538	94	0	2	3	96%
Pine Valley	High	614	95	0	3	2	95%
Ripley	High	314	99	0	1	0	95%
Sherman	High	434	97	1	0	1	95%
Silver Creek	High	1050	76	1	5	18	94%
Southwestern	Average	1409	92	1	2	4	96%
Westfield	High	726	93	1	4	1	96%

Source: NYS Education Department School Report Cards 2011-2012

Dunkirk, Jamestown, and Silver Creek school districts were the most racially and ethnically diverse during the 2011-2012 school year. Of Dunkirk students, 9% were black and 43% were Hispanic. Of Jamestown students, 5% self-identified as black and 16% Hispanic. The largest proportion of "other race or ethnicity" was demonstrated in the Silver Creek Central School District at 18%, which educates a relatively large proportion of the Native American population, due to its close proximity to the Cattaraugus Indian Reservation in Irving, NY. With the exception of Fredonia at 87%, the remaining school districts were comprised of more than 90%

white students. Percentages of annual attendance were comparable among all public school districts in the County.

School district report cards, provided by the New York State Education Department, indicated 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 poor economic state.

Table 16 provides statistics for factors related to drop outs and youths at risk. The number and percentages of students who continue onto a 2-year or 4-year college, as well as staff to student ratios are also listed for each school district.

Table 16. Statistics for public school districts in Chautauqua County, 2011-2012

School District	Drop Outs and Youth at Risk						N (%) to college	Pupil: Personnel services ratio (2011 - 12)	Pupil: Teacher Ratio (2011 - 12)
	Census Poverty Index (2011)	N (%) Free/ Reduced Lunch (2011 - 12)	(LEP) N (%) (2011 - 12)	Suspension N (%) (2011 - 12)	Drop out N (%) (2011 - 12)	N (%) Entered GED program			
Bemus Point	11.5	95 (12%)	0 (0%)	7 (1%)	1 (0%)	0 (0%)	54 (93%)	109	10.9
Brocton	33.2	484 (87%)	0 (0%)	61 (10%)	7 (4%)	0 (0%)	37 (81%)	91	9.6
Cassadaga Valley	25.6	501 (49%)	0 (0%)	28 (3%)	10 (3%)	0 (0%)	72 (73%)	133.6	11.4
Chautauqua Lake	21.1	520 (70%)	0 (0%)	7 (1%)	3 (1%)	0 (0%)	53 (89%)	99.3	9.3
Clymer	38	180 (40%)	0 (0%)	10 (2%)	1 (1%)	0 (0%)	27 (75%)	88.8	8.7
Dunkirk	33.7	1332 (67%)	266 (13%)	120 (6%)	38 (6%)	3 (0%)	96 (67%)	75.1	9.6
Falconer	27.9	429 (35%)	1 (0%)	28 (2%)	11 (3%)	0 (0%)	75 (79%)	133.3	12.1
Forestville	23.5	200 (36%)	0 (0%)	16 (3%)	7 (4%)	0 (0%)	34 (80%)	101	11
Fredonia	15.7	493 (31%)	38 (2%)	35 (2%)	6 (1%)	0 (0%)	92 (86%)	161.3	10.9
Frewsburg	15.3	131 (15%)	0 (0%)	20 (2%)	7 (1%)	0 (0%)	68 (79%)	120.7	13
Jamestown	36.4	3193 (64%)	165 (3%)	318 (6%)	100 (7%)	39 (2%)	223 (76%)	102	10.9
Panama	16.8	226 (35%)	0 (0%)	4 (1%)	1 (1%)	0 (0%)	30 (69%)	165	9.9
Pine Valley	27.5	315 (45%)	0 (0%)	17 (4%)	8 (4%)	0 (0%)	40 (73%)	110.5	9.7
Ripley	37.6	222 (70%)	0 (0%)	28 (9%)	5 (4%)	0 (0%)	22 (76%)	118	8.7
Sherman	36	258 (56%)	0 (0%)	18 (4%)	1 (1%)	0 (0%)	28 (78%)	119.5	10.8
Silver Creek	29.7	504 (48%)	4 (0%)	71 (7%)	8 (3%)	0 (0%)	47 (70%)	101.4	9.9
Southwestern	18	385 (25%)	7 (0%)	84 (5%)	15 (2%)	0 (0%)	90 (83%)	124.1	11.7
Westfield	22.8	446 (61%)	6 (0%)	16 (1%)	10 (2%)	0 (0%)	59 (83%)	101.6	10.1

LEP= Limited English Proficient

Source: US Census Bureau 2011 Small Area Income & Poverty Estimates for School Districts

NYS Education Department School Report Cards 2011-2012

Poverty is often correlated both with adverse health outcomes as well as poor health behaviors. The U.S. Census Poverty Index is the proportion of families in a school district with children aged 5-17 that are living at or below the federal poverty level. The highest poverty indices for 2011 were demonstrated by Clymer (38), Ripley (37.6), Jamestown (36.4), and Sherman (36). Another useful measure of poverty is the percentage of students who qualify for free or reduced school lunch fees. The school districts with the greatest proportions of students receiving free or reduced school lunches were: Brocton (87%), Chautauqua Lake (70%), Ripley (70%), Dunkirk (67%), and Jamestown (64%). Bemus Point, Fredonia, Frewsburg, Southwestern, and Panama had the lowest percentages of students receiving free or reduced lunches and demonstrated the lowest Census Poverty indices.

Language barriers at school can prevent students from learning. Dunkirk (13%), Jamestown (3%), and Fredonia (2%) school districts have the highest proportions of Limited English Proficient (LEP) in the County. LEP is not a major challenge for the remaining school districts.

Suspension and drop out statistics are used as indicators of youth at risk. Brocton (10%), Ripley (9%), and Silver Creek (7%) school districts had the highest percentages of discipline by suspension during the 2011-2012 school year. Jamestown (7%) and Dunkirk (6%) school districts ranked the highest for proportions of students who dropped out of school for the 2011-2012 school year.

Bemus Point (93%), Chautauqua Lake (89%), and Fredonia (86%) school districts had the highest proportions of graduating students who went on to pursue higher education at a 2 or 4-year college while Dunkirk (67%), Panama (69%), and Silver Creek (70%) had the lowest. Dunkirk and Clymer had the lowest ratio of students to personnel services staff, while Ripley and Clymer had the lowest number of students per teacher for the 2011-2012 school year.

Table 17 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 17. School enrollment in Chautauqua County and New York State for population ages 3 and older, 2007-2011

	Chautauqua County		New York State	
	Number	Percentage	Number	Percentage
Population 3 years and over enrolled in school	33,390	100.00%	5,046,122	100.00%
Nursery school, preschool	1,647	4.90%	296,795	5.90%
Kindergarten	1,429	4.30%	236,505	4.70%
Elementary school (grades 1-8)	13,683	41.00%	1,917,809	38.00%
High school (grades 9-12)	7,260	21.70%	1,092,498	21.70%
College or graduate school	9,371	28.10%	1,502,515	29.80%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

The greatest proportion of Chautauqua County and New York State residents enrolled in school are elementary students in grades 1-8. New York State has a greater proportion of students in nursery or preschool and college or graduate school than Chautauqua County.

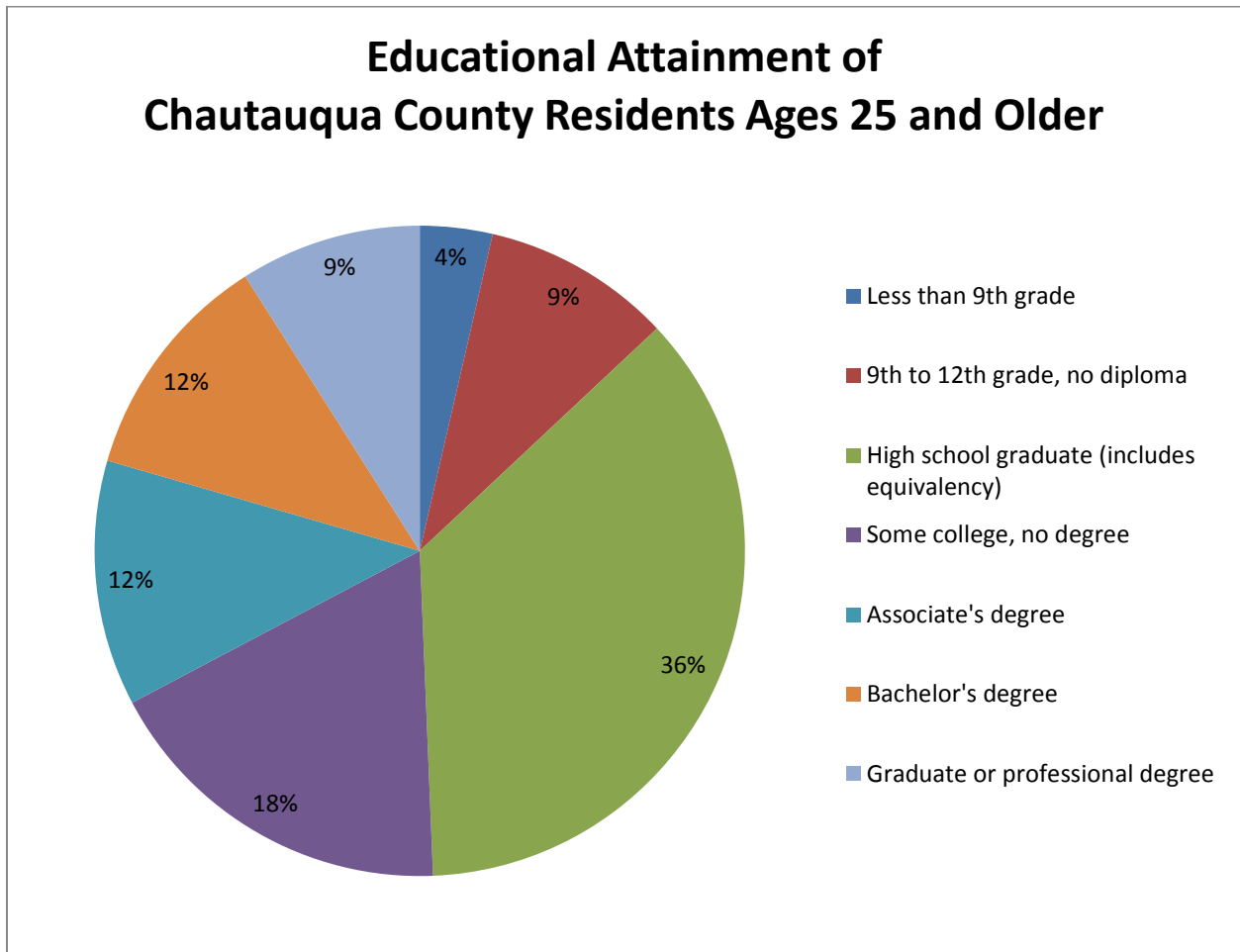
Post-secondary Educational Opportunities

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 5,400 undergraduate and 300 graduate students in 2012. At that time, 2,770 students lived on campus. Two satellite offices for SUNY Empire State College are located in Chautauqua County- one in Jamestown, and the other in Fredonia. Empire State is an arts and sciences college offering Associate, Bachelor, and Graduate degrees on-line and on-site at thirty-five 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). About 3,500 students attend JCC 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

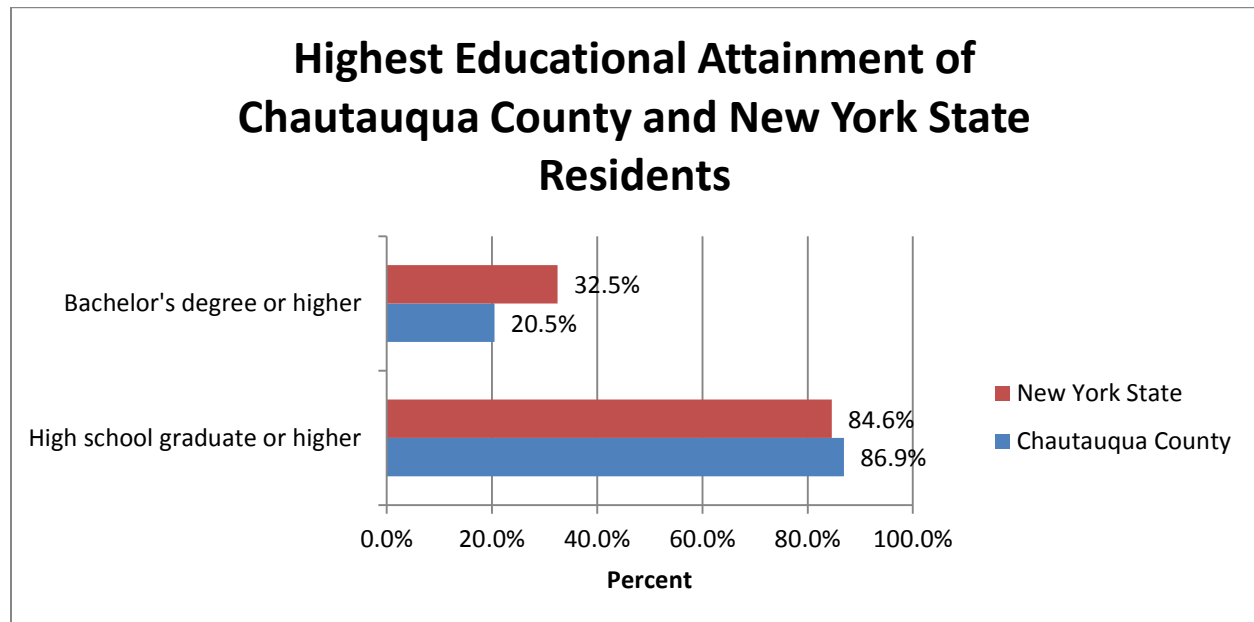
Highest level of educational attainment is used as a measure of a person or area's socioeconomic status, which is highly associated with both beneficial and adverse health outcomes. Figure 15 presents the distribution of educational attainment of Chautauqua County residents ages 25 and older. Figure 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, 2007-2011



Source: U.S. Census Bureau, 2007-2011 American Community Survey

Figure 16. Highest educational attainment of Chautauqua County and New York State residents, 2007-2011



Source: U.S. Census Bureau, 2007-2011 American Community Survey

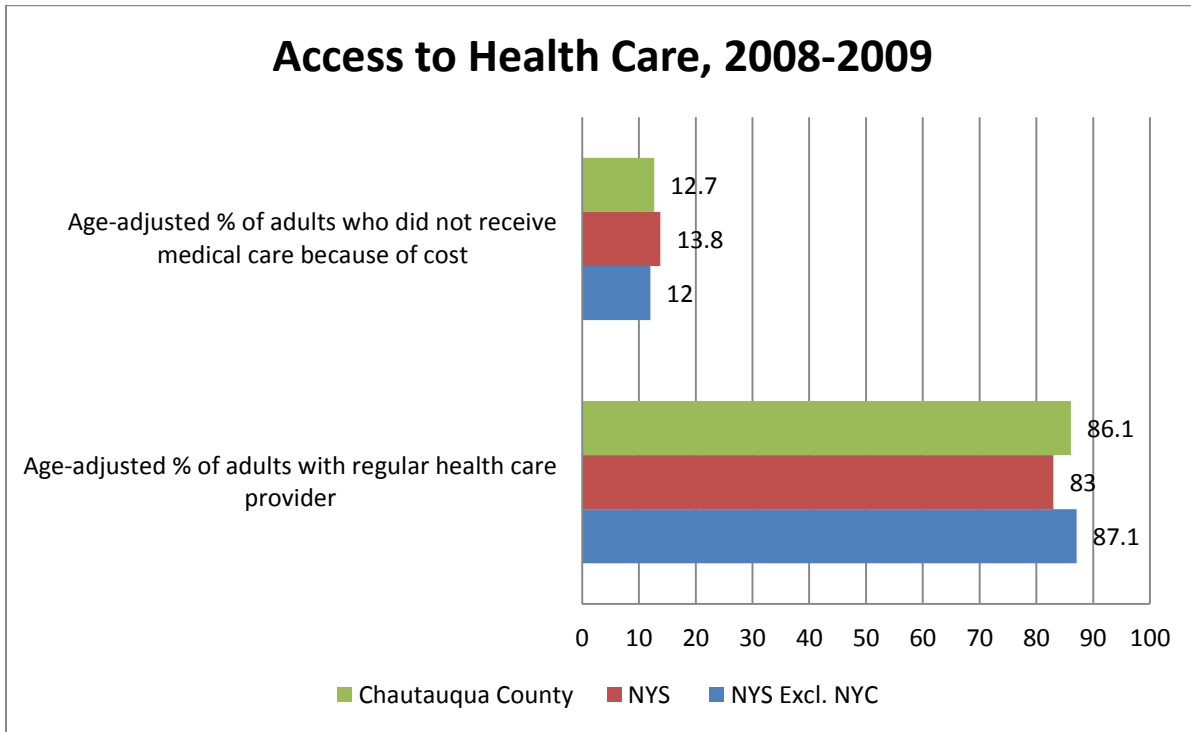
The majority of County residents claim that high school or GED is their highest level of educational attainment (36.3%). Chautauqua County has proportionately fewer residents over the age of 25 with less than a 9th grade education than New York State. The percentage of residents who have a bachelor's or graduate or professional degree is much higher for New York State (18.5%, 14.0%) than Chautauqua County (11.5%, 9.0%). 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

In 2010, 85.1% of Chautauqua County adults ages 18-64 had health insurance (Tracking Indicators for Priority Areas). This was relatively similar to the state percentage.

The New York State eBRFSS indicates that in 2008-2009, 12.7% of Chautauqua County adults self-reported that they did not receive medical care because of cost. During the same time period, 86.1% of adults reported that they have a regular health care provider. State comparisons were relatively similar to those of Chautauqua County.

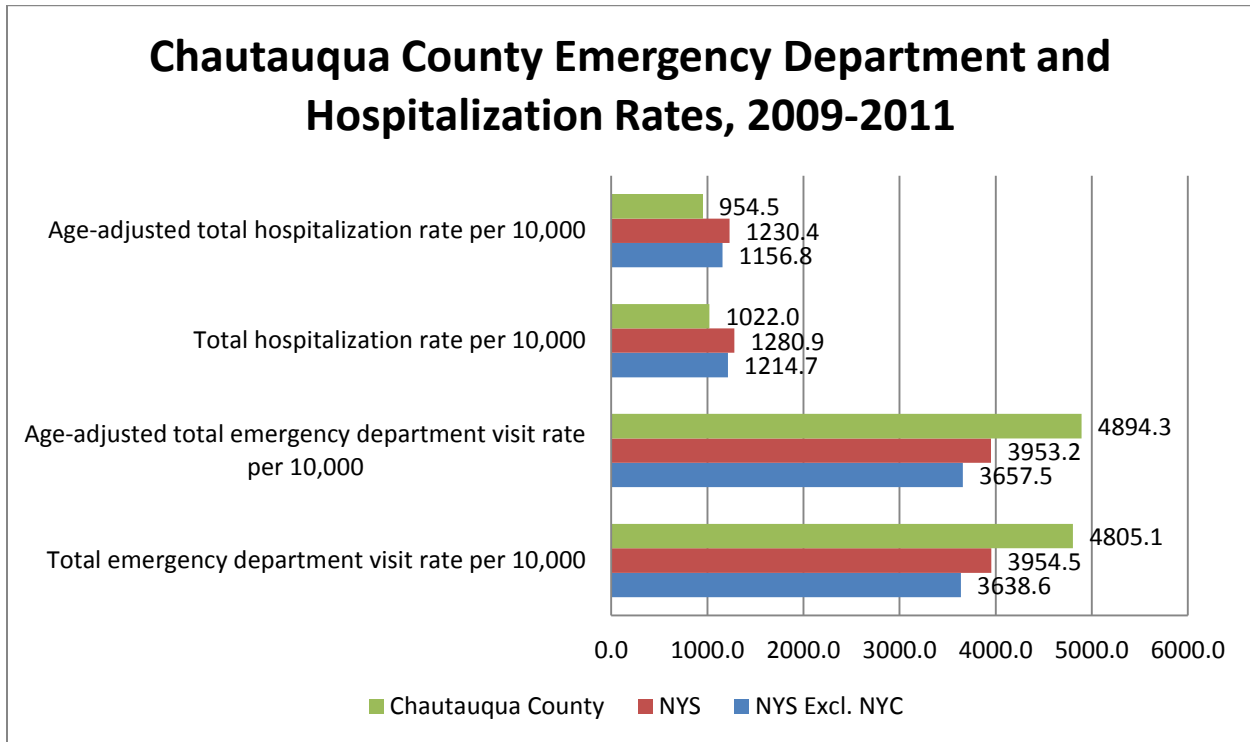
Figure 17. Access to health care, 2008-2009



Source: NYS Community Health Indicator Reports: SES and General Health Status 2009-2011

Crude and age-adjusted hospitalization rates were lower than both New York State and New York State excluding New York City from 2009-2011. However, emergency department visit rates were significantly higher in Chautauqua County. There were 193,536 emergency department visits from 2009 to 2011 in Chautauqua County, resulting in an age-adjusted visit rate of 4894.3 per 10,000 population.

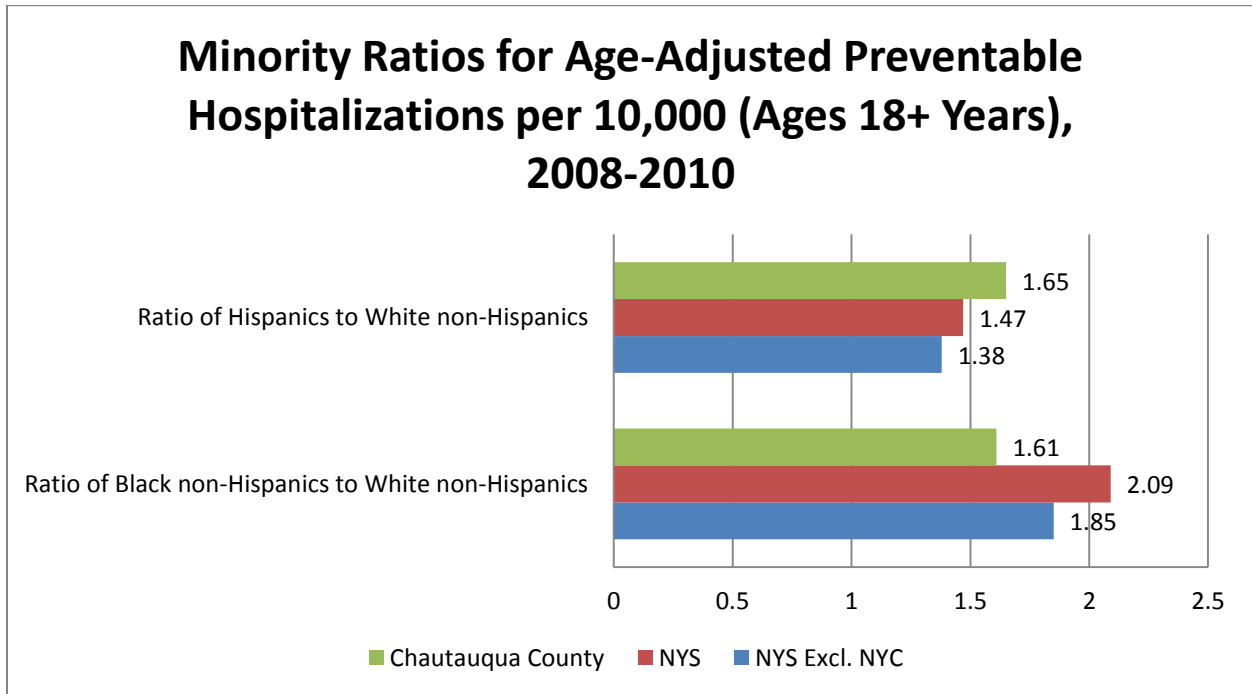
Figure 18. Chautauqua County emergency department and hospitalization rates, 2009-2011



Source: NYS Community Health Indicator Reports: SES and General Health Status 2009-2011

In 2008-2010, the age-adjusted preventable hospitalization rate per 10,000 was 119.7 for all adults in Chautauqua County. This was slightly lower than state comparisons. The rate of preventable hospitalizations for Hispanics was 1.65 times as great as for White, non-Hispanics. This ratio was higher than the ratios for state comparisons. The rate for Black, non-Hispanics was 1.61 times as great as the rate for White, non-Hispanics. This ratio was lower than state comparisons. (Community Health Indicator Reports, 2009-2011)

Figure 19. Minority ratios for age-adjusted preventable hospitalizations per 10,000 (ages 18+ years), 2008-2010



Source: NYS Indicators for Tracking Prevention Agenda Priority Areas, 2008-2010

Health Profile

Prevent Chronic Diseases

“Chronic diseases such as cancer, diabetes, heart disease, stroke and asthma are conditions of long duration and generally slow progression. Chronic diseases are among the leading causes of death, disability and rising health care costs in New York State (NYS). Specifically, they account for approximately 70 percent of all deaths in NYS and affect the quality of life for millions of New Yorkers, causing major limitations in daily living for about one in ten residents. Costs associated with chronic diseases and their major risk factors consume more than 75 percent of our nation's spending on health care.”

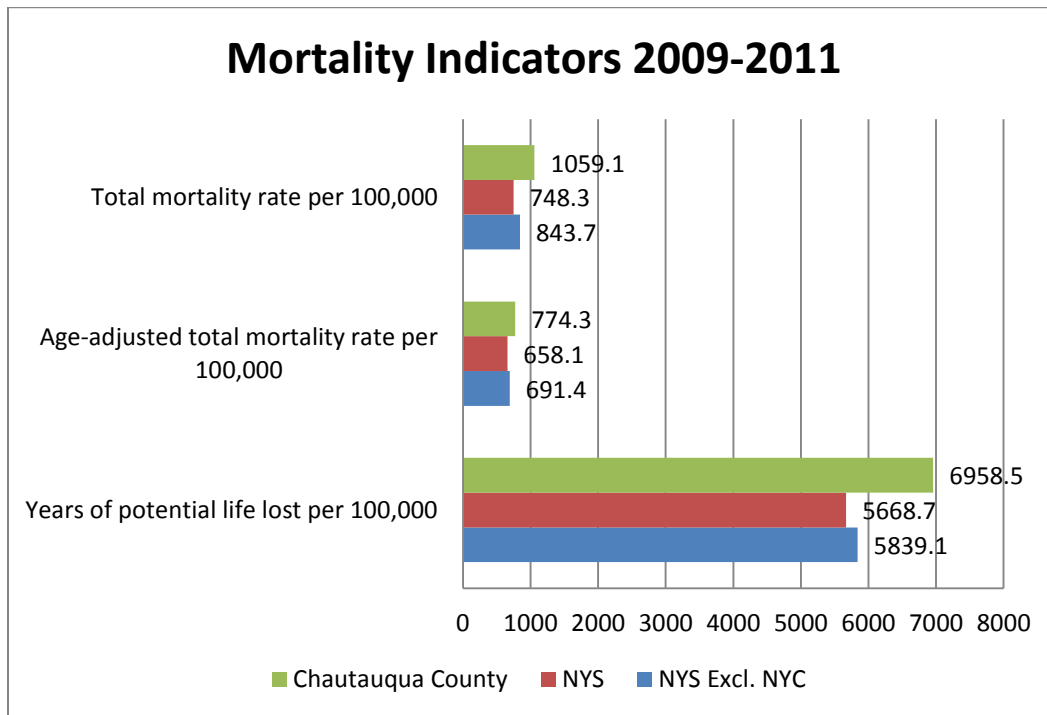
-New York State Prevention Agenda 2013-2017, Prevent Chronic Diseases Action Plan

Leading Causes of Death

From 2009 to 2011, there were 4,266 deaths to Chautauqua County residents. The resulting total mortality rate was 1,059.1 deaths per 100,000 residents, and when adjusted for age the rate dropped to 774.3. Even when adjusted for age, the mortality rate in Chautauqua County was significantly higher than both New York State and New York State excluding New York City.

Of all deaths 2009-2011, 35.7% were to residents less than 75 years of age in Chautauqua County, compared to 39.9 in New York State and 37.3 in New York State excluding New York City. Years of potential life lost (prior to age 75) per 100,000 residents totaled 6,958.5.

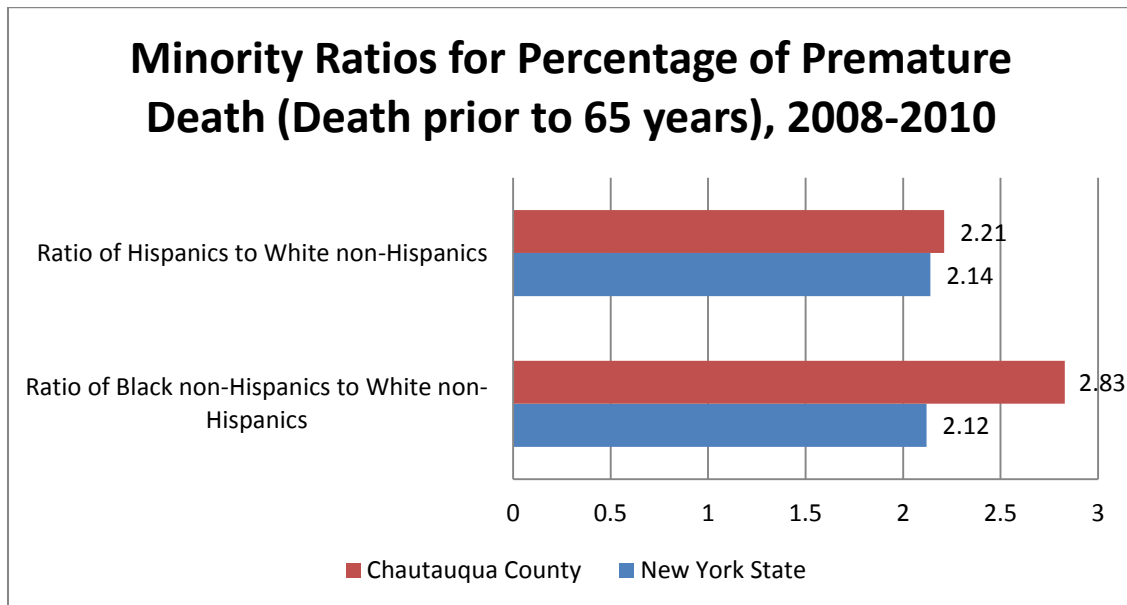
Figure 20. Mortality indicators, 2009-2011



Source: NYS Community Health Indicator Reports, SES and General Health Indicators, 2009-2011

From 2008 to 2010, 20.8% of deaths in Chautauqua County were to residents less than 65 years of age. Premature deaths were more common among Hispanics and Black non-Hispanics. The percentage of premature deaths was 2.21 times greater among Hispanics over White, non-Hispanics. The percentage of premature deaths was 2.83 times greater among Black non-Hispanics over White, non-Hispanics. These ratios were slightly higher than for New York State.

Figure 21. Minority ratios for percentage of premature death (death prior to 65 years), 2008-2010



Source: NYSDOH Indicators for Tracking Prevention Agenda Priority Areas, 2008-2010

The leading causes of death in Chautauqua County, as of 2011 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 1,491 deaths in Chautauqua County in 2011, 972 or 65.2% were attributable to these four causes.

Table 18. Leading causes of death, 2011

Geography and Total Deaths	Rank				
	1	2	3	4	5
Chautauqua Total: 1,491	Heart Disease 452 231 per 100,000	Cancer 324 176 per 100,000	Chronic Lower Respiratory Diseases (CLRD) 114 62 per 100,000	Stroke 82 43 per 100,000	Unintentional Injury 44 31 per 100,000
Rest of State Total: 95,734	Heart Disease 27,165 189 per 100,000	Cancer 22,556 165 per 100,000	Chronic Lower Respiratory Diseases (CLRD) 5,117 37 per 100,000	Stroke 4,374 31 per 100,000	Unintentional Injury 3,680 30 per 100,000
New York State Total: 147,078	Heart Disease 43,959 191 per 100,000	Cancer 35,032 159 per 100,000	Chronic Lower Respiratory Diseases (CLRD) 6,902 31 per 100,000	Stroke 6,152 27 per 100,000	Unintentional Injury 5,246 25 per 100,000

Source: NYS Vital Statistics Leading Causes of Death by County, New York State, 2011

Chronic Disease Risk Factors

Overweight and Obesity

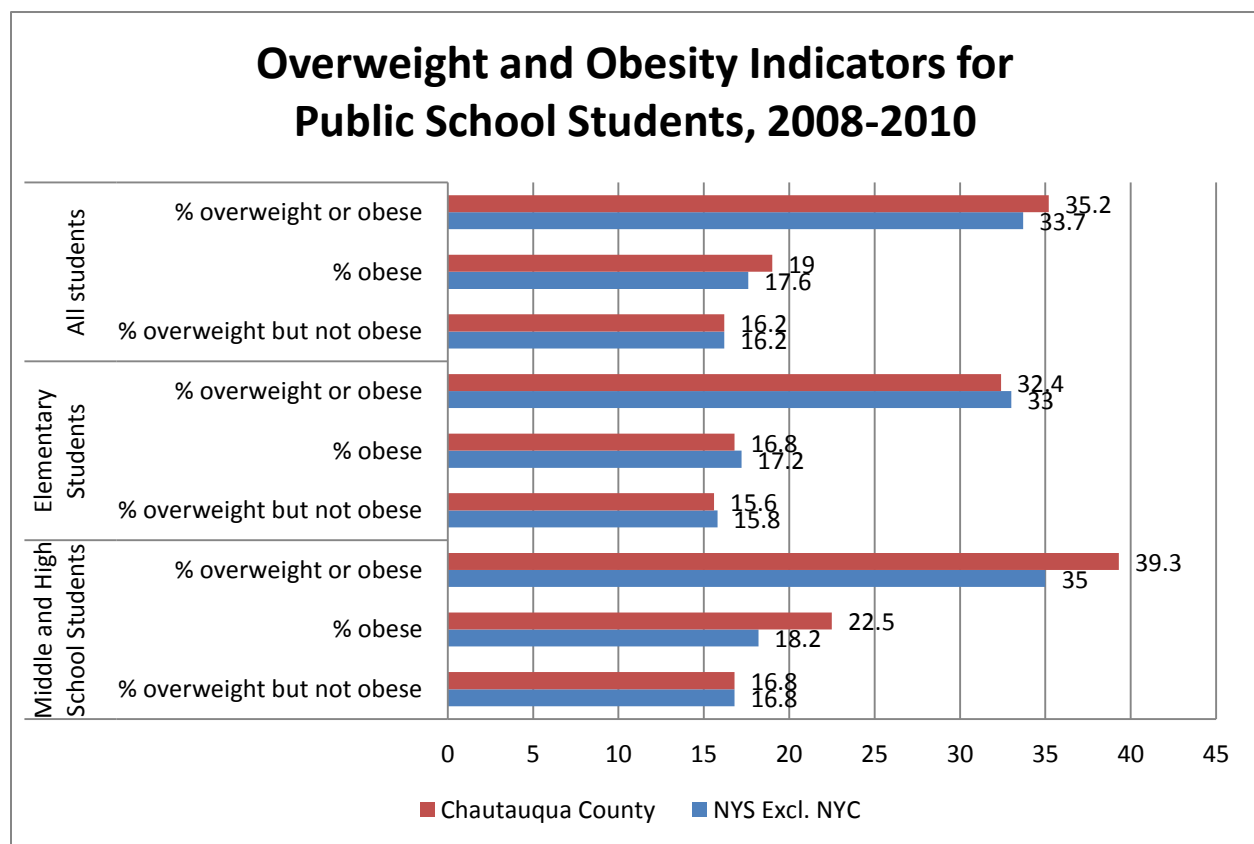
Data from the newly established (2007) New York State Student Weight Status Category Reporting System reports public school students' body mass index (BMI) and weight status categories for grades Pre-kindergarten, kindergarten, 2, 4, 7, and 10. A summary of data from 2008-2010 for all school districts in Chautauqua County, with the exception of the Silver Creek Central School District, are included in Figure 22 below. New York State excluding New York City rates are provided as a comparison.

Among all students measured in Chautauqua County, 19% were classified as obese, and 16.2% were classified as overweight. The rate of obesity was slightly higher than the state comparison rate of 17.6%.

Rates of overweight and obesity were slightly lower than NYS excluding NYC rates for elementary students in Chautauqua County, with 16.8% presenting as obese and 15.6% overweight. Obesity was more common among Chautauqua County middle and high school students (22.5%) than Upstate New York students (18.2%).

The combined total for overweight and obesity (32.4%) was greater among middle and high school students in Chautauqua County than elementary students (39.3%). The risk of unhealthy weight status increased with age during the specified time period.

Figure 22. Overweight and obesity indicators for public school students, 2008-2010

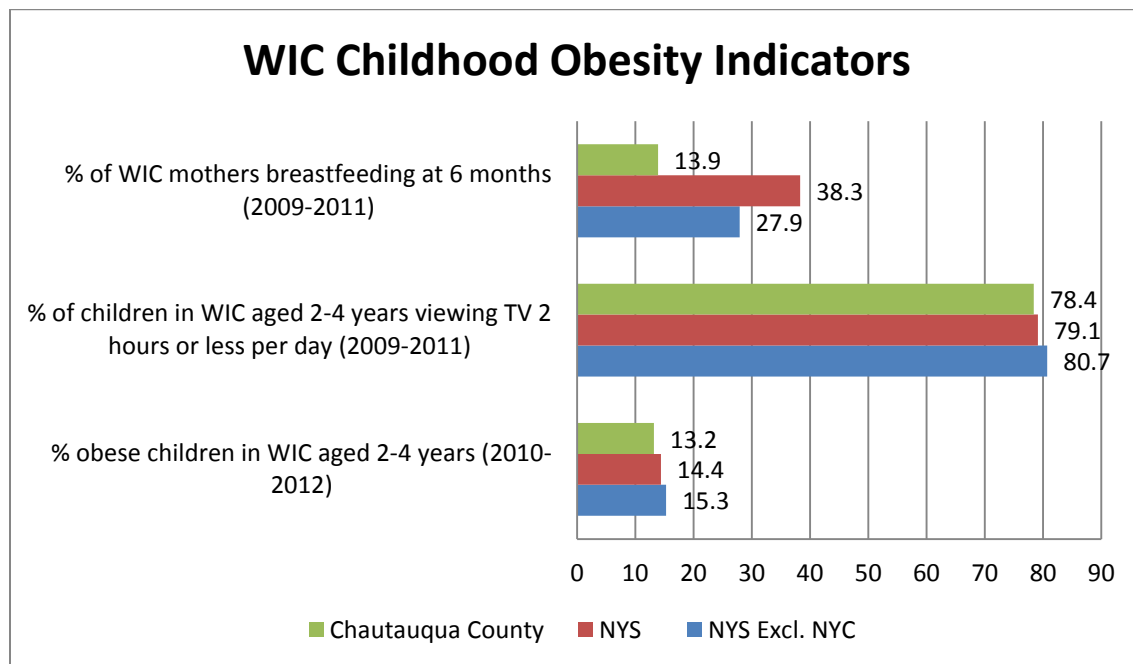


Source: NYSDOH Community Health Indicator Reports: Obesity indicators 2008-2010

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 2009-2011, 13.9% of mothers were still breastfeeding their babies at 6 months of age. This figure is much lower than the state comparison rates. In Chautauqua County, 78.4% of children in WIC ages 2-4 who viewed television two hours or less per day, which was just slightly lower than New York State (79.1%) and New York State excluding New York City (80.7%).

From 2010 to 2012, 13.2% of Chautauqua County children in WIC ages 2-4 were obese, which was lower than New York State (14.4%) and New York State excluding New York City (15.3%).

Figure 23. WIC childhood obesity indicators

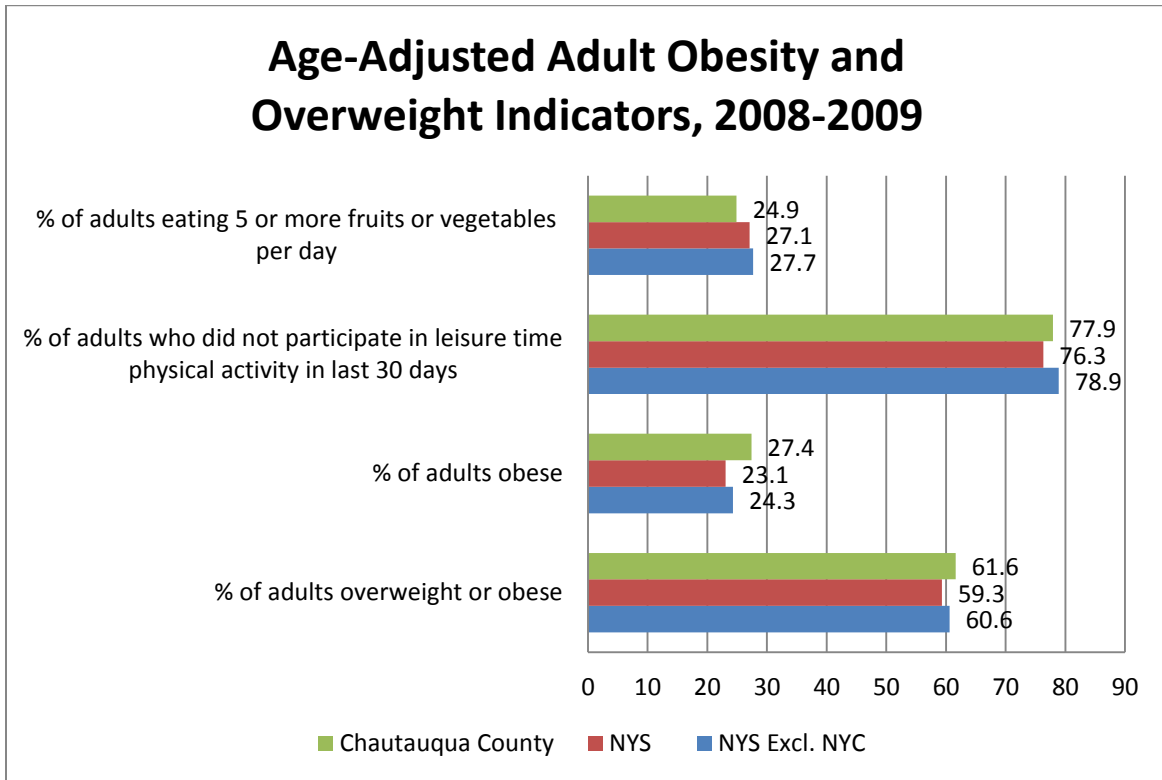


Source: NYSDOH Community Health Indicator Reports: Obesity indicators, 2008-2010

Self-reported weight statuses, along with related behaviors, are provided by the New York State Expanded Behavioral Risk Factor Surveillance System in 2008-2009. During this time frame, slightly fewer adults (ages 18 and older) in Chautauqua County reported eating 5 or more servings of fruits and vegetables per day (24.9%) than New York State (27.1%) and New York State excluding New York City (27.7%) comparisons. At 77.9%, the majority of Chautauqua County adult residents did not participate in leisure time physical activity in the last 30 days. Figures for state comparisons were relatively similar.

The percentage of adults who self-reported a BMI of 30 or higher was slightly greater in Chautauqua County (27.4%) than New York State (23.1%) and New York State Excluding New York City (24.3%). The percent of adults with a BMI of 25 or greater in Chautauqua County was 61.6%.

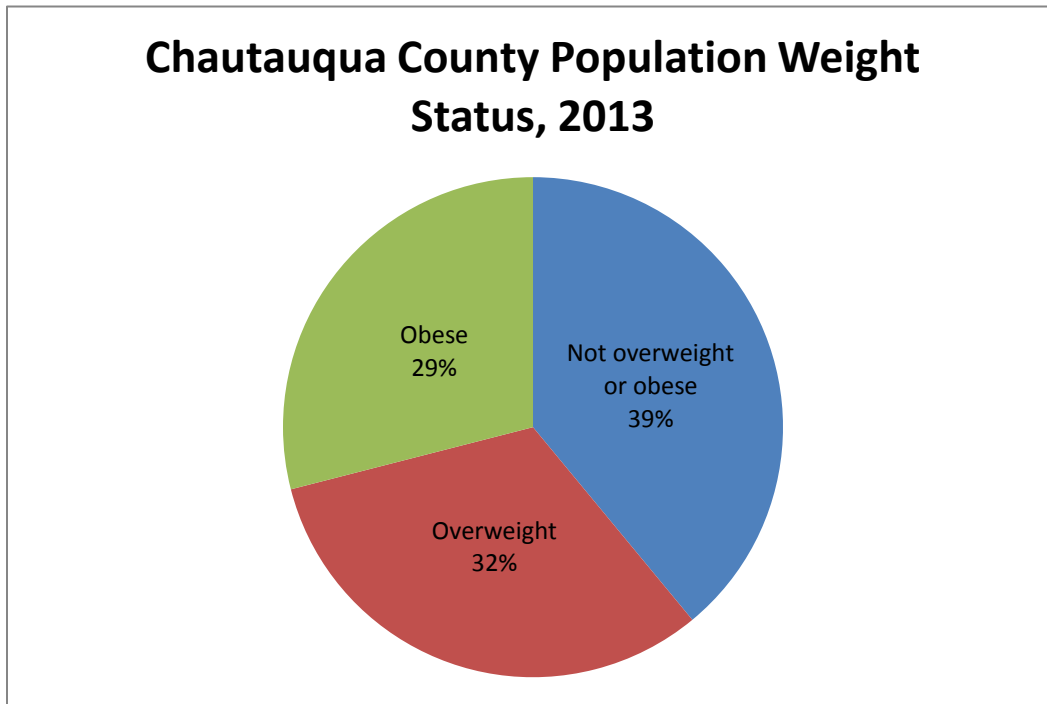
Figure 24. Age-adjusted adult obesity and overweight indicators, 2008-2009



Source: NYSDOH Community Health Indicator Reports: Obesity indicators, 2008-2010

Preliminary study data from the Community Transformation Grant supplied self-reported weight status data for 2013 in Chautauqua County. Sampling occurred county-wide, but emphasis was placed on the three target communities of Dunkirk, Jamestown, and Silver Creek. According to this BRFSS, 39% of county residents were not overweight or obese, 29% were obese, and 32% were overweight.

Figure 25. Chautauqua County population weight status, 2013



Source: Community Transformation in Small Communities Grant (CTG) Population Survey Preliminary Frequencies from Baseline Data Collection, 2013

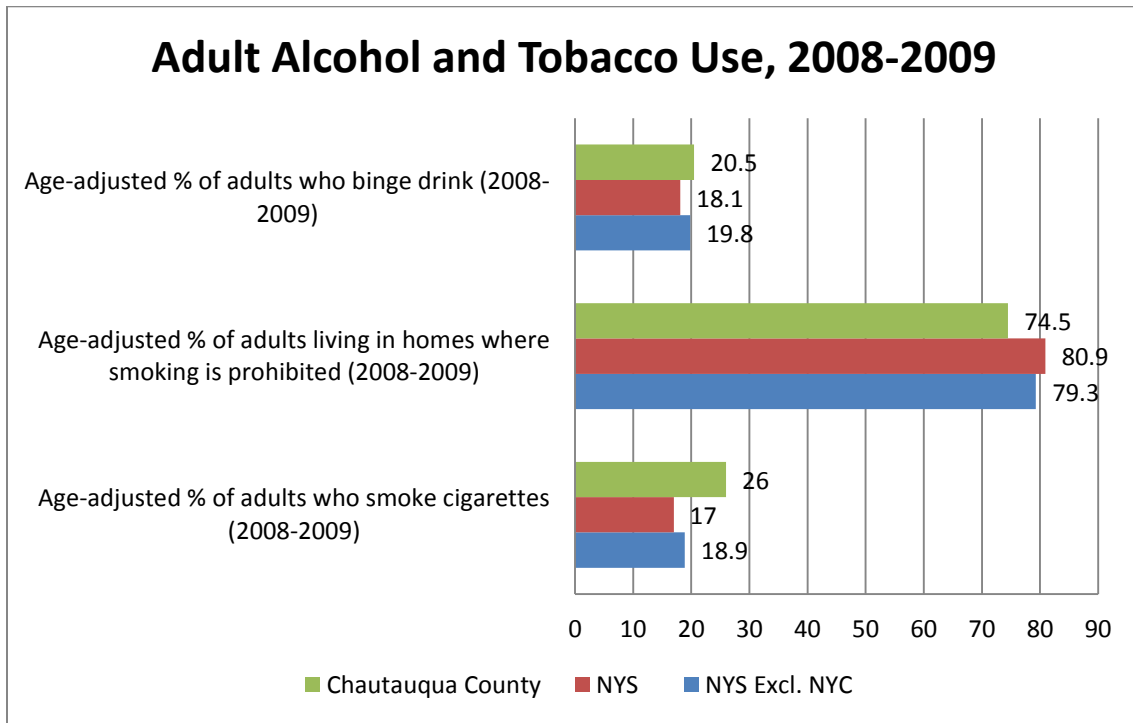
Alcohol and Tobacco Use

In 2008-2009, 20.5% of adults (ages 18 and older) in Chautauqua County self-reported that they were binge drinkers in 2008-2009, slightly higher than the NYS (18.1%) and NYS excluding NYC (19.8%) rates (NYSDOH eBRFSS).

Most Chautauqua County adults lived in homes where smoking is prohibited at 74.5% in 2008-2009. In New York State as a whole, more adults lived in homes where smoking was prohibited at 80.9%, compared to 79.3% in Upstate New York (NYSDOH eBRFSS).

At 26%, the rate of Chautauqua County current adult cigarette smokers in 2008-2009 was significantly higher than the New York State (17%) and New York State excluding New York City (18.9%) rates (NYSDOH eBRFSS).

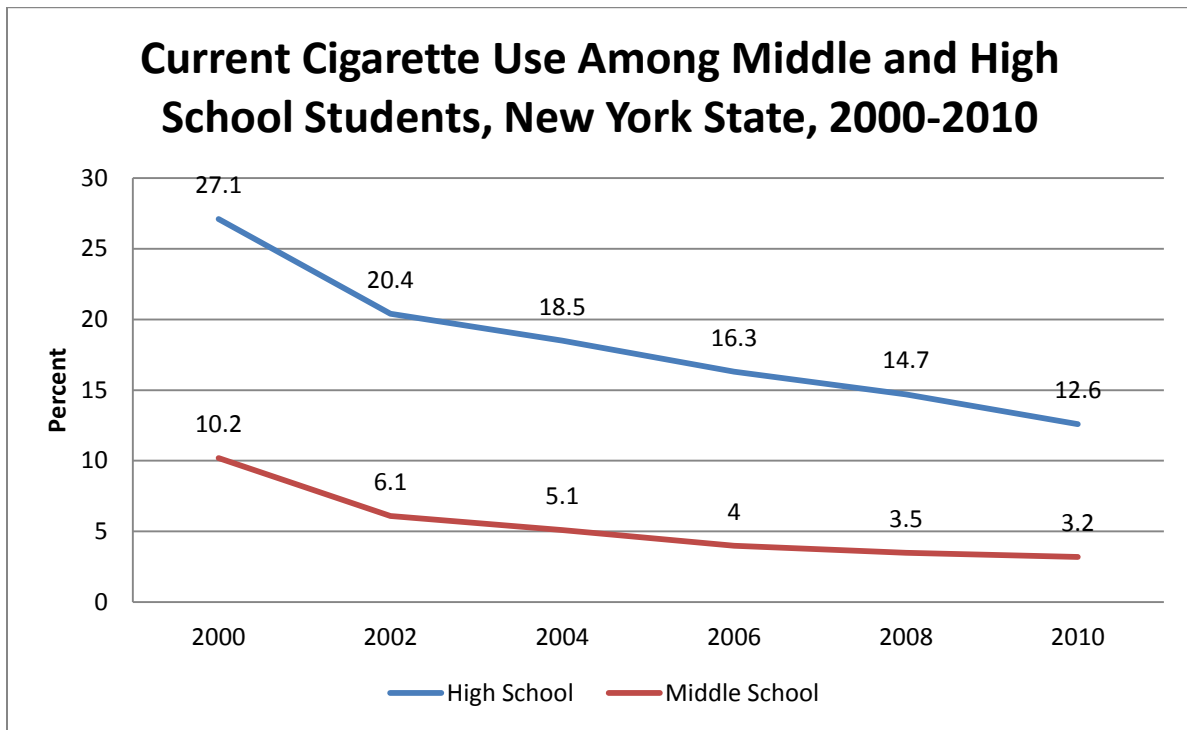
Figure 26. Adult alcohol and tobacco use, 2008-2009



Source: Community Health Indicators Reports: Tobacco, Alcohol and Other Substance Abuse Indicators, 2008-2009

No current local statistics for cigarette use among youth are available at this time. Figures for New York State were generated by the NYSDOH Youth Tobacco Survey. The following time trend was adapted from the figure presented in Youth Prevention and Adult Smoking in New York State published in March 2011. From 2002 to 2010, cigarette use drastically decreased among both middle and high school students.

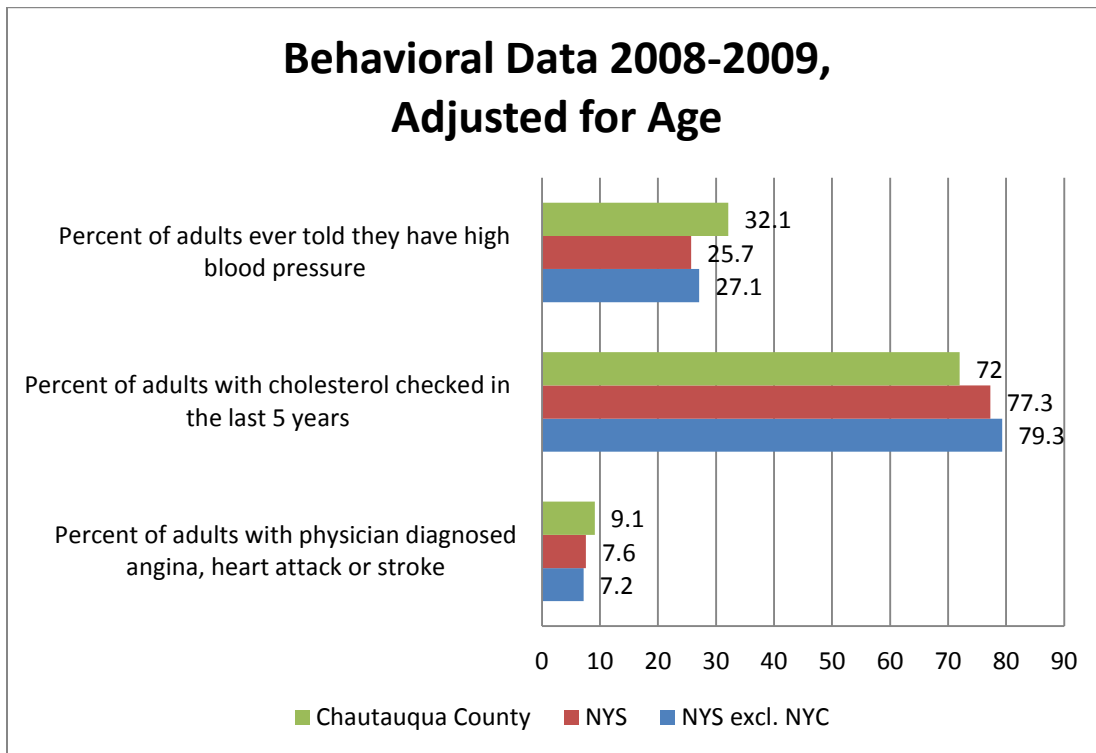
Figure 27. Current cigarette use among middle and high school students, New York State, 2000-2010



Cardiovascular Disease

Data from the New York State Department of Health’s 2008-2009 Expanded Behavioral Risk Factor Surveillance System (eBRFSS) that relates to cardiovascular disease is presented in Figure 28. In Chautauqua County (when adjusted for age), 32.1% of adults have ever been told they have high blood pressure, 72% of adults have had their cholesterol checked in the past five years, and 9.1% of adults have physician diagnosed angina, heart attack, or stroke. Figures at the state level were slightly more favorable than Chautauqua County.

Figure 28. Behavioral data 2008-2009, adjusted for age



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

Consistent with New York State as a whole, statistics from the NYSDOH Vital Statistics indicated that in 2011, the leading cause of death in Chautauqua County was heart disease. There were 452 deaths to heart disease in Chautauqua County, resulting in a rate of 231 per 100,000 residents. (NYS Vital Statistics Leading Causes of Death by County, NYS, 2011)

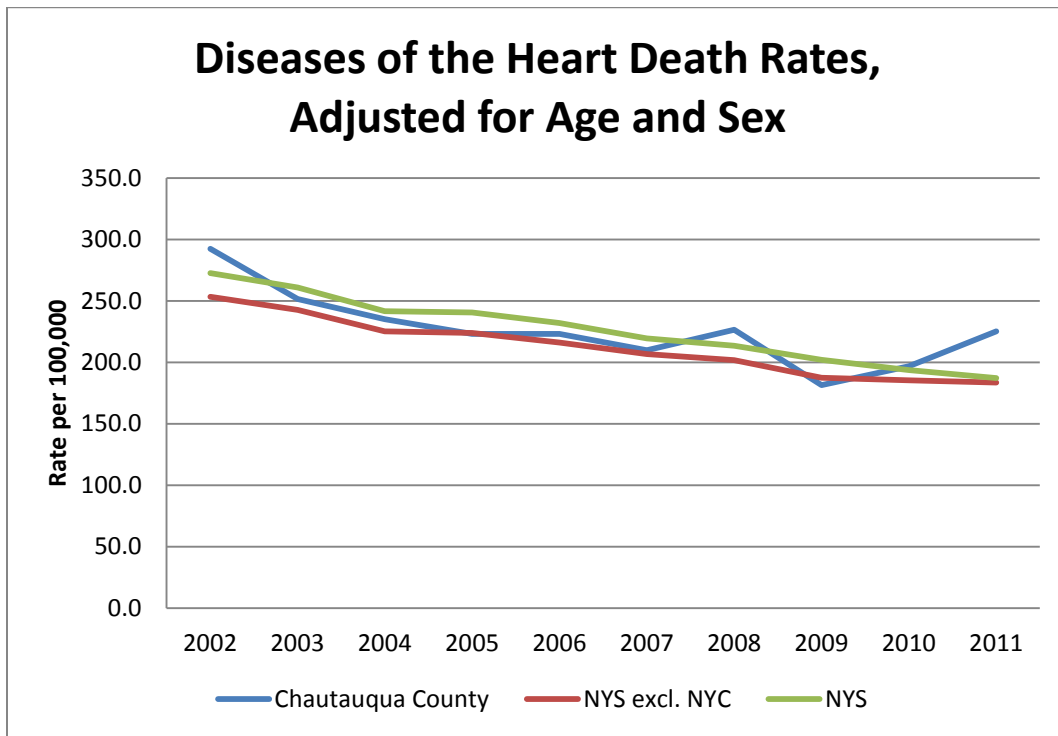
Stroke, or cerebrovascular disease, was the fourth leading cause of death in Chautauqua County in 2011. In total, 82 deaths were caused by stroke, with a rate of 43 deaths per 100,000 residents. (NYS Vital Statistics Leading Causes of Death by County, NYS, 2011)

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 29 shows the death rates for heart disease and stroke from 2002-2011, adjusted for age and sex. With slightly more ups and downs 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 2011.

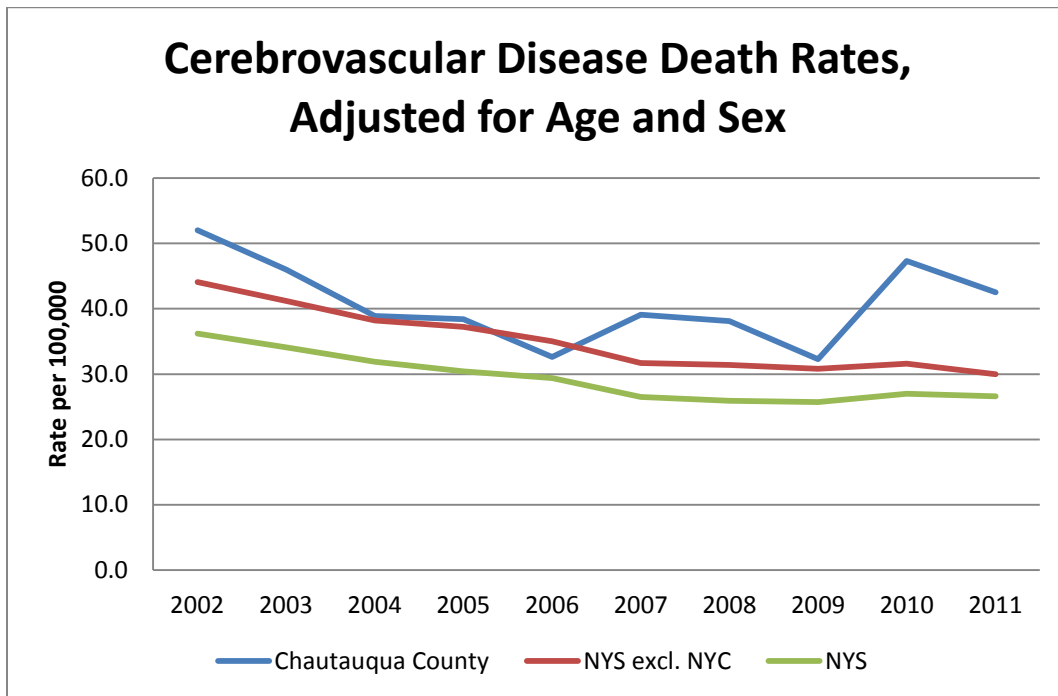
Figure 29. Diseases of the heart death rates, adjusted for age and sex, 2002-2011



Source: NYSDOH Vital Statistics, 2002-2011

The 2002-2011 time trend for cerebrovascular disease death rates shows a gradual decrease for New York State excluding New York City and New York State. The trend for Chautauqua County shows more fluctuation, with figures from 2007 to 2011 higher than the two comparison geographies.

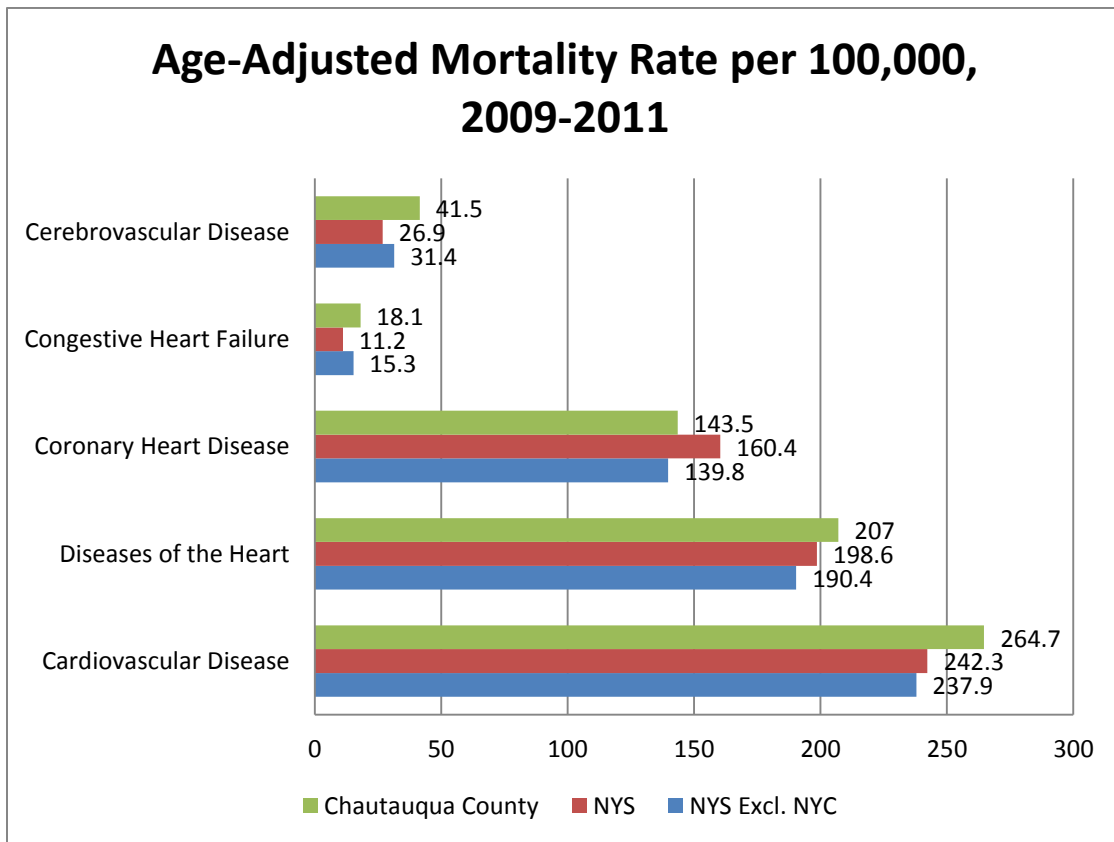
Figure 30. Cerebrovascular disease death rates, adjusted for age and sex



Source: NYSDOH Vital Statistics, 2002-2011

Figure 31 shows the age-adjusted mortality rate per 100,000 for specified types of cardiovascular disease from 2009 to 2011. The most common classification among these groups was diseases of the heart with 207 deaths per 100,000, followed by coronary heart disease with a death rate of 143.5. For all of the rates displayed in Figure 31 except for coronary heart disease, Chautauqua County shows significantly higher values than New York State excluding New York City and New York State.

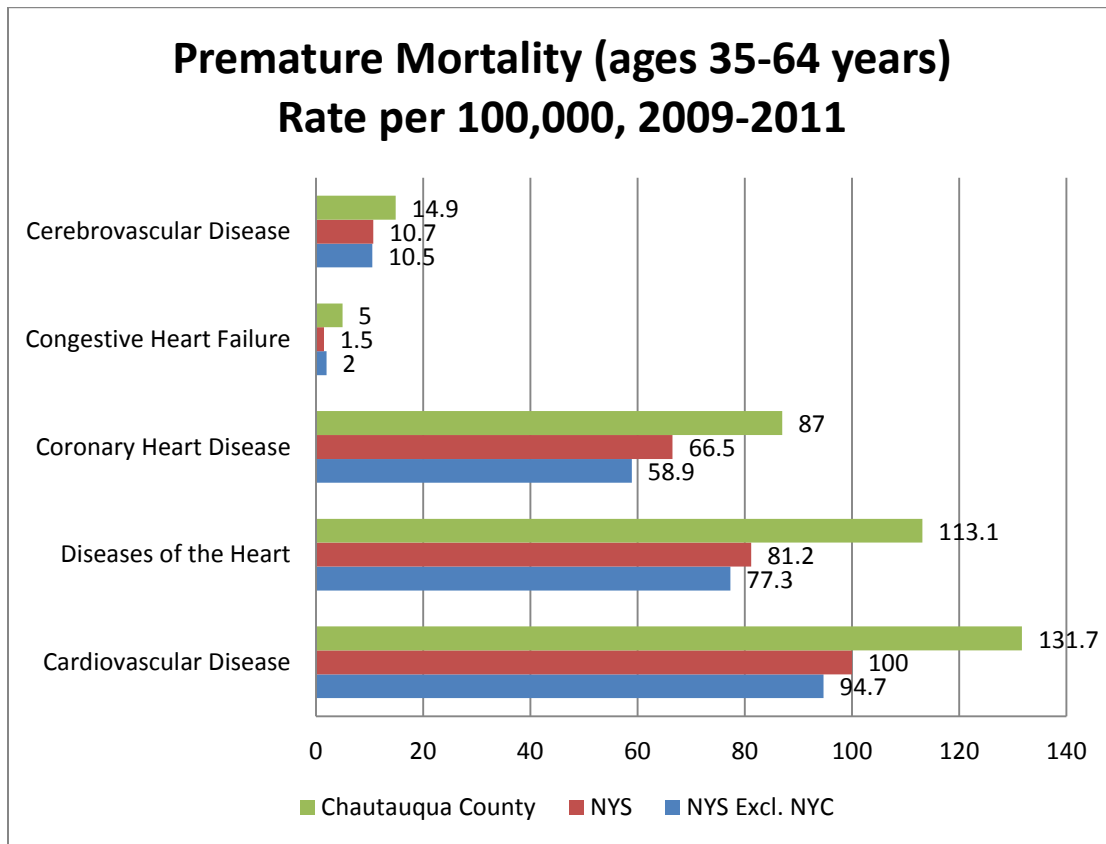
Figure 31. Age-adjusted mortality rate per 100,000, 2009-2011



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

Premature mortality rates which account for deaths to residents aged 35 to 64 years were significantly higher than both New York State excluding New York City and New York state for diseases of the heart and coronary heart disease. The Chautauqua County rate for congestive heart failure was significantly higher than New York State as a whole. For all subgroups, the rates in Chautauqua County were greater than the state comparison groups.

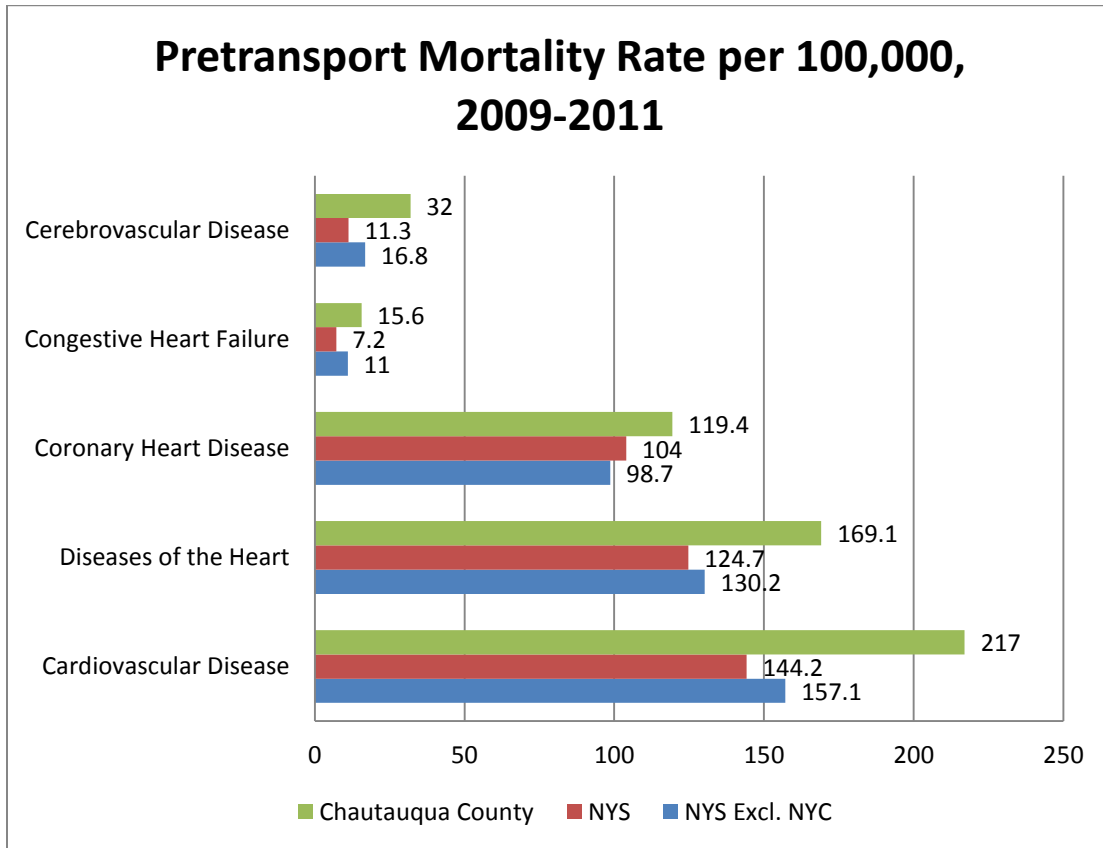
Figure 32. Premature mortality (ages 35-64 years) rate per 100,000, 2009-2011



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

Pretransport mortality rates for all cardiovascular disease subgroups were significantly higher than New York State excluding New York City and New York State in Chautauqua County from 2009 to 2011.

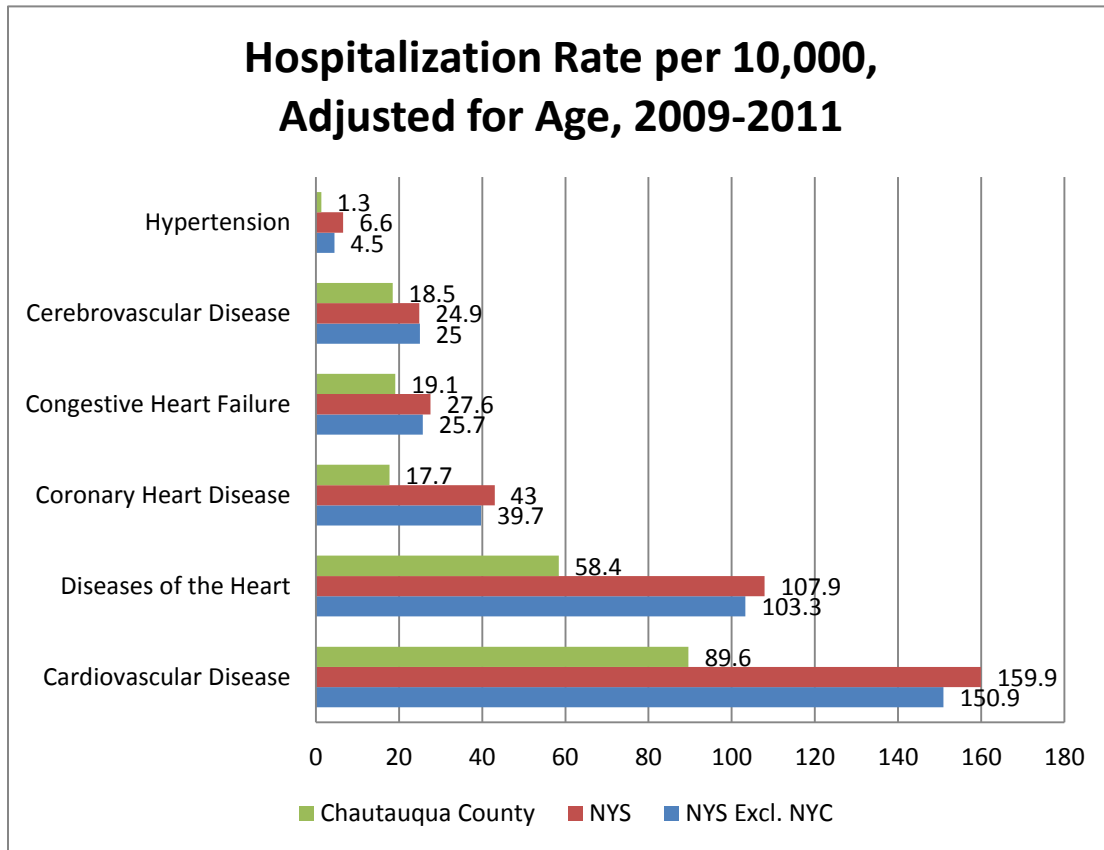
Figure 33. Pretransport mortality rate per 100,000, 2009-2011



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 and New York State as a whole.

Figure 34. Hospitalization rate per 10,000, adjusted for age, 2009-2011



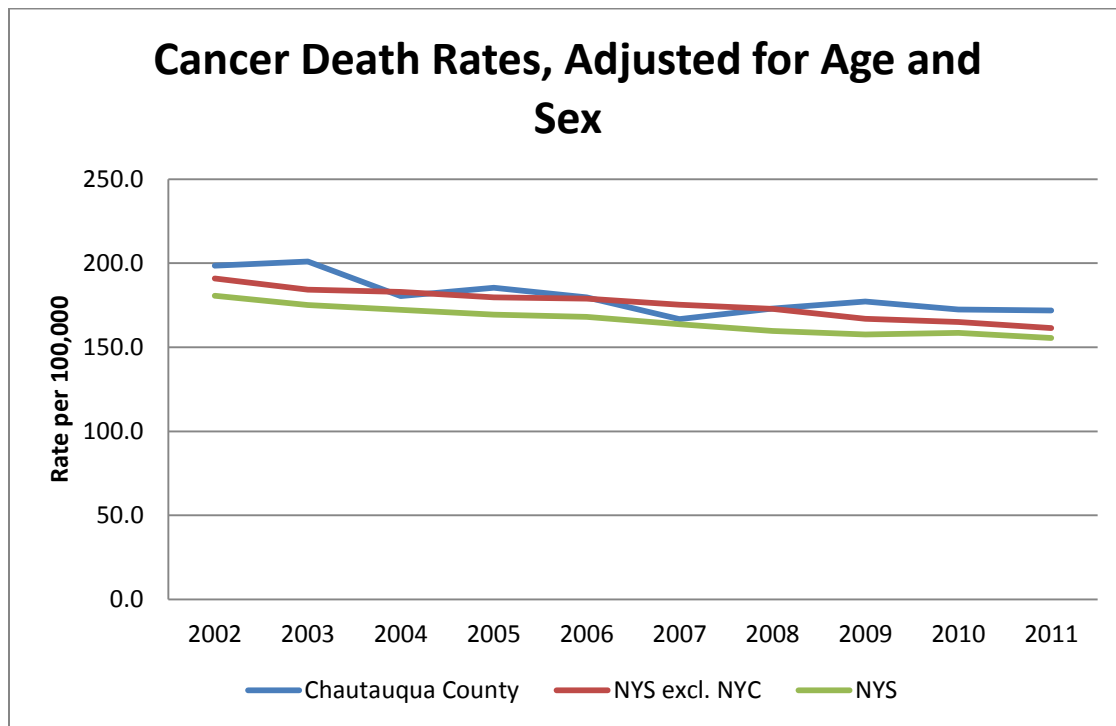
Source: NYSDOH Community Health Indicator Reports: Cardiovascular Disease Indicators, 2009-2011

Cancer

As of 2011, cancer was the second leading cause of death in Chautauqua County with 324 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 2002 to 2011 similarly with state figures.

Figure 35. Cancer death rates, adjusted for age and sex, 2002-2011



Source: NYSDOH Vital Statistics, 2002-2011

From 2007 to 2009, 2,718 new cases of cancer occurred in Chautauqua County, resulting in a crude rate of 677.7 cases per 100,000 residents. The age-adjusted rate of all cancers during the same time period was 540.9 cases per 100,000, significantly higher than the New York State rate of 489.6 cases. This figure was slightly higher, but not significantly higher than the NYS excluding NYC rate of 520 cases per 100,000.

During the same time period, 917 cancer deaths occurred, resulting in a crude mortality rate of 228.6 deaths per 100,000 residents. When adjusted for age, the cancer death rate decreased to 173.5 deaths per 100,000, which was not significantly different from the NYS rate of 163 and the NYS excluding NYC rate of 173.9.

The most common types of cancer in Chautauqua County from 2007 to 2009 were prostate (577 cases, 45 deaths), lung and bronchus (344 cases, 49 deaths), female breast (344 cases, 49 deaths), and colon and rectum (242 cases, 72 deaths). Age-adjusted lung and bronchus cancer incidence and mortality rates and prostate cancer incidence rates are higher than the rest of NYS.

Table 19. Incidence and mortality rate for all cancers, and specified sites, 2007-2009

Indicator	3 Year Total	County Rate	NYS Rate	NYS Rate excl. NYC
All cancers				
Crude incidence per 100,000	2,718	677.6	536.5*	599.7*
Age-adjusted incidence per 100,000	2,718	540.9	489.6*	520
Crude mortality rate per 100,000	917	228.6	179.9*	204.1*
Age-adjusted mortality rate per 100,000	917	173.5	163	173.9
Colon and rectum cancer				
Crude incidence per 100,000	242	60.3	50.4*	53.9
Age-adjusted incidence per 100,000	242	47.2	45.8	46.2
Crude mortality rate per 100,000	72	18	17.4	18.5
Age-adjusted mortality rate per 100,000	72	13.4	15.7	15.7
Lung and bronchus cancer				
Crude incidence per 100,000	391	97.5	69.8*	83.9*
Age-adjusted incidence per 100,000	391	76.2	63.8*	72.2
Crude mortality rate per 100,000	265	66.1	46.9*	57.2*
Age-adjusted mortality rate per 100,000	265	50.3	42.8*	49
Female breast cancer				
Crude incidence per 100,000	344	168.2	147.1*	164.9
Age-adjusted incidence per 100,000	344	131.9	126.9	136.1
Crude mortality rate per 100,000	49	24	26.7	28.8
Age-adjusted mortality rate per 100,000	49	17.4	21.7	22.2
Crude late stage incidence per 100,000	16	7.8	8	8.3
Age-adjusted late stage incidence per 100,000	16	6.4	6.8	6.8
Prostate cancer				
Crude incidence per 100,000	577	293.5	169.1*	186*
Age-adjusted incidence per 100,000	577	247	166.9*	171.2*
Crude mortality rate per 100,000	45	22.9	18.5	19.2
Age-adjusted mortality rate per 100,000	45	21.7	21.6	20.8
Crude late stage incidence per 100,000	9	4.6*	6.7	6.6
Age-adjusted late stage incidence per 100,000	9	4.1*	7.2	6.6

Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2007-2009

*Significantly different from Chautauqua County figure

Ovarian cancer was not among the most common types of cancer from 2007 to 2009, however its mortality rates showed significant difference from the state rate. Thirty-six deaths resulted in an age-adjusted mortality rate of 12.4 which was significantly higher than the corresponding New York State rate of 7.8 deaths per 100,000 residents.

Table 20. Incidence and mortality rate for all ovarian cancer, 2007-2009

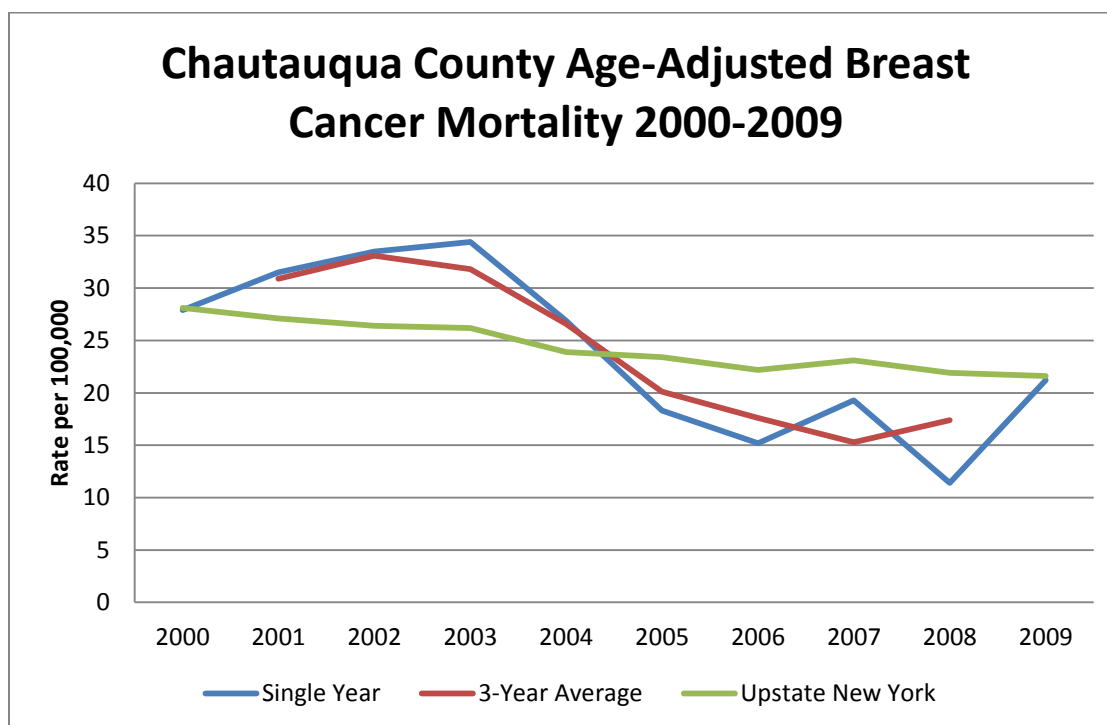
Indicator	3 Year Total	County Rate	NYS Rate	NYS Rate excl. NYC
Ovarian cancer				
Crude incidence per 100,000	31	15.2	15.2	16.5
Age-adjusted incidence per 100,000	31	11.7	12.9	13.4
Crude mortality rate per 100,000	36	17.6	9.6*	11*
Age-adjusted mortality rate per 100,000	36	12.4	7.8*	8.5

Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2007-2009

*Significantly different from Chautauqua County figure

Time trends for breast cancer show that incidence remained relatively stable from 2000 to 2009, but that mortality rates appear to be decreasing. This mortality trend is evident in Figure 36.

Figure 36. Chautauqua County age-adjusted breast cancer mortality 2000-2009



Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2000-2009

In Chautauqua County in 2008-2009, 73.9% (age-adjusted) of women aged 18 years and older with a pap smear in the past three years, compared to 82.7% in New York State as a whole, and 82.6% in New York State excluding New York City. During the same time frame, 77.6% of women aged 40 years and older with a mammography screening in the past 2 years in Chautauqua County. This figure was slightly lower than the state comparisons.

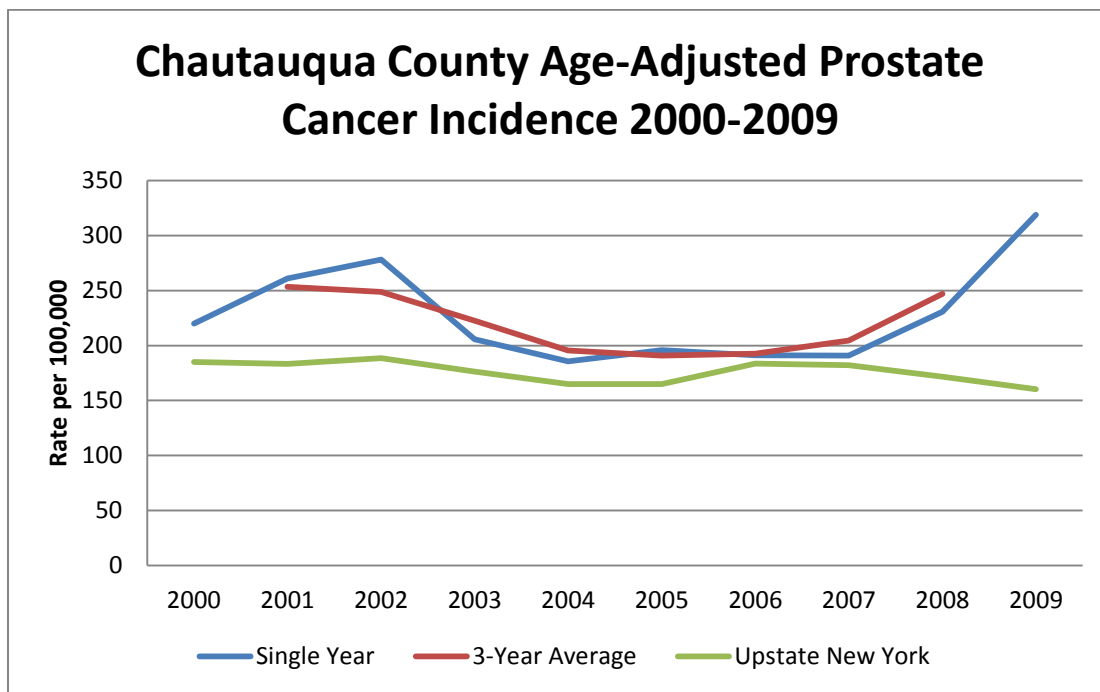
Table 21. Cancer screening rates for females in Chautauqua County, 2008-2009

	Chautauqua County	NYS	NYS excl. NYC
Age-adjusted % of women 18 years and older with pap	73.9	82.7	82.6*
% of women 40 years and older with mammography	77.6	79.7	81.9

Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2008-2010

A look at trends in prostate cancer (Figure 37) show that the age-adjusted incidence rate appears to be on the rise in Chautauqua County. The corresponding mortality rate appears to be stable during the same time frame.

Figure 37. Chautauqua County age-adjusted prostate cancer incidence, 2000-2009



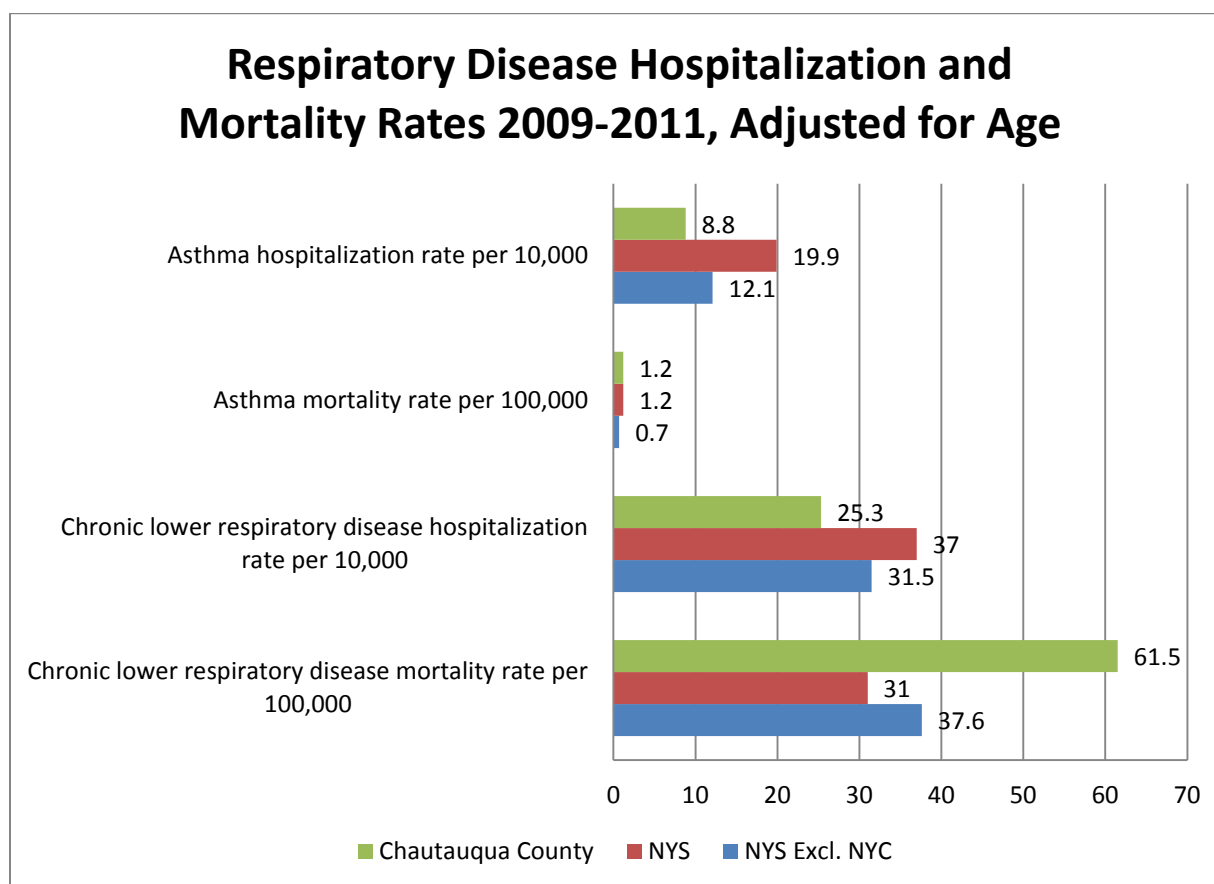
Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2000-2009

Respiratory Disease

The third leading cause of death in Chautauqua County in 2011 was Chronic Lower Respiratory Disease (CLRD) with a total of 114 deaths at a rate of 62 deaths per 100,000 residents.

Figure 38 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 comparison groups from 2009 to 2011.

Figure 38. Respiratory disease hospitalization and mortality rates 2009-2011, adjusted for age



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

The NYSDOH eBRFSS data indicated that during 2008-2009, 8.4% (age-adjusted) of adults in Chautauqua County had current asthma, compared to 9.7% in New York State and 10.1% in NYS excluding NYC.

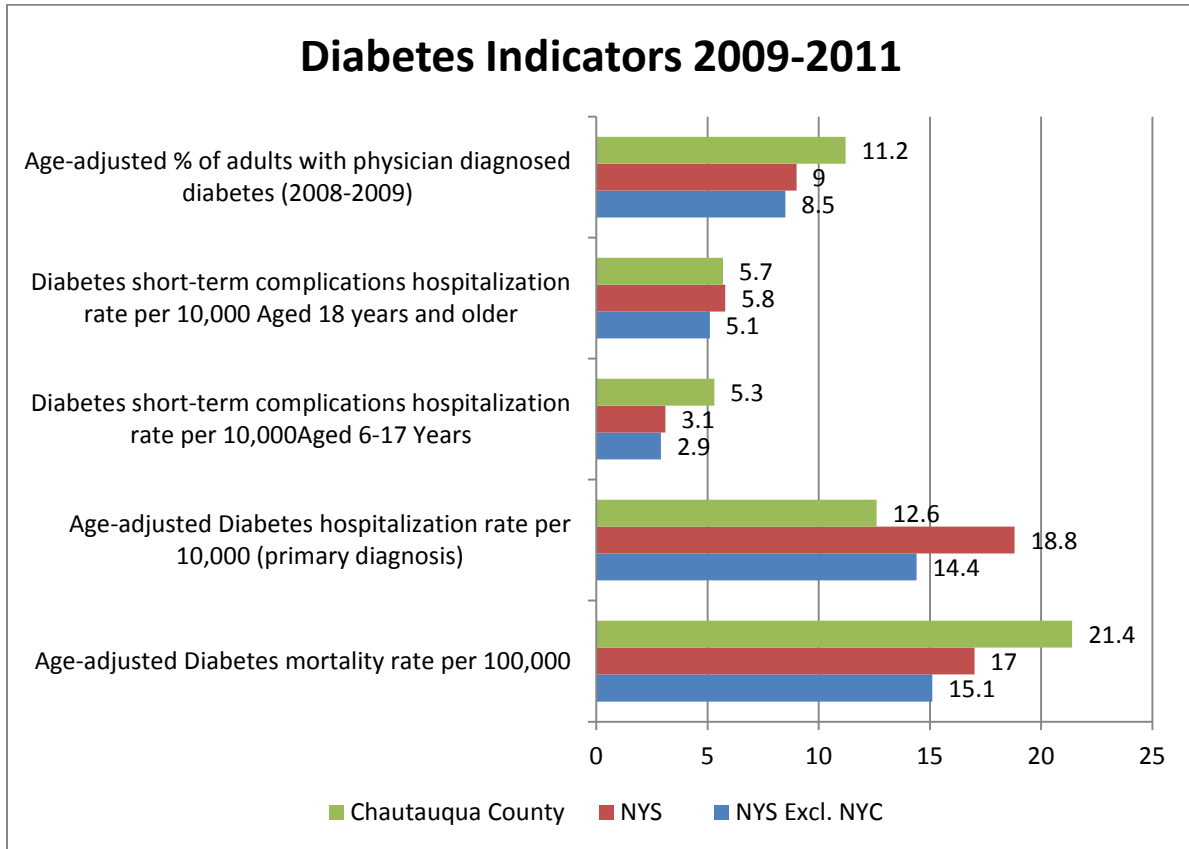
Diabetes

According to the NYSDOH Expanded Behavioral Risk Factor Surveillance System, the age-adjusted rate of physician-diagnosed diabetes among adults in 2008-2009 was 11.2% in Chautauqua County. This rate exceeded both NYS (9%) and NYS excluding NYC (8.5%). In 2009-2011 Chautauqua County saw a rate of short-term diabetes complications hospitalizations among adults per 10,000 of 5.7, slightly lower than NYS (5.8) and slightly higher than Upstate New York (5.1). In comparison, short-term diabetes complication hospitalizations rate per 10,000 for children ages 6-17 was greater in Chautauqua County than NYS and NYS excluding NYC.

While the age-adjusted diabetes hospitalization rate per 10,000 in Chautauqua County (12.6) was lower than its state comparisons, the age-adjusted diabetes mortality rate per 100,000 was

much higher in Chautauqua County at 21.4 compared to 17 in New York State and 15.1 in New York State excluding New York City.

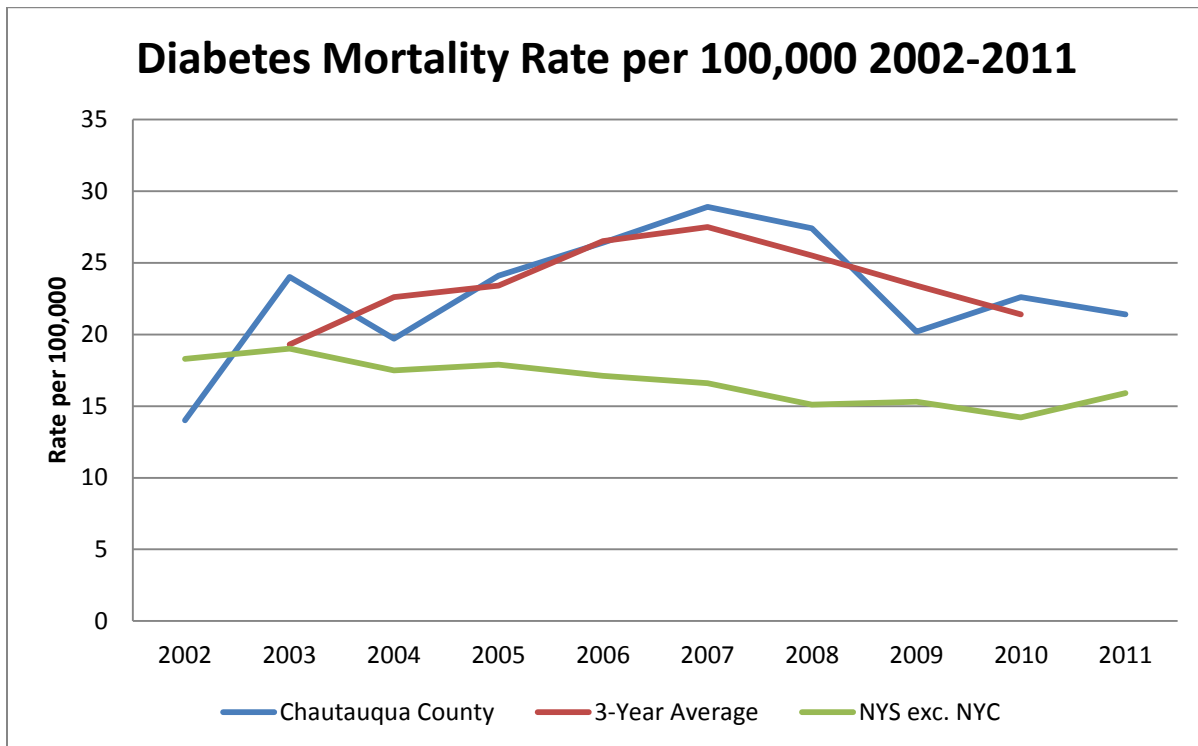
Figure 39. Diabetes indicators, 2009-2011



Source: NYSDOH Community Health Indicator Reports: Cirrhosis and Diabetes indicators 2009-2011

A look at diabetes mortality rate per 100,000 shows gradual increases and decreases from 2002 to 2011 (Figure 40). The rate for Chautauqua County was consistently higher than New York State excluding New York City, with the exception of 2003.

Figure 40. Diabetes mortality rate per 100,000, 2002-2011



Source: NYSDOH Community Health Indicator Reports: Cirrhosis and Diabetes indicators 2009-2011

Promote a Healthy and Safe Environment

“The 2013-2017 State Health Improvement Plan to "Promote a Healthy and Safe Environment" in New York State focuses on four core areas that impact health. These are: the quality of the water we drink, the air we breathe, and the built environments where we live, work, learn and play; and injuries and occupational health. 'Environment,' as used here, incorporates all dimensions of the physical environment that impact health and safety. In addition to addressing the six cross-cutting issues identified by ad hoc Committee (access to quality health services and early identification of health problems; life course perspective; health disparities; social determinants of health; a gender perspective; and oral health), the healthy and safe environment committee proposed the impact of and adaptation to climate change as another cross-cutting issue within this action plan.”

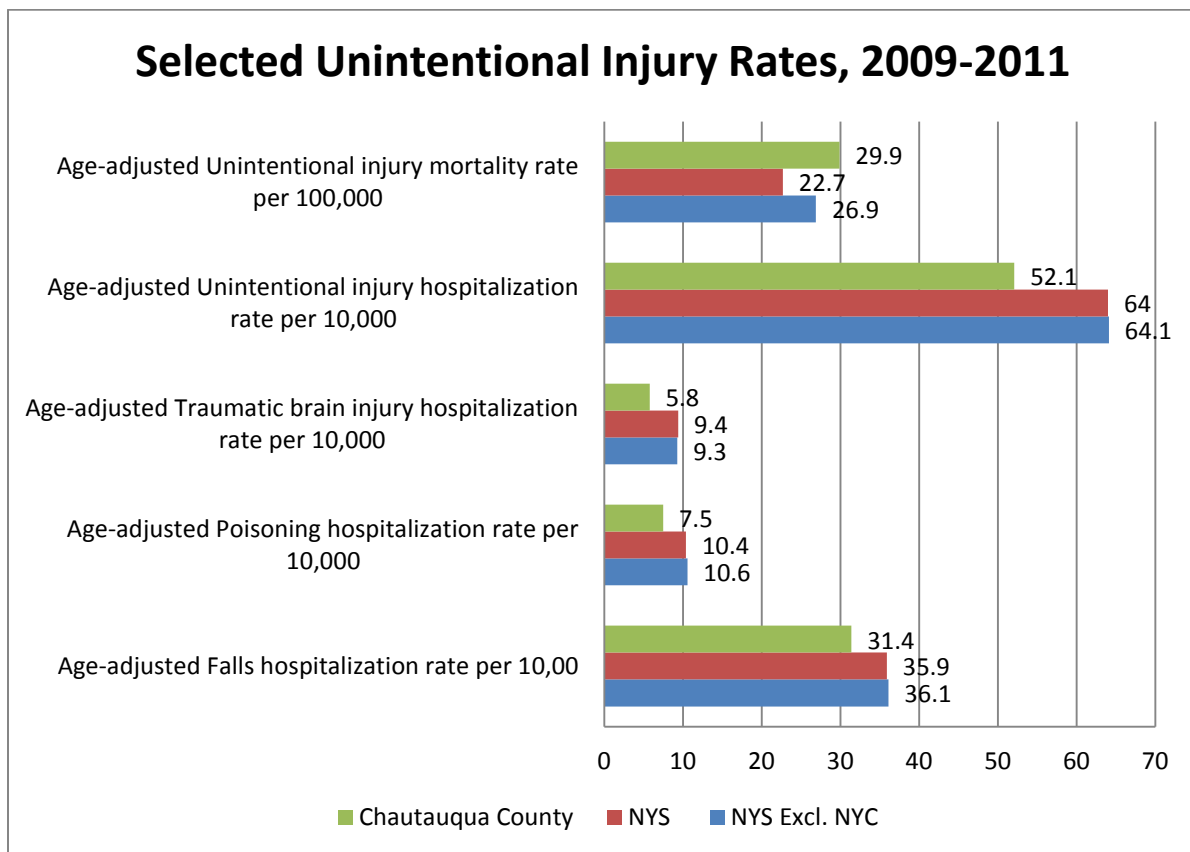
-New York State Prevention Agenda 2013-2017, Promote a Healthy and Safe Environment Action Plan

Injury

The fifth leading cause of death in Chautauqua County and New York State as a whole is unintentional injury. In 2011, forty-four deaths occurred due to unintentional injury, resulting in a mortality rate of 31 per 100,000 residents.

The age-adjusted unintentional injury mortality rate for 2009-2011 for Chautauqua County was higher than New York State and New York State excluding New York City, while the corresponding hospitalization rate was lower. Age-adjusted rates of traumatic brain injury, poisoning, and falls hospitalizations were also lower in Chautauqua County during 2009-2011.

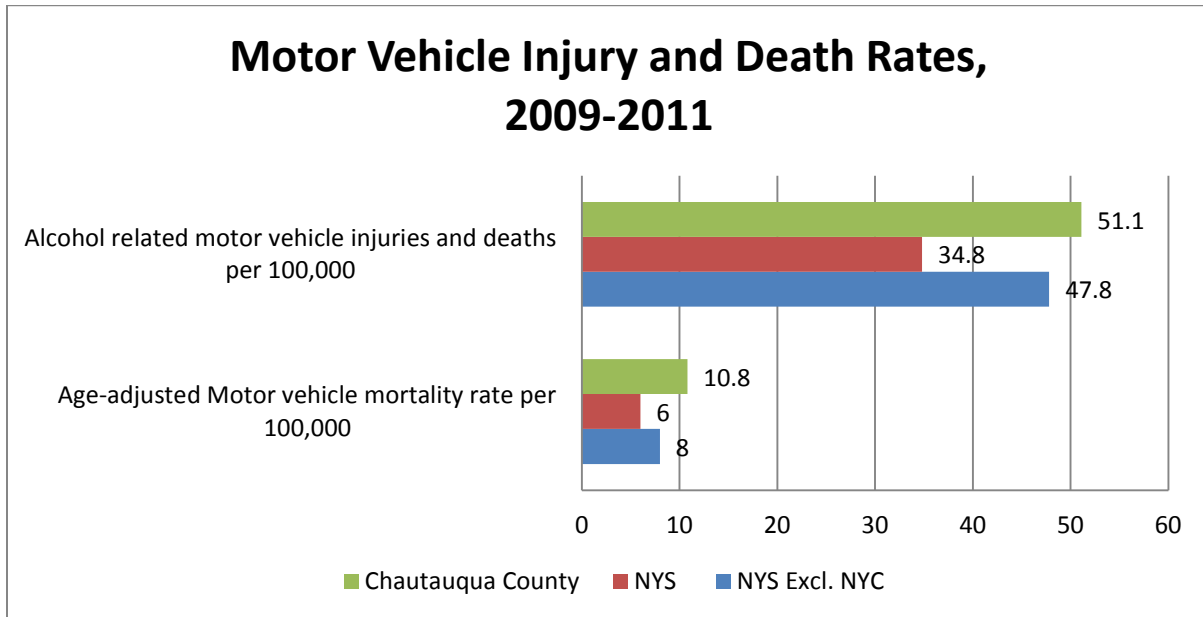
Figure 41. Selected unintentional injury rates, 2009-2011



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

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.

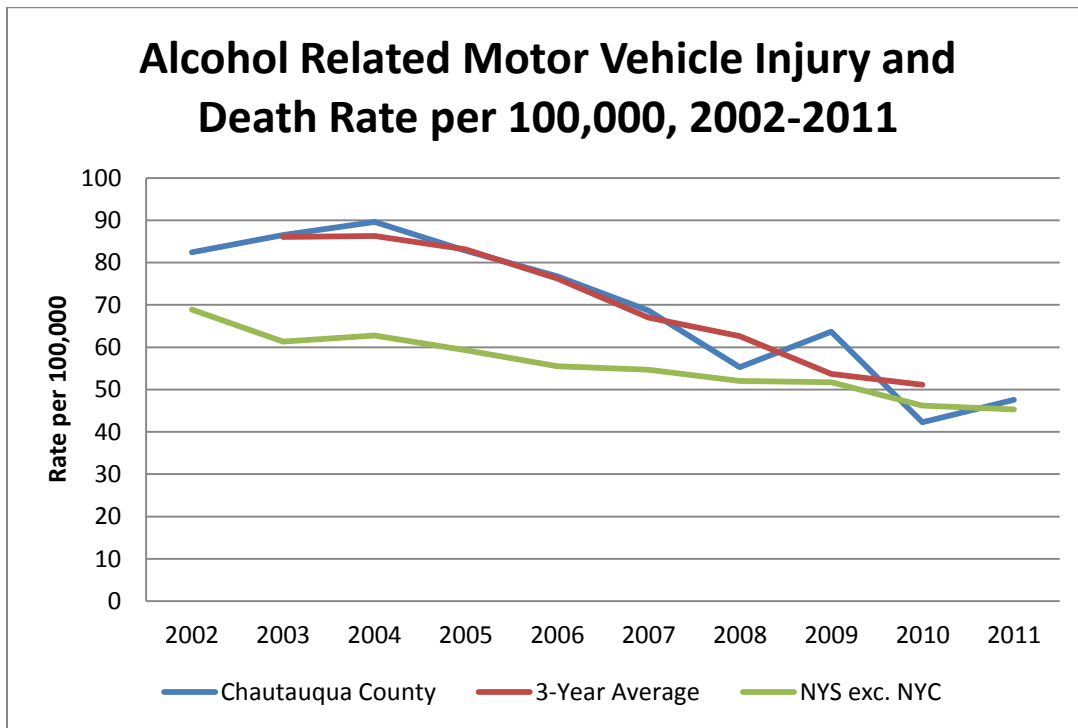
Figure 42. Motor vehicle injury and death rates, 2009-2011



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

While alcohol related motor vehicle injuries and deaths were greater in Chautauqua County than the rest of the state, a look at the rate over time shows a discernable downward trend (Figure 43).

Figure 43. Alcohol related motor vehicle injury and death rate per 100,000, 2002-2011

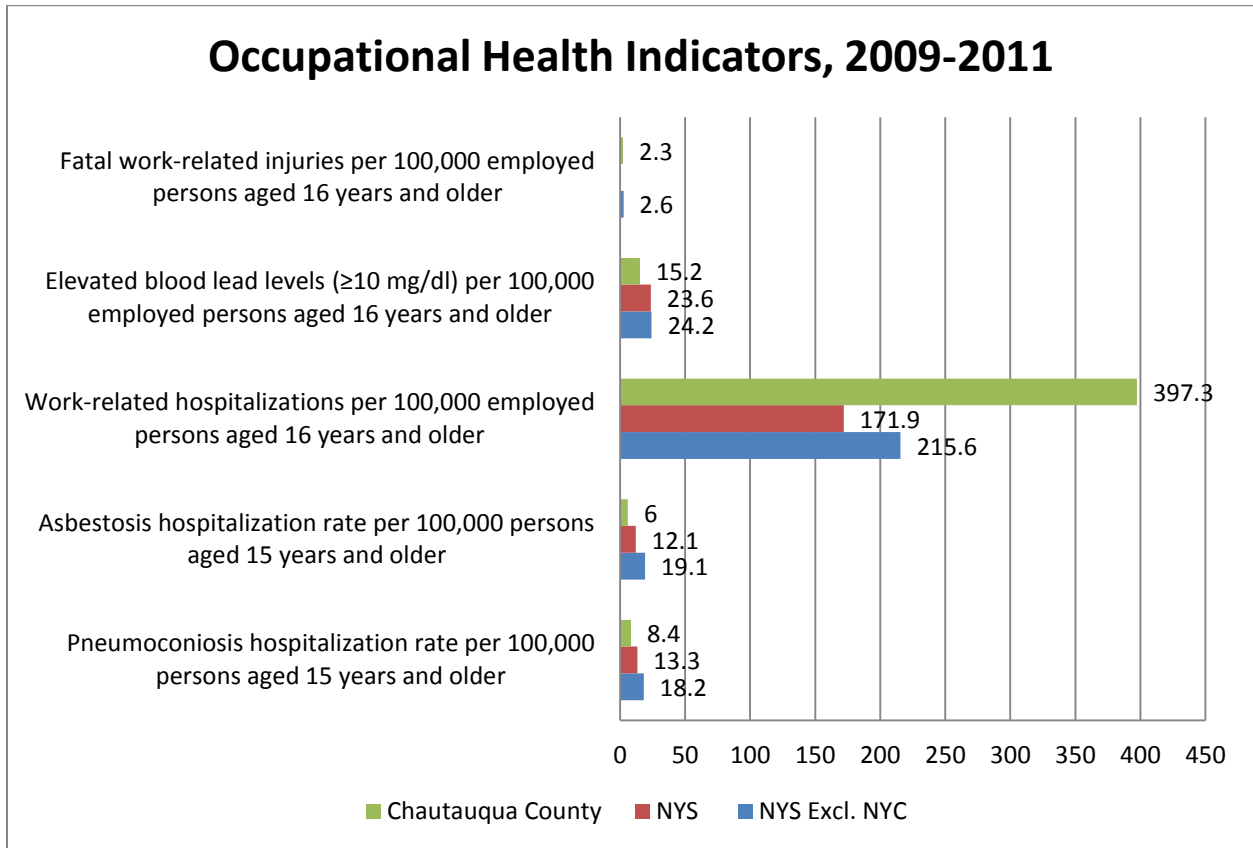


Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2002-2011

Occupational Health Indicators

Occupational health indicators provided by the New York State Department of Health Community Health Assessment Indicator for Chautauqua County and state comparisons 2009-2011 are presented in Figure 44. Chautauqua County employees experienced fewer hospitalizations due to pneumoconiosis and asbestosis than the rest of the state. Fatal work-related injuries were very low at 2.3 deaths per 100,000 employed persons aged 16 years and older. Elevated blood lead levels were also lower in Chautauqua County than the rest of the state. On the contrary, the rate of work-related hospitalizations per 100,000 employed persons ages 16 years and older was significantly higher at 397.3 in Chautauqua County than New York State (171.9) and New York State excluding New York City (215.6). In total, there were 704 work-related hospitalizations in Chautauqua County for workers ages 16 and older from 2009 to 2011.

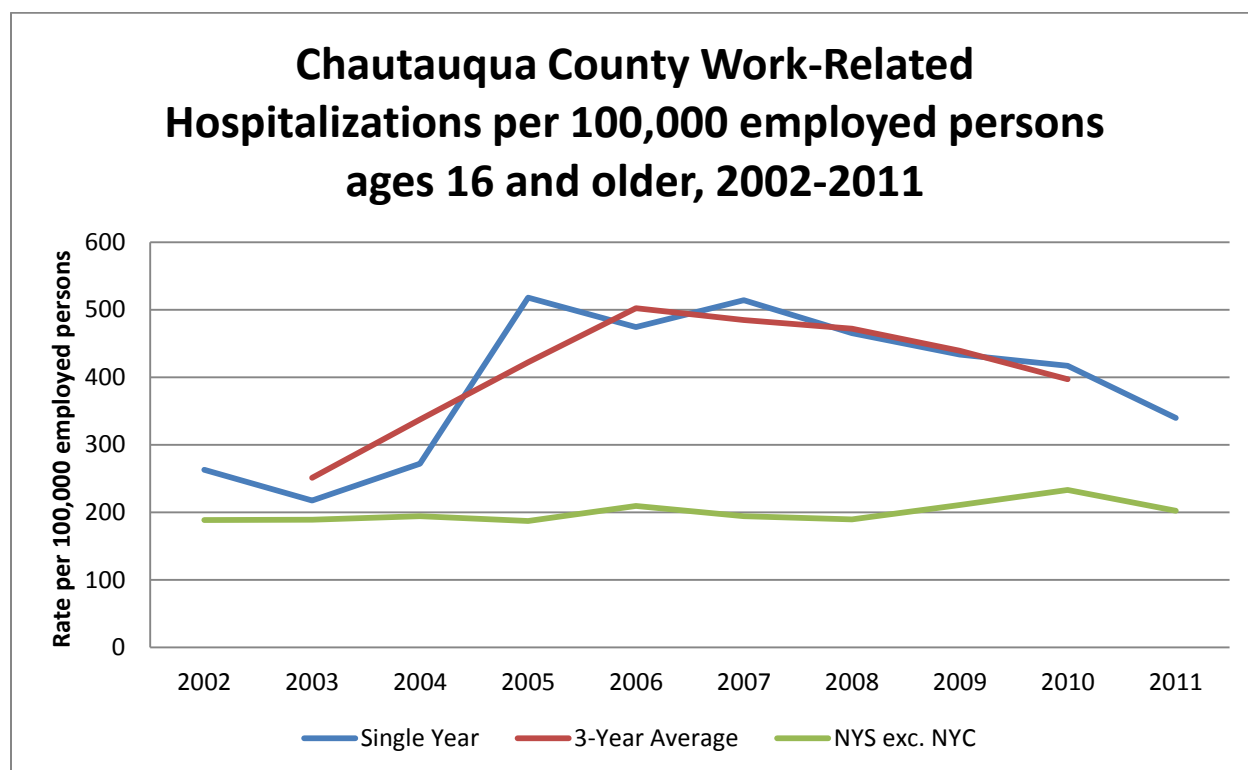
Figure 44. Occupational health indicators, 2009-2011



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

Figure 45 shows Chautauqua County work-related hospitalization rates per 100,000 employed persons ages 16 years and older from 2002 to 2011. The time trend shows that Chautauqua County rates are consistently higher than hospitalization rates for New York State excluding New York City. The figure also illustrates a rise in the rate around 2005, and a gradual decrease from 2008 to 2011.

Figure 45. Chautauqua County work-related hospitalizations per 100,000 employed persons ages 16 and older, 2002-2011



Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2002-2011

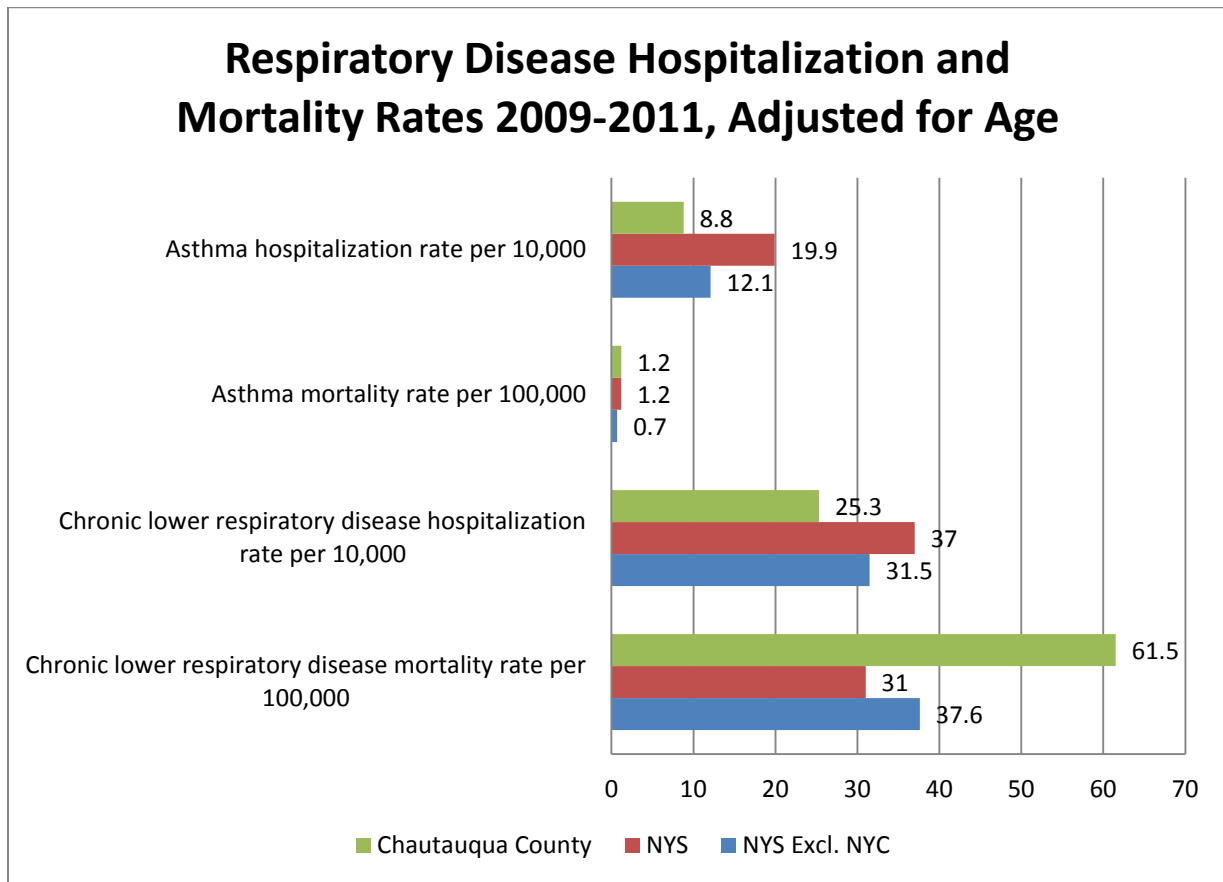
Respiratory Disease

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 (PM_{2.5}) (µg/m³) 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 2008, average daily PM_{2.5} for Chautauqua County was measured at 13.4, the highest in New York State. During the same time period, the NYS average was 10.9. With the highest daily averages in the state, all eight counties in Western New York ranked in the fourth quartile. (County Health Rankings, CDC WONDER data)

The third leading cause of death in Chautauqua County in 2011 was Chronic Lower Respiratory Disease (CLRD) with a total of 114 deaths at a rate of 62 deaths per 100,000 residents.

Figure 46 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 comparison groups from 2009 to 2011.

Figure 46. Respiratory disease hospitalization and mortality rates per 2009-2011, adjusted for age



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

The NYSDOH eBRFSS data indicated that during 2008-2009, 8.4% (age-adjusted) of adults in Chautauqua County had current asthma, compared to 9.7% in New York State and 10.1% in NYS excluding NYC.

Promote Healthy Women, Infants, and Children

“The health and well-being of mothers and children are fundamental to overall population health. Improving health outcomes for women, infants and children is a priority for the New York State Prevention Agenda, aligning with goals of the State's Medicaid program and Title V/Maternal Child Health Services Block Grant. Of great concern, New York's key population indicators of maternal and child health have been stagnant or worsened during the last decade. Even for measures with improving trends, there are striking racial, ethnic and economic disparities.”

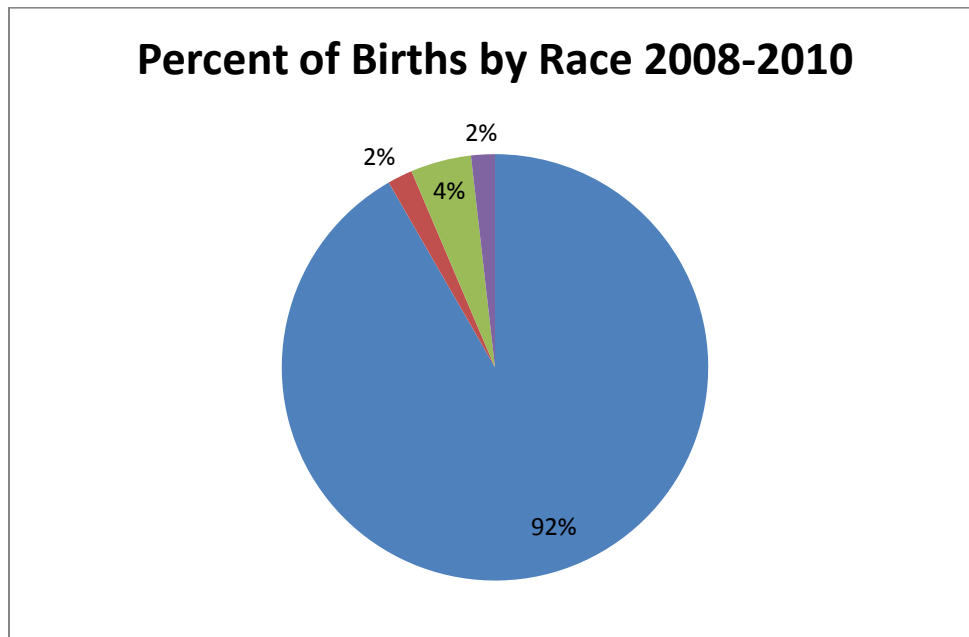
-New York State Prevention Agenda 2013-2017, Promote Healthy Women, Infants, and Children Action Plan

Births

According to NYS Vital Statistics Tables, there were 4,209 resident live births reported in Chautauqua County during the period 2008 to 2010, resulting in a crude birth rate of 10.5 births per 1,000 population. (NYS Vital Statistics 2008-2010 Tables 7, 8) The fertility rate during the same time period was 54.7 births per 1,000 females ages 15-44, slightly lower than the New York State rate of 60.9. Of all births, 137 (3.3%) were multiple births and 1,719 (40.8%) were first births.

Of all births, 3,856 (91.6%) of babies were white, 82 (1.9%) were black or African American, 195 (4.6%) were designated as “other” race and 76 (1.8%) had no race stated on the birth certificate. Of all births, 415 (9.9%) were of Hispanic or Latino ethnicity.

Figure 47. Percent of births by race, 2008-2010



Source: NYSDOH Vital Statistics, 2008-2010

Pregnancy, Fertility, and Abortions

Table 22 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 2008-2010. While Chautauqua County pregnancy rates are lower than both WNY and NYS for all age categories except for ages 15-17, fertility rates are very close to or higher than the other geographies. This trend is consistent with the discrepancy in abortion ratios across these geographies.

Table 22. Pregnancy and fertility rates for women of selected age groups, 2008-2010

Age Group	Pregnancy Rates			Fertility Rates		
	Chautauqua County	WNY	NYS	Chautauqua County	WNY	NYS
All Ages	68.7	76.4	93.6	54.9	55.5	60.9
Ages 10-14	0.9	1.2	1.4	0.3	0.4	0.4
Ages 15-17	28.1	27.1	31.1	18.9	14.3	12.1
Ages 15-19	46	46.2	53.5	34	27.4	24
Ages 18-19	65.1	71.3	84.1	50.1	44.6	40.3

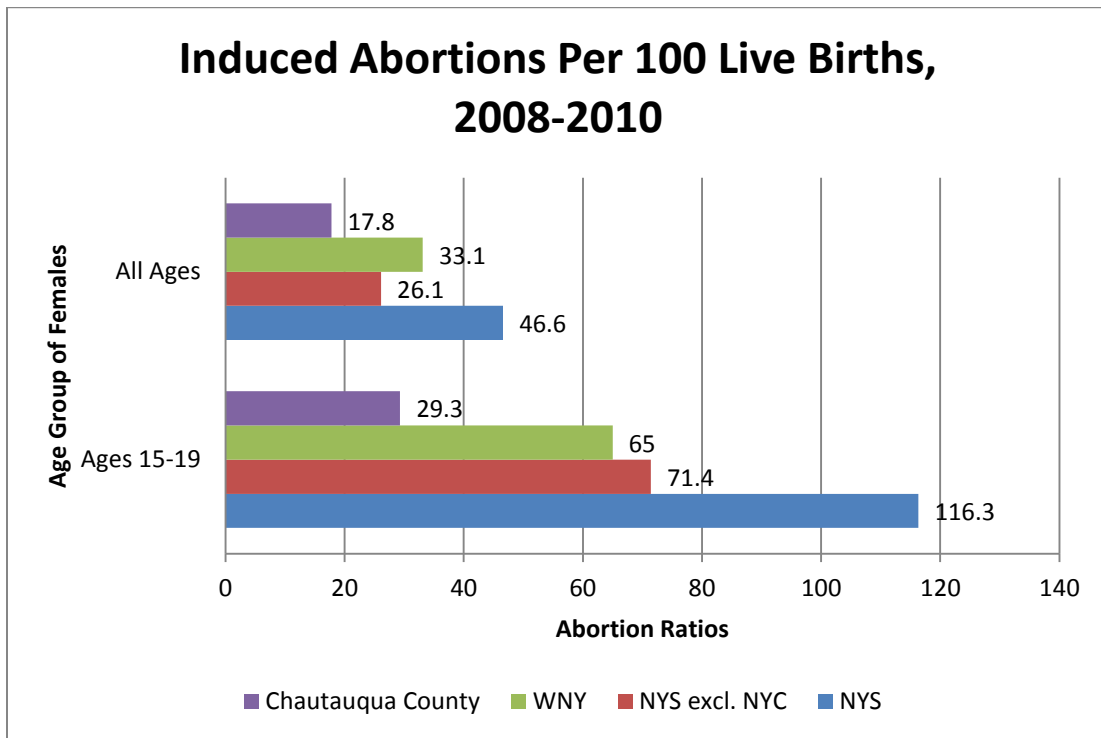
Pregnancy rate per 1,000 (all pregnancies/female 15-44 years)

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

Source: NYSDOH Family Planning/Natality Indicators 2008-2010

Abortion ratios, or the number of induced abortions per 100 live births, are significantly lower in Chautauqua County than New York State excluding New York City and New York State as a whole. During the time period 2008-2010, there were 17.8 induced abortions for every 100 births among all women. Among women ages 15-19 years old, there were 29.3 abortions for every 100 births in Chautauqua County. This ratio is nearly four times less than New York State’s ratio of 116.3.

Figure 48. Induced abortions per 100 live births, 2008-2010

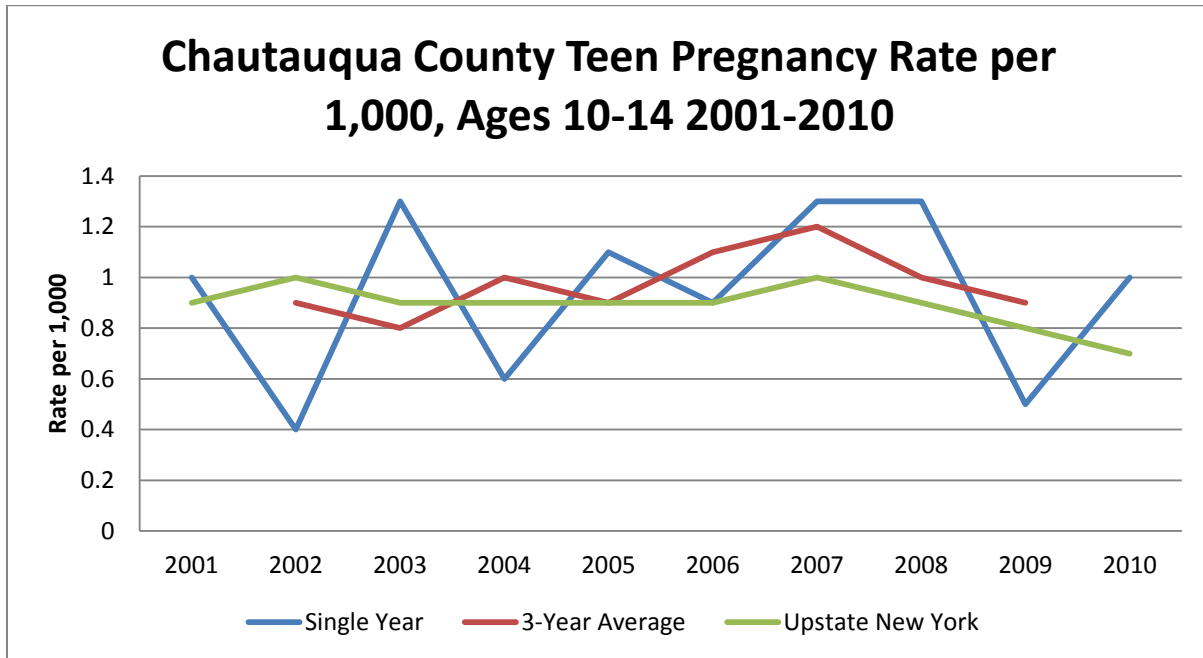


Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2008-2010

Teen Pregnancies

The following figures demonstrate the time trends in teenage pregnancy age groups from 2001 to 2010. Rates for the 10-14 age group show more fluctuation than the other age groups because the number of pregnancies is very low.

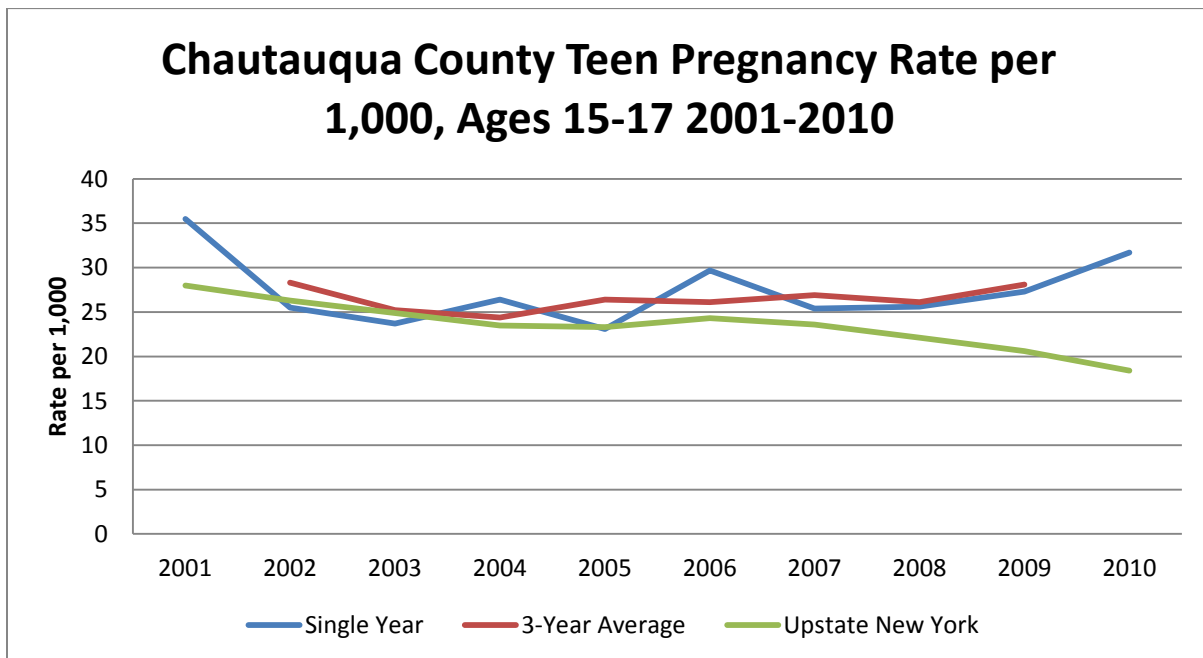
Figure 49. Chautauqua County teen pregnancy rate per 1,000, ages 10-14, 2001-2010



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2008-2010

From 2008 to 2010, 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 slight temporal rise in 2010 for Chautauqua County, and a slight decrease for Upstate New York.

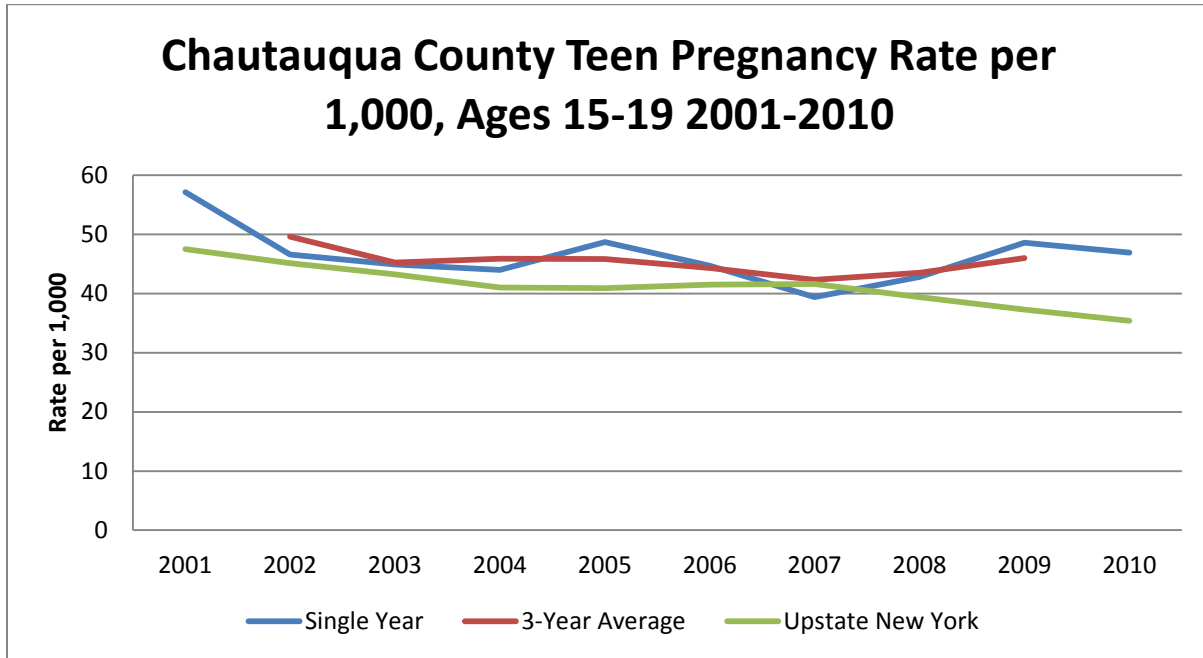
Figure 50. Chautauqua County teen pregnancy rate per 1,000, ages 15-17, 2001-2010



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2001-2010

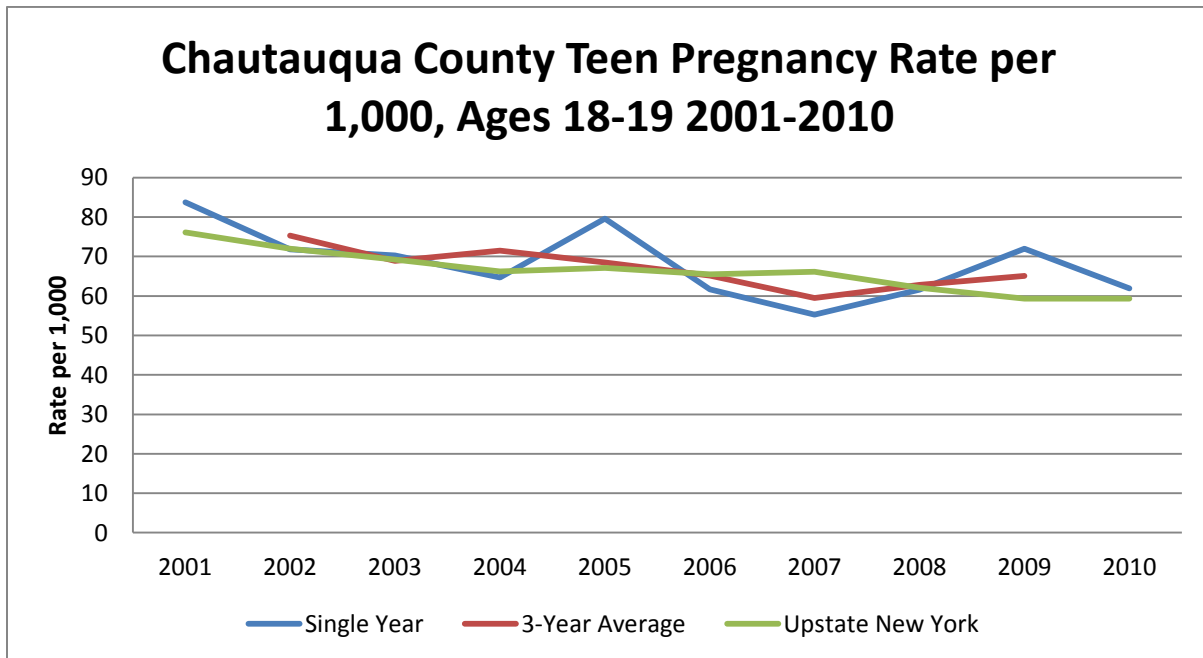
Teen pregnancy rates among females age 15-19 (Figure 51) and ages 18-19 (Figure 52) remained relatively stable from 2001 to 2010.

Figure 51. Chautauqua County teen pregnancy rate per 1,000, ages 15-19, 2001-2010



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2001-2010

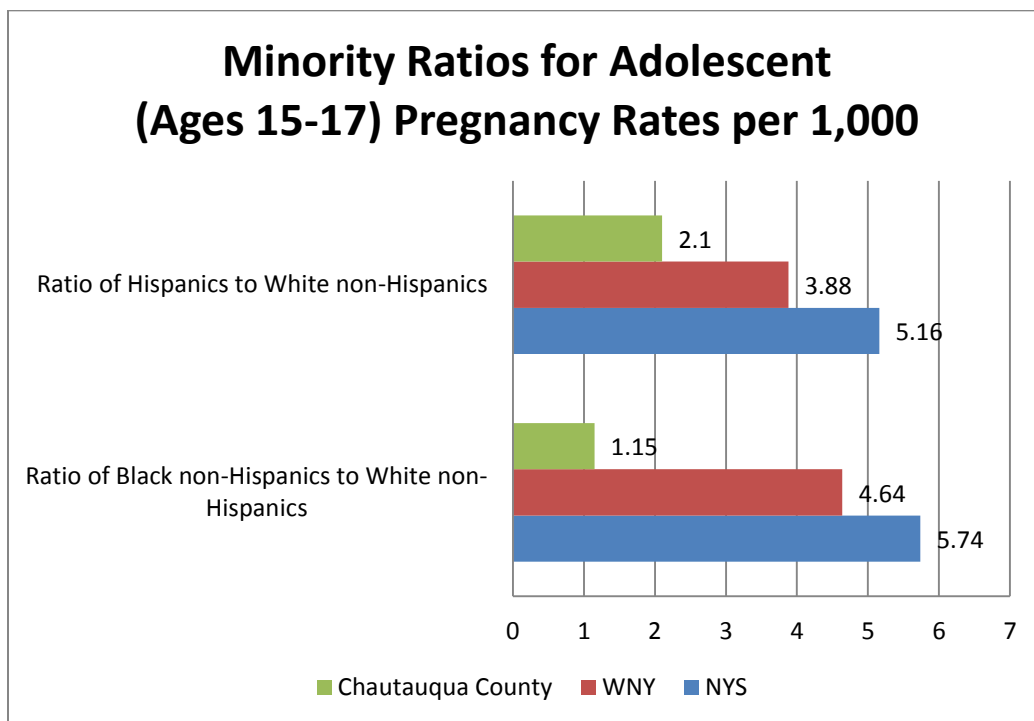
Figure 52. Chautauqua County teen pregnancy rate per 1,000, ages 18-19, 2001-2010



Source: NYSDOH Community Health Indicator Reports: Family Planning/Natality Indicators, 2001-2010

From 2008 to 2010, the adolescent pregnancy rates per 1,000 for Hispanic women and Black non-Hispanics ages 15-17 were slightly higher than those of White non-Hispanic women. The adolescent pregnancy rate ratio of Hispanic to White non-Hispanic women was 2.1, which was much lower than the Western New York and New York State rates of 3.88 and 5.16, respectively. The ratio of Black non-Hispanic to White non-Hispanic women was 1.15 in Chautauqua County, compared to 4.64 in Western New York and 5.74 in New York State. These figures are presented in Figure 53 below.

Figure 53. Minority ratios for adolescent (ages 15-17) pregnancy rates per 1,000, 2008-2010



Source: NYSDOH Indicators for Tracking Priority Areas 2013-2017

The percentage of births within 24 months of a previous pregnancy 2008-2010 is significantly higher in Chautauqua County as compared to both New York State and Upstate New York. During that time period, 25.1% of births were within 24 months of a previous pregnancy in Chautauqua County. In New York State, this figure was only 18% and 21.1% for Upstate New York. Western New York saw 21.8% of births within 24 months of a previous pregnancy during the same time range. (NYSDOH Family Planning/Natality Indicators 2008-2010)

Prenatal Care

As indicated by the NYSDOH Maternal and Infant Health Tracking indicators, many Chautauqua County mothers are not seeking out early prenatal care.

NYSDOH Maternal and Infant Health Indicators indicate that from 2008-2010, 68.8% of mothers who gave birth sought out prenatal care during the first trimester. This figure is significantly

lower than the NYS rate of 72.8% and the NYS excluding NYC rate of 75.2%. The percentage of mothers seeking out prenatal care during the third trimester is significantly higher than the rest of the state at 7.1%. Additionally, only 62.8% of births during 2008-2010 were designated as having adequate prenatal care. The rate of prenatal care use during the first trimester is greater among mothers who participate in the WIC program with 84.2% during 2008-2010.

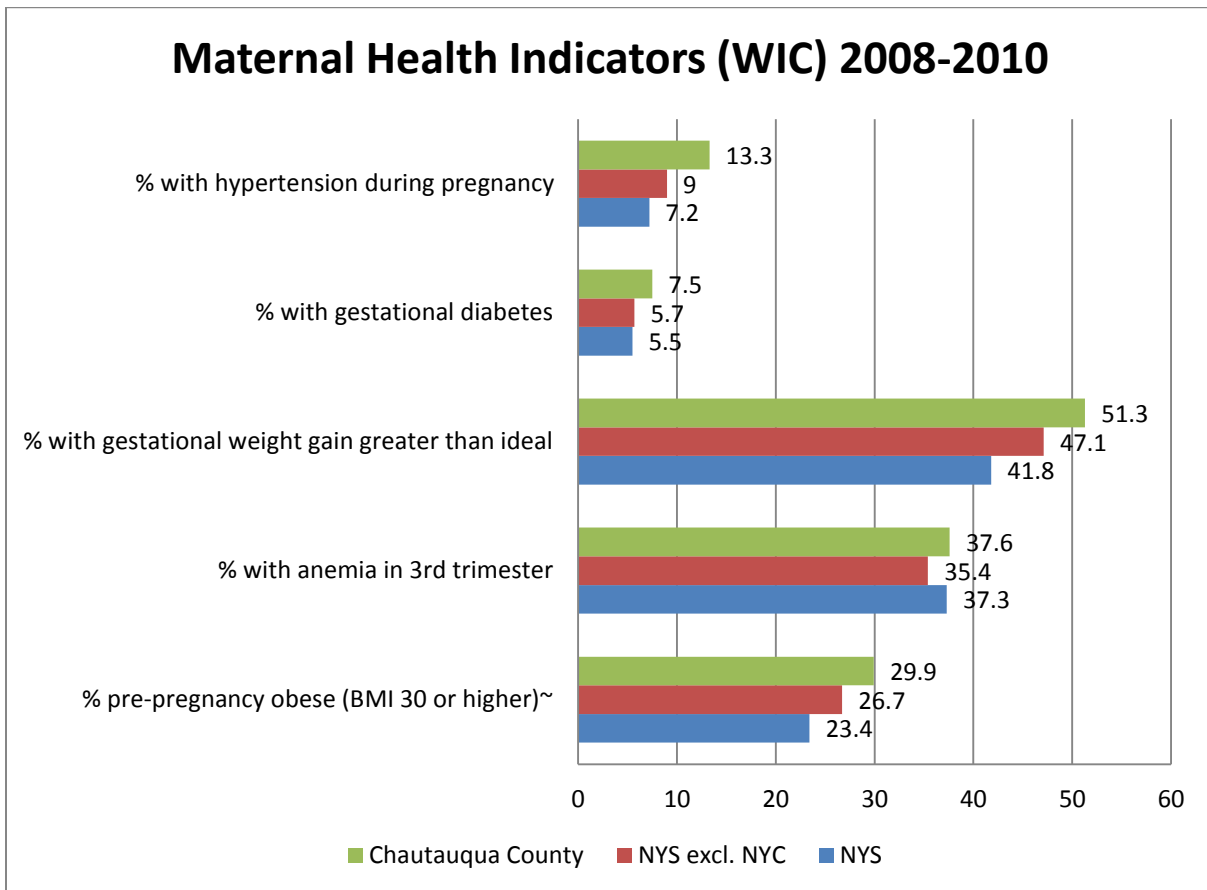
Table 23. Prenatal care indicators for Chautauqua County, 2008-2010

	<i>3 year total</i>	<i>Chautauqua County</i>	<i>NYS</i>	<i>NYS excl. NYC</i>
% of births with early (1st trimester) prenatal	2,747	68.8	72.8	75.2
% of births with late (3rd trimester) or no	284	7.1	5.9	4.3
% of births with adequate prenatal care	2,488	62.8	66	68.2
% of pregnant women in WIC with early (1st	2,495	84.2	85.6	86.3

NYSDOH Maternal and Infant Health Indicators 2008-2010

According to figures from the Women, Infants, and Children Supplemental Nutrition Program (WIC), a significantly greater proportion of pregnant women in WIC were pre-pregnancy obese in Chautauqua County (29.9%) compared to NYS as a whole (23.4%) and NYS excluding NYC (26.7%). In addition, weight gain, gestational diabetes, and hypertension during pregnancy are issues in Chautauqua County (Figure 54).

Figure 54. Maternal health indicators (WIC), 2008-2010

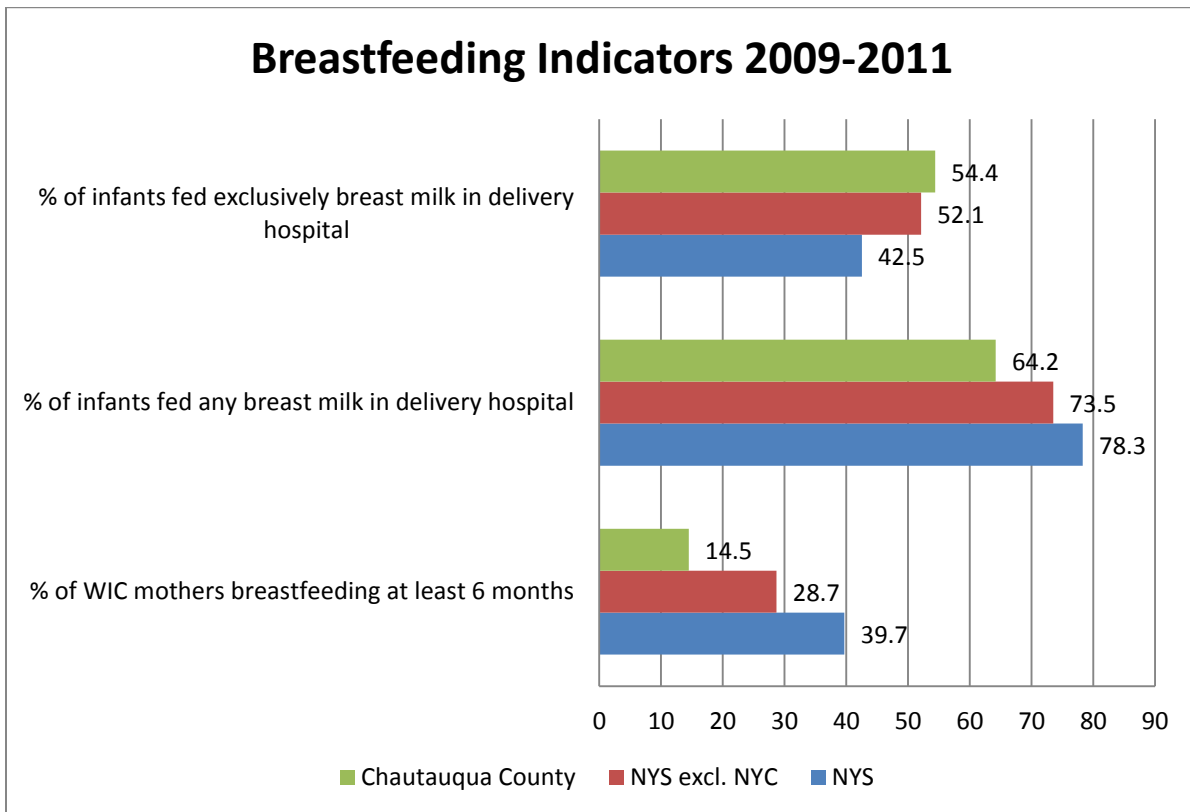


Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2008-2010

Breastfeeding

A greater percentage of infants are exclusively fed breast milk in delivery hospital in Chautauqua County (54.4%) than New York State excluding New York City (52.1%) and New York State as a whole (42.5%). 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 55 below, only 14.5% of WIC mothers in Chautauqua County were breastfeeding at 6 months.

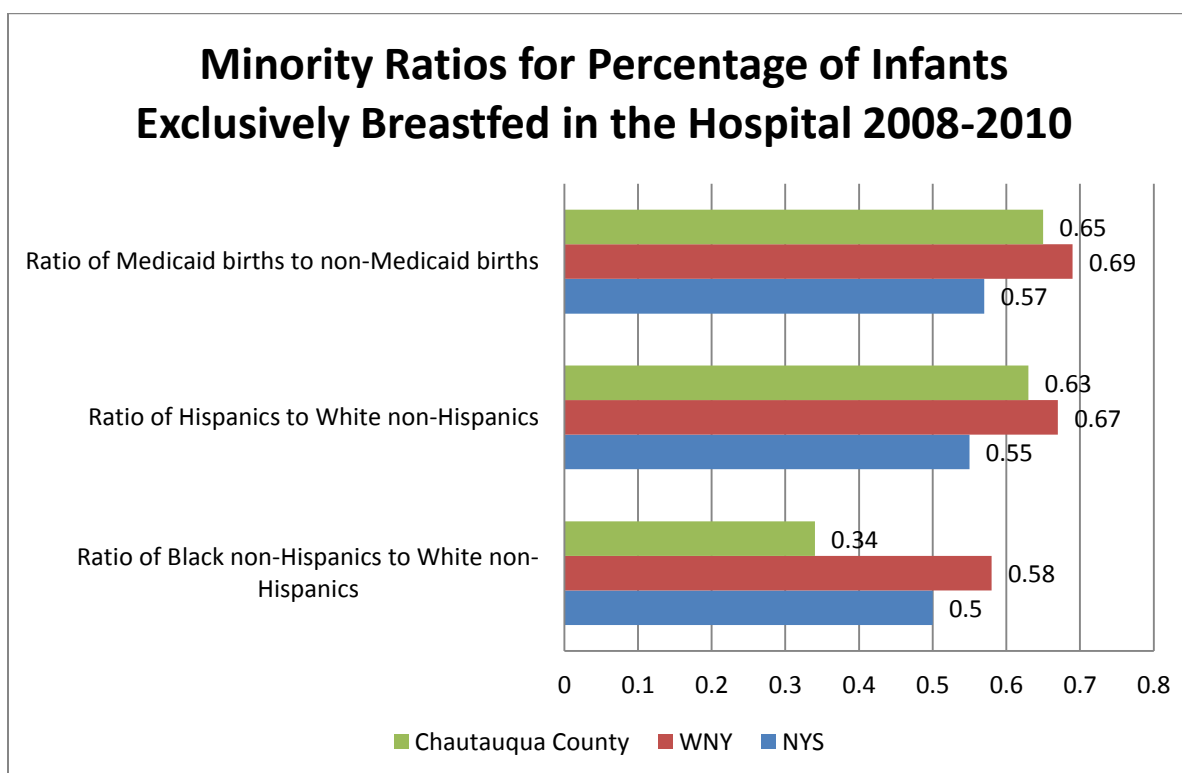
Figure 55. Breastfeeding indicators, 2009-2011



Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2008-2010

Exclusive breastfeeding in the delivery hospital was less common among Hispanic, Black non-Hispanic, and Medicaid births from 2008 to 2010, compared to White non-Hispanic and non-Medicaid births. In Chautauqua County, the greatest disparity was observed for Black non-Hispanic infants, for whom the percentage was just slightly more than one third of the percentage for White non-Hispanic births. This disparity was greater in the County than in Western New York and New York State, with respective ratios of 0.58 and 0.5.

Figure 56. Minority ratios for percentage of infants exclusively breastfed in the hospital, 2008-2010



Source: NYSDOH Indicators for Tracking Public Health Priority Areas 2013-2017 (2008-2010)

Low Birthweight

Very low birthweight (less than 1.5 kg) figures were similar among Chautauqua County, New York State, and New York State excluding New York City during 2008-2010. Low birthweight (less than 2.5 kg) births were slightly more common in Chautauqua County than New York State and New York State excluding New York City 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 24.

Table 24. Low birth weight and prematurity indicators, 2008-2010

	3 Year Total	Chautauqua County	NYS	NYS excl. NYC
<i>Low birthweight indicators</i>				
% very low birthweight (less than 1.5 kg) births	58	1.4	1.5	1.4
% very low birthweight (less than 1.5kg) singleton births	41	1	1.1	1
% low birthweight (less than 2.5 kg) births	352	8.5	8.2	7.7
% low birthweight (less than 2.5kg) singleton births	271	6.7	6.2	5.7
<i>% of premature births by gestational age</i>				
less than 32 weeks gestation	81	2	2	1.9
32 - less than 37 weeks gestation	387	9.7	9.9	9.3

less than 37 weeks gestation	468	11.8	12	11.2
% of births with a 5 minute APGAR less than 6	28	0.7	0.7	0.7

Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2008-2010

Newborn Drug-Related Discharges

During the time frame 2008-2010, sixty-three infants less than 28 days old were discharged from a hospital with a drug-related ICD-9 code, resulting in a rate of 157.1 infants per 10,000 newborn discharges. This rate was significantly higher than the New York State rate of 64 and the New York State excluding New York City rate of 78.4.

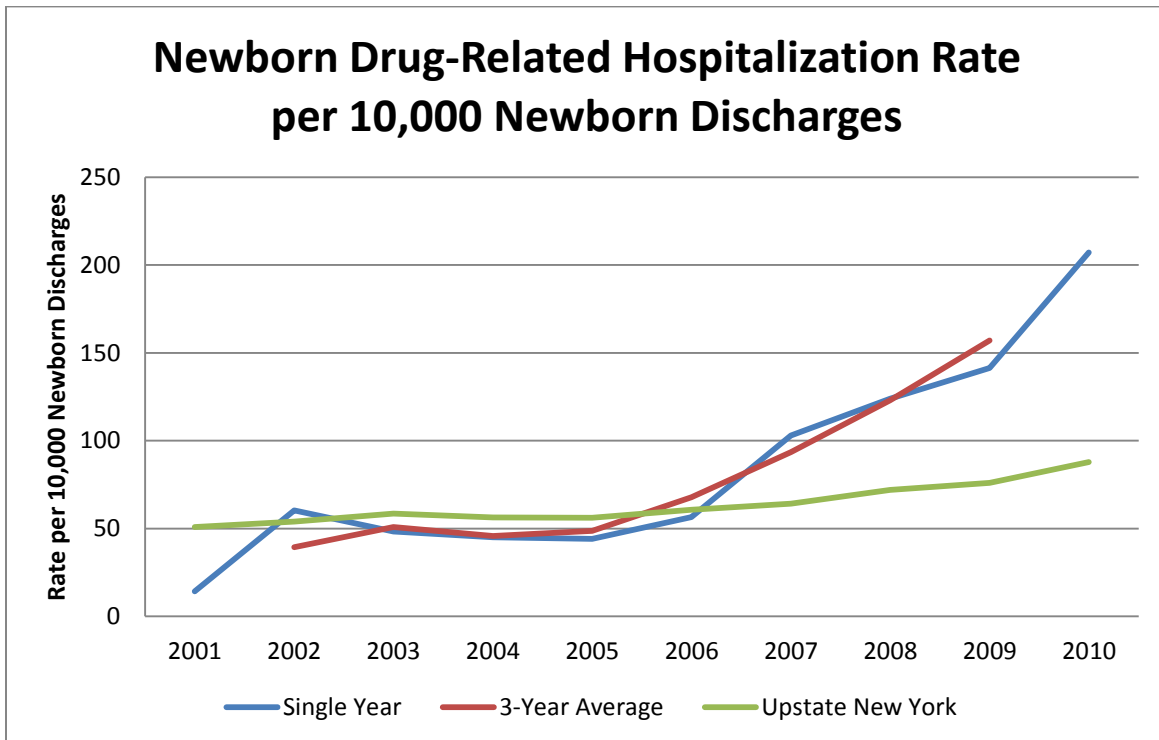
Table 25. Newborn drug-related discharge rate per 10,000 newborn discharges, 2008-2010

	3-Year Total	Chautauqua County	NYS	NYS excl. NYC
Newborn drug-related discharge rate per 10,000 newborn discharges	63	157.1	64	78.4

Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2008-2010

Examination of Chautauqua County newborn drug-related hospitalization rates from 2001 to 2010 reveals that this rate was relatively stable around 50 cases per 10,000 discharges until 2007 when the rate began to rise rapidly.

Figure 57. Newborn drug-related hospitalization rate per 10,000 newborn discharges, 2001-2010



Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2001-2010

A breakdown of ICD-9 codes for these figures was requested from NYSDOH. The following data was provided by state representatives. The rates of newborn hospitalizations due to narcotics and hallucinogenic agents and cocaine in Chautauqua County were nearly double the state rate.

Table 26. Newborn drug-related hospitalization rate per 10,000 newborn discharges, 2009-2011

<i>ICD -9 groups</i>	<i>Description</i>	Chautauqua County		NYS
		<i>Count</i>	<i>Rate</i>	<i>Rate</i>
760.7	Noxious influences affecting fetus or newborn via	0	0	1.9
760.72 and 760.73	Narcotics and Hallucinogenic agents	9	22.4	13.9
760.75	Cocaine	9	22.4	10.13
760.79	Fetus or newborn affected by: -immune sera transmitted via placenta or breast milk -unspecified medicinal agents transmitted via placenta or breast milk -unspecified toxic substance transmitted via placenta or breast milk	25	62.3	23.64
763.5	Maternal anesthesia and analgesic reactions and intoxication	0	0	1.73
779.5	Drug withdrawal syndrome in newborn	27	67.2	20.37
Total		70	174.3	72.6

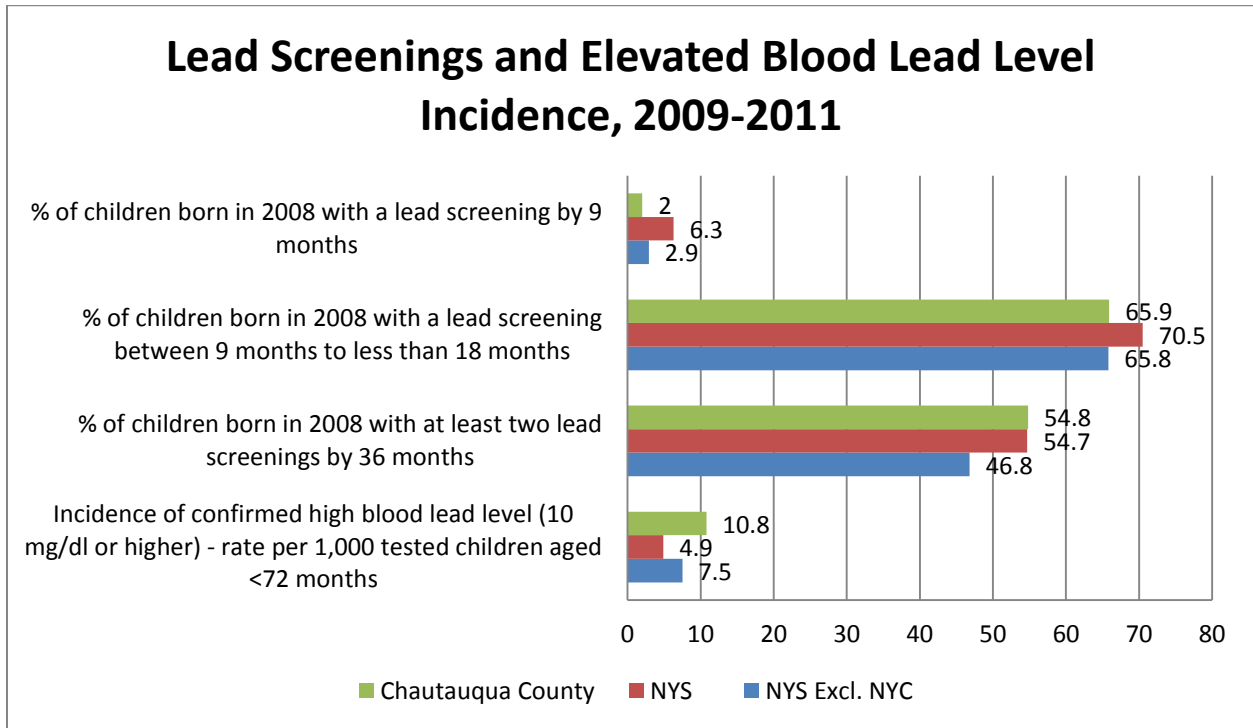
(Correspondence with Trang Nguyen, MD, Dr.PH, MPH, Deputy Director, Office of Public Health Practice, NYSDOH)

Childhood Health

Childhood Lead Poisoning

As identified in the demographic profile, 45.3% of homes in Chautauqua County were built prior to 1950. Because lead paint is more common among older homes, the threat of childhood lead poisoning is a concern in the county. Figure 58 displays lead screening and elevated blood lead level figures. Most Chautauqua County children born in 2008 (65.9%) were screened for lead between 9 and 18 months. This figure is similar to that of Upstate New York. Children born in 2008 were less likely to be screened for lead at least twice by 36 months, with only 54.8% tested. This figure was similar to, while slightly higher than state comparisons. The incidence of elevated blood lead levels (≥ 10 mg/dl) among children less than 72 months old was 10.8 per 1,000, which was significantly higher than the New York State rate of 4.9 and the New York State excluding New York City rate of 7.5.

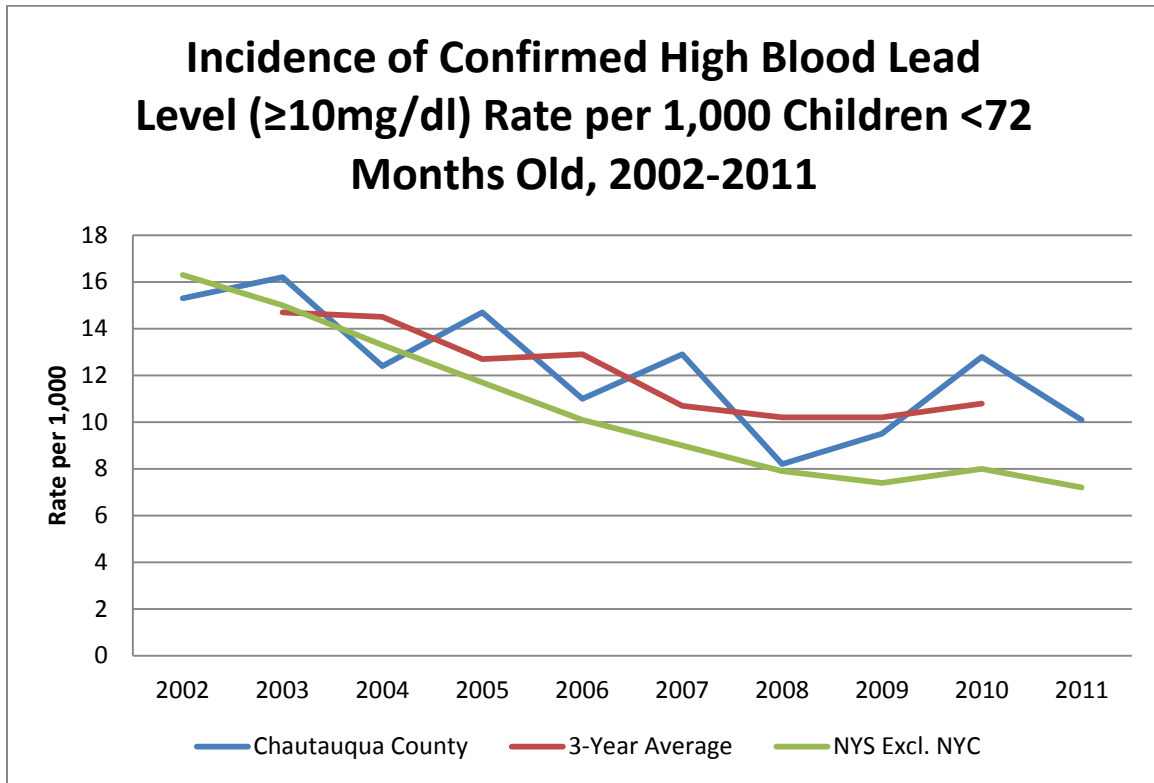
Figure 58. Lead screenings and elevated blood lead level incidence, 2009-2011



Source: NYSDOH Community Health Indicator Reports: Child and Adolescent Health Indicators 2009-2011

Figure 59 shows the incidence rate of confirmed high blood lead levels among children less than 72 months old from 2002 to 2011. Rates for Chautauqua County and New York State excluding New York City show a strong downward trend.

Figure 59. Incidence of confirmed high blood lead level (≥ 10 mg/dl) rate per 1,000 children <72 months old, 2002-2011

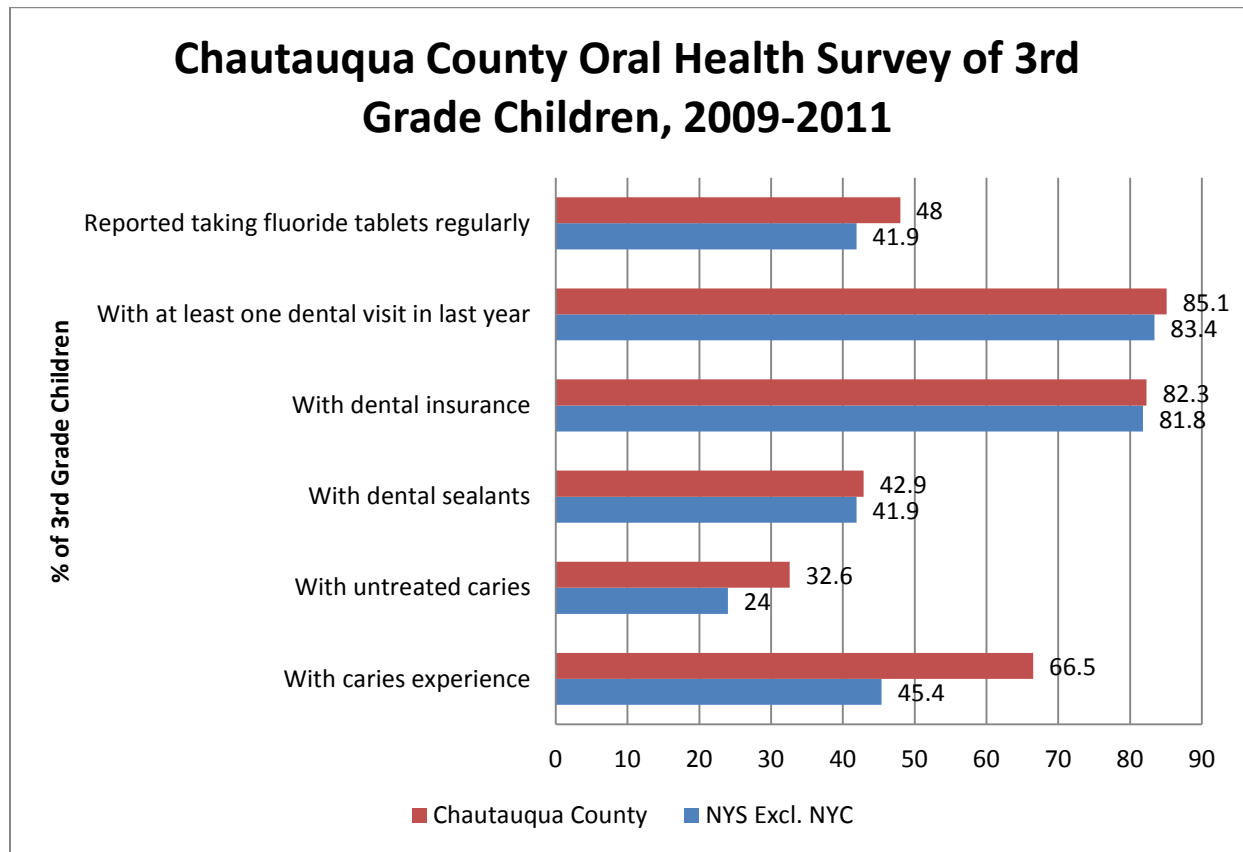


Source: NYSDOH Community Health Indicator Reports: Child and Adolescent Health Indicators 2002-2011

Oral Health

The Oral Health Survey of 3rd Grade Children, conducted by the New York State Department of Health from 2009 to 2011 looked at a number of oral health indicators for children. Compared to Upstate New York, a greater percentage of third graders reported taking fluoride tablets regularly (48%), had at least one dental visit within the past year (85.1%), had dental insurance (82.3%), and had dental sealants (42.9%). Despite these favorable indicators, untreated caries (32.6%) and ever had caries (66.5%) was greater among Chautauqua County students.

Figure 60. Chautauqua County oral health survey of 3rd grade children, 2009-2011



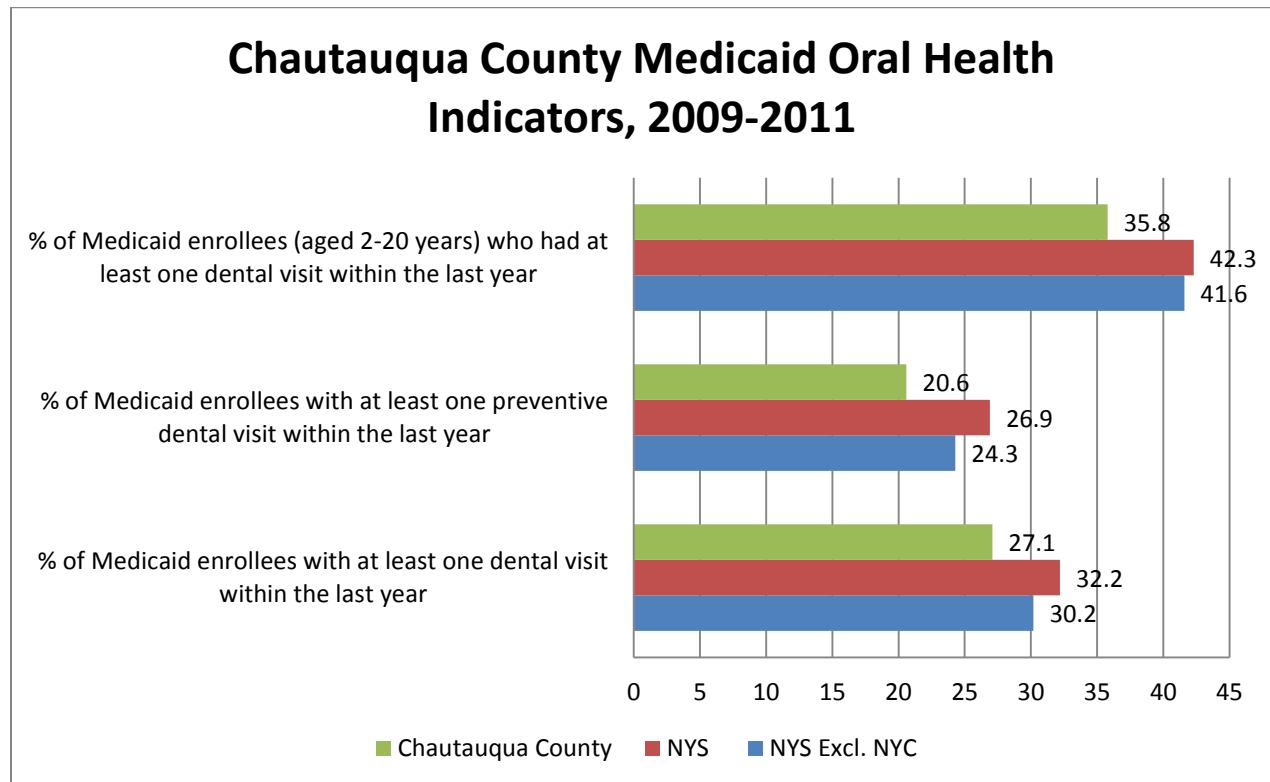
Source: NYSDOH Community Health Indicator Reports: Oral Health Indicators 2009-2011

From 2009 to 2011, Chautauqua County experienced 246 emergency room visits with dental caries as the primary complaint among children ages 3 to 5 years old. The resulting visit rate was 180.4 per 10,000 3-5 year olds. This rate was significantly higher than the New York State (68.6) and New York State excluding New York City (74.2) rates. (Oral Health Indicators 2009-2011)

According to the New York State eBRFSS, in 2008-2009, at 68.1%, Chautauqua County adults were less likely than New York State residents (71.1%) or New York State excluding New York City residents (72.7%) 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 2009-2011 are presented below. According to Medicaid claims, only 35.8% 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 NYS excluding NYC rates. Trends were consistent for Medicaid enrollees for preventive dental visits (20.6%) and dental visits among enrollees of all ages (27.1%).

Figure 61. Chautauqua County Medicaid oral health indicators, 2009-2011



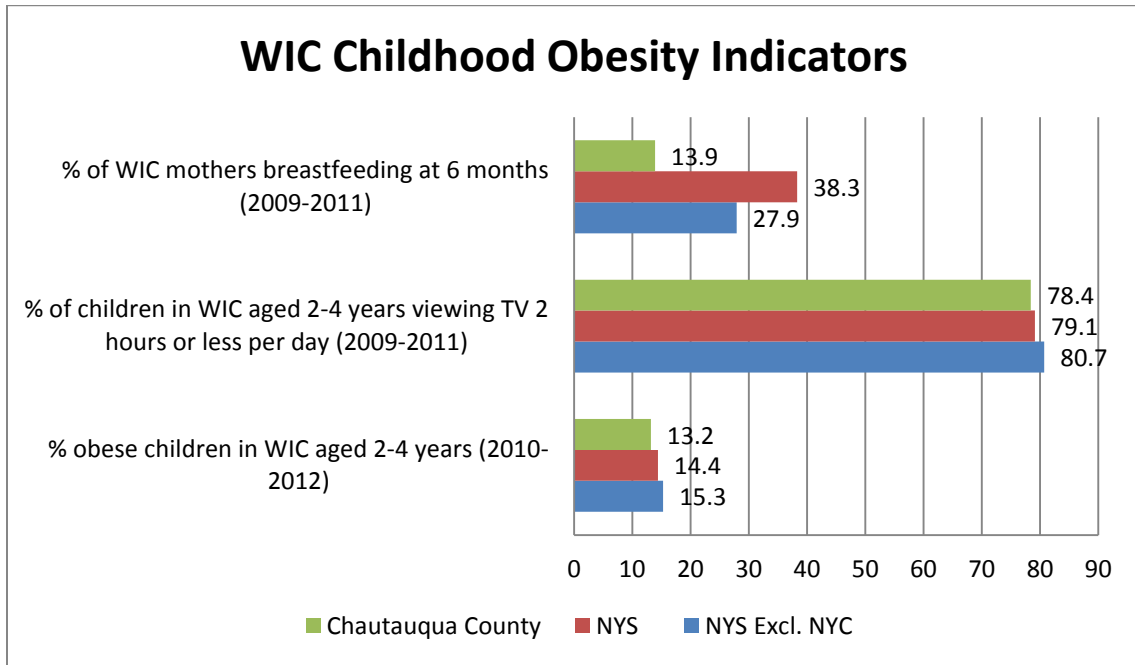
Source: NYSDOH Community Health Indicator Reports: Oral Health Indicators 2009-2011

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 2009-2011, 13.9% of mothers were still breastfeeding their babies at 6 months of age. This figure is much lower than the state comparison rates. In Chautauqua County, 78.4% of children in WIC ages 2-4 who viewed television two hours or less per day, which was just slightly lower than New York State (79.1%) and New York State excluding New York City (80.7%).

From 2010 to 2012, 13.2% of Chautauqua County children in WIC ages 2-4 were obese, which was lower than New York State (14.4%) and New York State excluding New York City (15.3%).

Figure 62. WIC childhood obesity indicators



Source: NYSDOH Community Health Indicator Reports: Obesity indicators, 2008-2010

Promote Mental Health and Prevent Substance Abuse

“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. About three-fourths of all MEB disorders are diagnosed between the ages of 14-24 years.

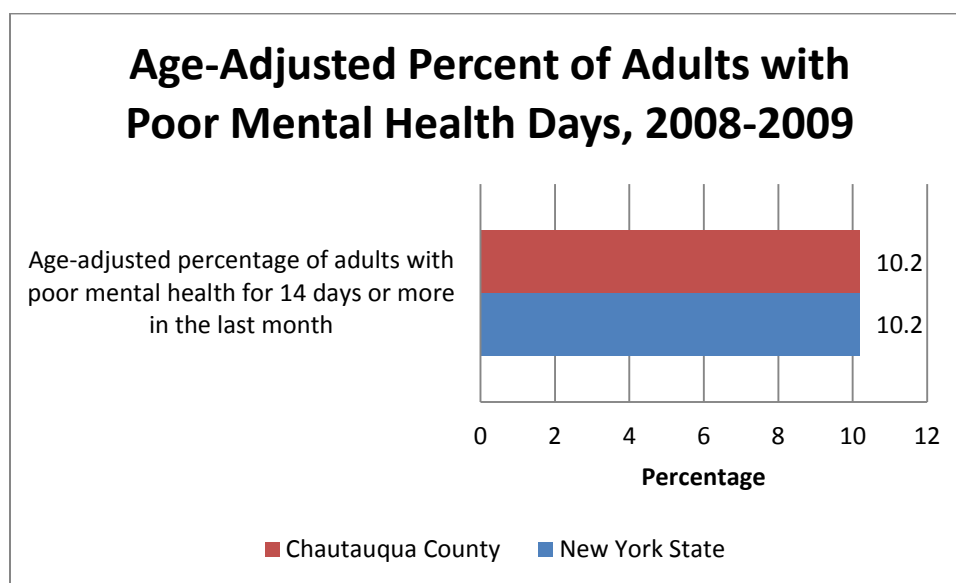
MEB health promotion is an emerging field that uses a strengths-based developmental approach. MEB disorder prevention includes mental illness prevention and substance abuse prevention. Substance abuse prevention has more than two decades of etiological and program outcome research, and evidence is emerging to show that mental illness can be prevented. In New York State, there is a critical need for quality mental, emotional and behavioral health promotion and prevention services. Promoting MEB health and preventing MEB disorders, while supporting their integration with quality treatment options, is a cost-effective approach.”

-New York State Prevention Agenda 2013-2017, Promote Mental Health and Prevent Substance Abuse Action Plan

Mental Health

The NYSDOH 2008-2009 Expanded Behavioral Risk Factor Surveillance System indicates that, when adjusted for age, 10.2% of adults in Chautauqua County experienced 14 or more poor mental health days within the last month. This figure was consistent with New York State as a whole.

Figure 63. Age-adjusted percent of adults with poor mental health days, 2008-2009



Indicators for Tracking Prevention Agenda Priority Areas, NYSDOH eBRFSS 2008-2009

The Chautauqua County Department of Mental Hygiene contracts with Crisis Services to operate a 24-hour mental health hotline. Services include immediate crisis intervention, supportive counseling, information and referrals and connect with services if immediate on-site intervention is needed to address the mental health crisis.

Data from this 24-hour hotline helps to broadly monitor the mental health status of Chautauqua County residents. A look at the total number of calls to the hotline from June 2011 to October 2013 (Figure 64) shows a gradual, but fluctuating overall increase in the utilization of this service.

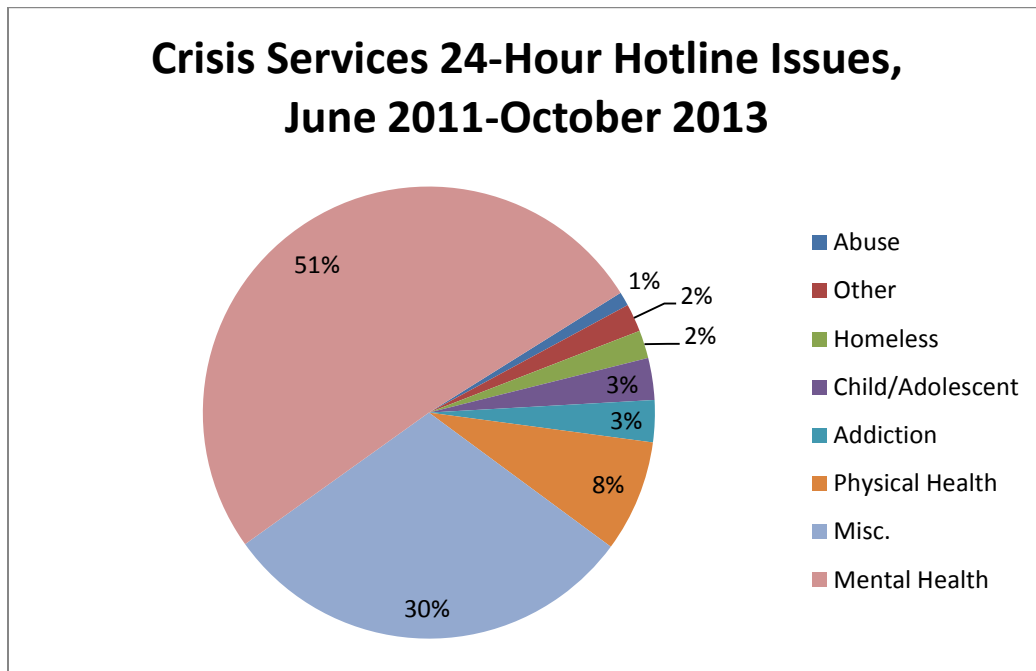
Figure 64. Crisis 24-hour hotline calls, June 2011-October 2013



Source: Personal Correspondence with Suicide Prevention & Crisis Service, Inc. November 4, 2013

A breakdown of calls to the hotline by identified issues shows that the majority of calls (51%) were for mental health issues. An additional 3% of the calls were attributed to addiction issues.

Figure 65. Crisis services 24-hour hotline issues, June 2011-October 2013



Source: Personal Correspondence with Suicide Prevention & Crisis Service, Inc. November 4, 2013

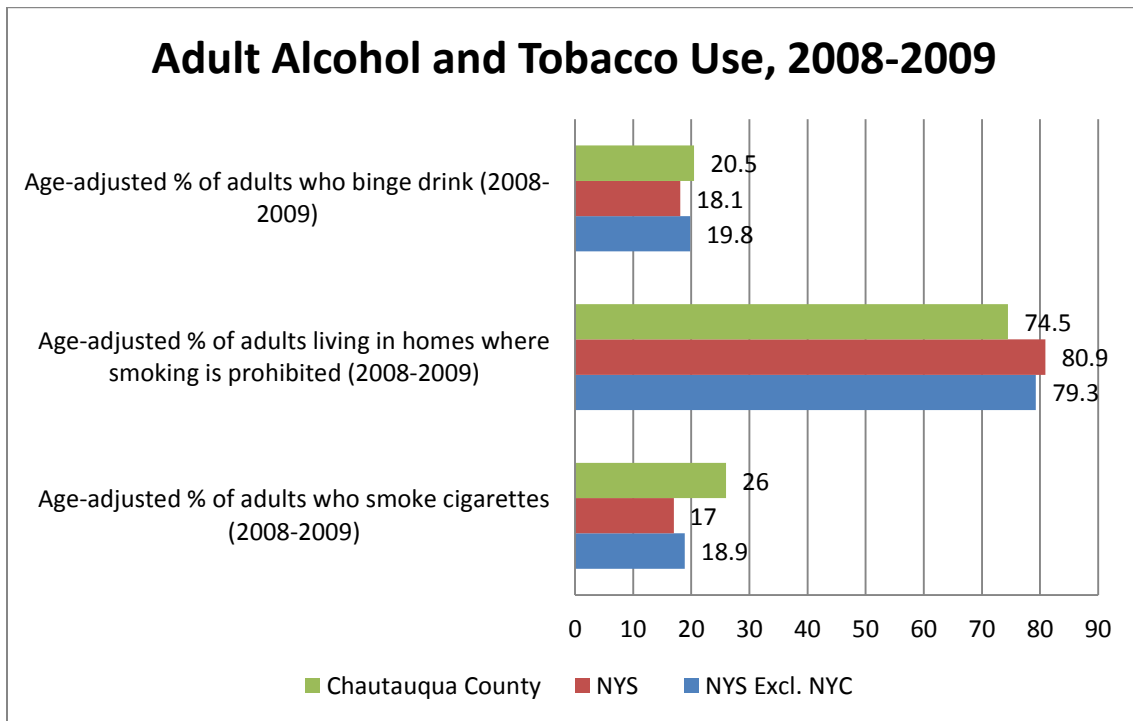
Alcohol, Tobacco, and Substance Abuse

In 2008-2009, 20.5% of adults (ages 18 and older) in Chautauqua County self-reported that they were binge drinkers in 2008-2009, slightly higher than the NYS (18.1%) and NYS excluding NYC (19.8%) rates. (NYSDOH eBRFSS)

Most Chautauqua County adults lived in homes where smoking is prohibited at 74.5% in 2008-2009. In New York State as a whole, more adults lived in homes where smoking was prohibited at 80.9%, compared to 79.3% in Upstate New York. (NYSDOH eBRFSS)

At 26%, the rate of Chautauqua County current adult cigarette smokers in 2008-2009 was significantly higher than the New York State (17%) and New York State excluding New York City (18.9%) rates. (NYSDOH eBRFSS)

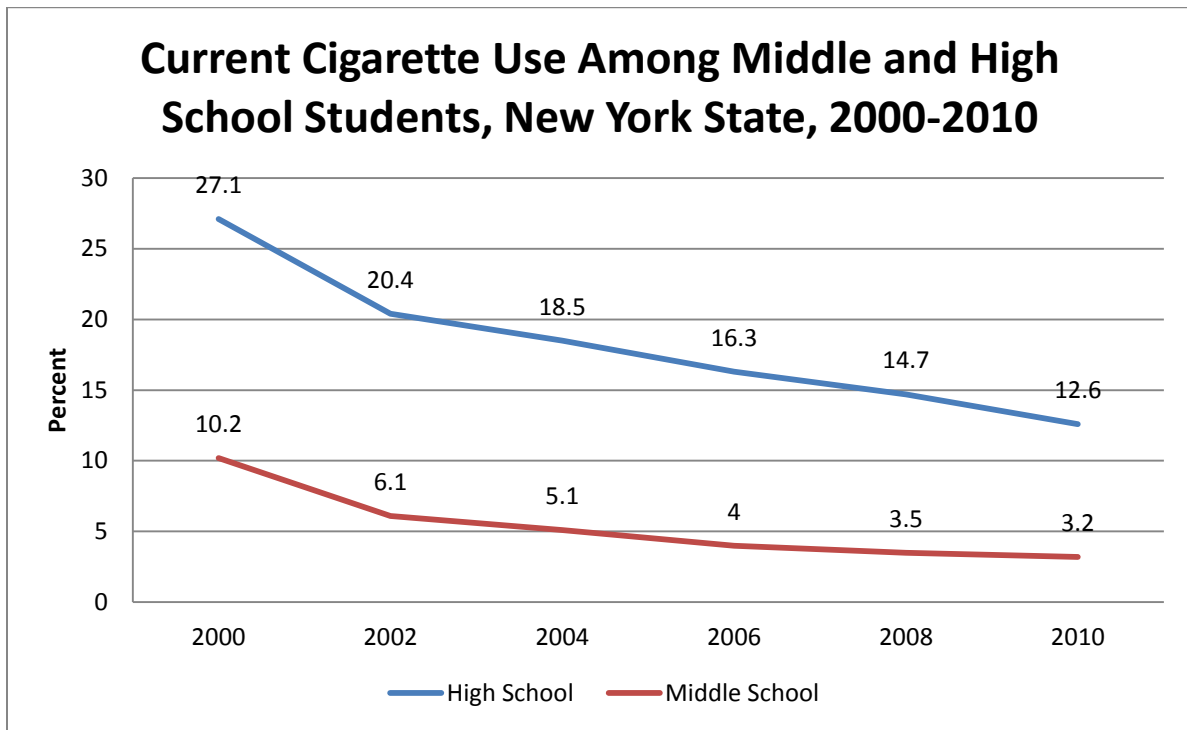
Figure 66. Adult alcohol and tobacco use, 2008-2009



Source: NYSDOH Community Health Indicator Reports: Tobacco, Alcohol and Other Substance Abuse Indicators 2008-2009

Current cigarette use among middle and high school students figures for New York State were generated by the NYSDOH Youth Tobacco Survey. The following time trend was adapted from the figure presented in Youth Prevention and Adult Smoking in New York State published in March 2011. From 2002 to 2010, cigarette use drastically decreased among both middle and high school students.

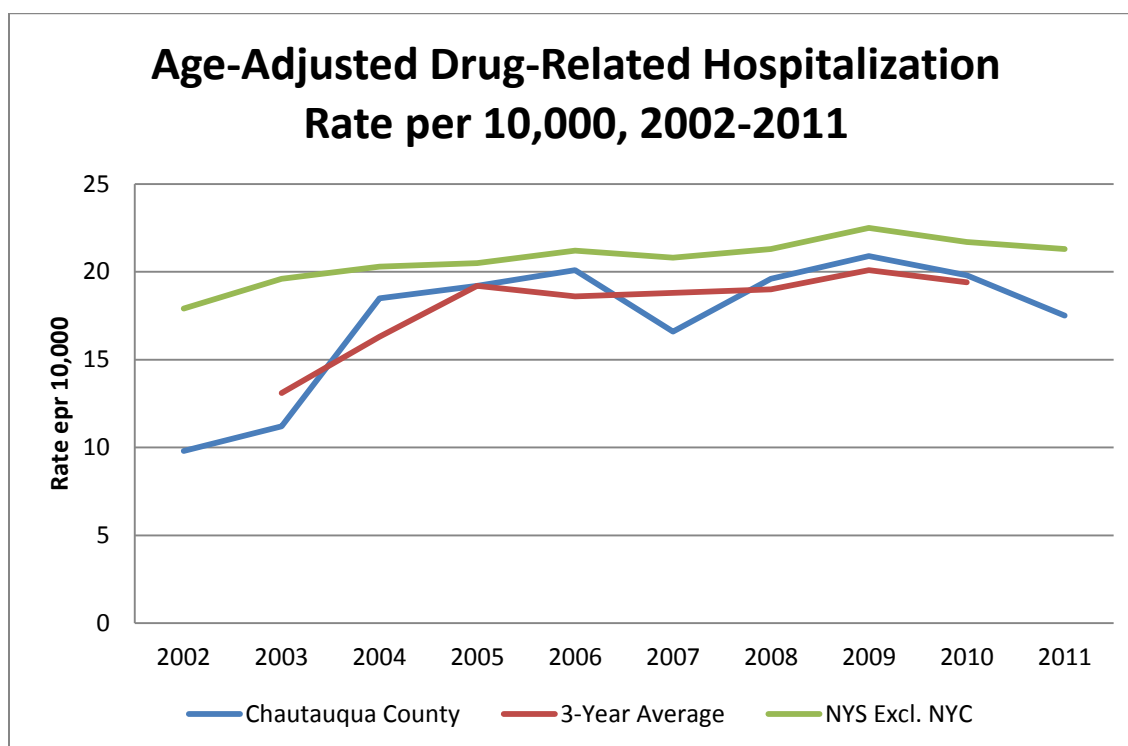
Figure 67. Current cigarette use among middle and high school students, New York State, 2000-2010



In 2009-2011, there were 700 drug-related hospitalizations in Chautauqua County, resulting in a crude hospitalization rate of 17.4 per 10,000 and an age-adjusted hospitalization rate of 19.4 per 10,000 county residents. These figures were both significantly lower than the state comparison rates.

A look at age-adjusted drug-related hospitalization rates per 10,000 over time from 2002 to 2011 shows an overall increase in Chautauqua County with periodic increases and decreases (Figure 68).

Figure 68. Age-adjusted drug-related hospitalization rate per 10,000, 2002-2011



Source: NYSDOH Community Health Indicator Reports: Tobacco, Alcohol and Other Substance Abuse Indicators 2008-2009

Table 27 displays the number and rates for juvenile arrests for drug use/possession/sale for youth and young adult driving while intoxicated arrests for 2005 and 2012 in Chautauqua County. A dramatic decrease in these arrests from 2005 to 2012 is apparent. However, the rate of young adults arrested for driving while intoxicated per 10,000 arrests for young adults 16-21 years was much higher in Chautauqua County (56.3) than New York State (29.6) in 2012.

Table 27. Drug and alcohol related juvenile and young adult arrests

Indicator	Chautauqua County				NYS
	2005		2012		2012
	Number	Rate	Number	Rate	Rate
Juvenile- Arrests for Drug Use/Possession/Sale, number and rate/10,000 youth under 16 years old	26	16.1	*6	*4.1	N/A
Young Adults- Driving While Intoxicated, number and rate/10,000 arrests for young adults age 16-21 years	133	101.2	70	56.3	29.6

*Rate is unstable

Child Well-being, Chautauqua County Report (Kids Well-being Indicator Clearinghouse)

Newborn Drug-Related Discharges

During the time frame 2008-2010, sixty-three infants less than 28 days old were discharged from a hospital with a drug-related ICD-9 code, resulting in a rate of 157.1 infants per 10,000 newborn discharges. This rate was significantly higher than the New York State rate of 64 and the New York State excluding New York City rate of 78.4.

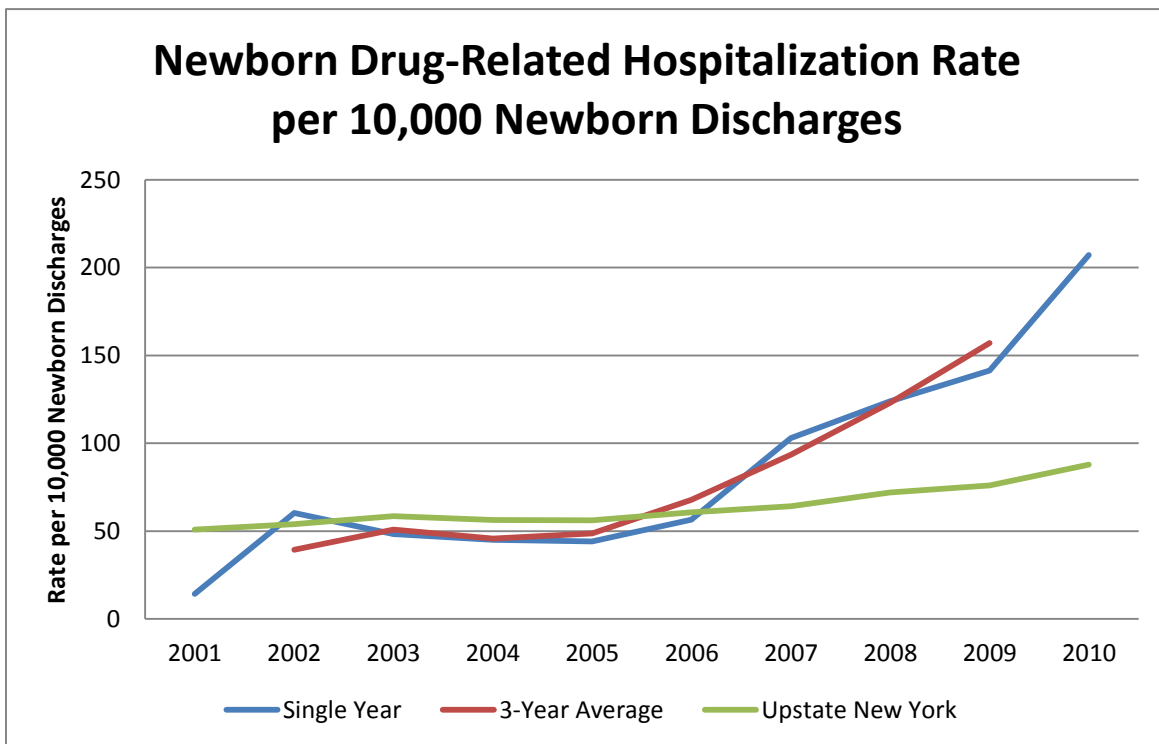
Table 28. Newborn drug-related discharge rate per 10,000 newborn discharges, 2008-2010

	3-Year Total	Chautauqua County	NYS	NYS excl. NYC
Newborn drug-related discharge rate per 10,000 newborn discharges	63	157.1	64	78.4

Source: NYSDOH Maternal and Infant Health Indicators 2008-2010

Examination of Chautauqua County newborn drug-related hospitalization rates from 2001 to 2010 reveals that this rate was relatively stable around 50 cases per 10,000 discharges until 2007 when the rate began to rise rapidly.

Figure 69. Newborn drug-related hospitalization rate per 10,000 newborn discharges



Source: NYSDOH Community Health Indicator Reports: Maternal and Infant Health Indicators 2001-2010

A breakdown of ICD-9 codes for these figures was requested from NYSDOH. The following data was provided by state representatives. The rates of newborn hospitalizations due to narcotics and hallucinogenic agents and cocaine in Chautauqua County were nearly double the state rate.

Table 29. Newborn drug-related hospitalization rate per 10,000 newborn discharges, 2009-2011

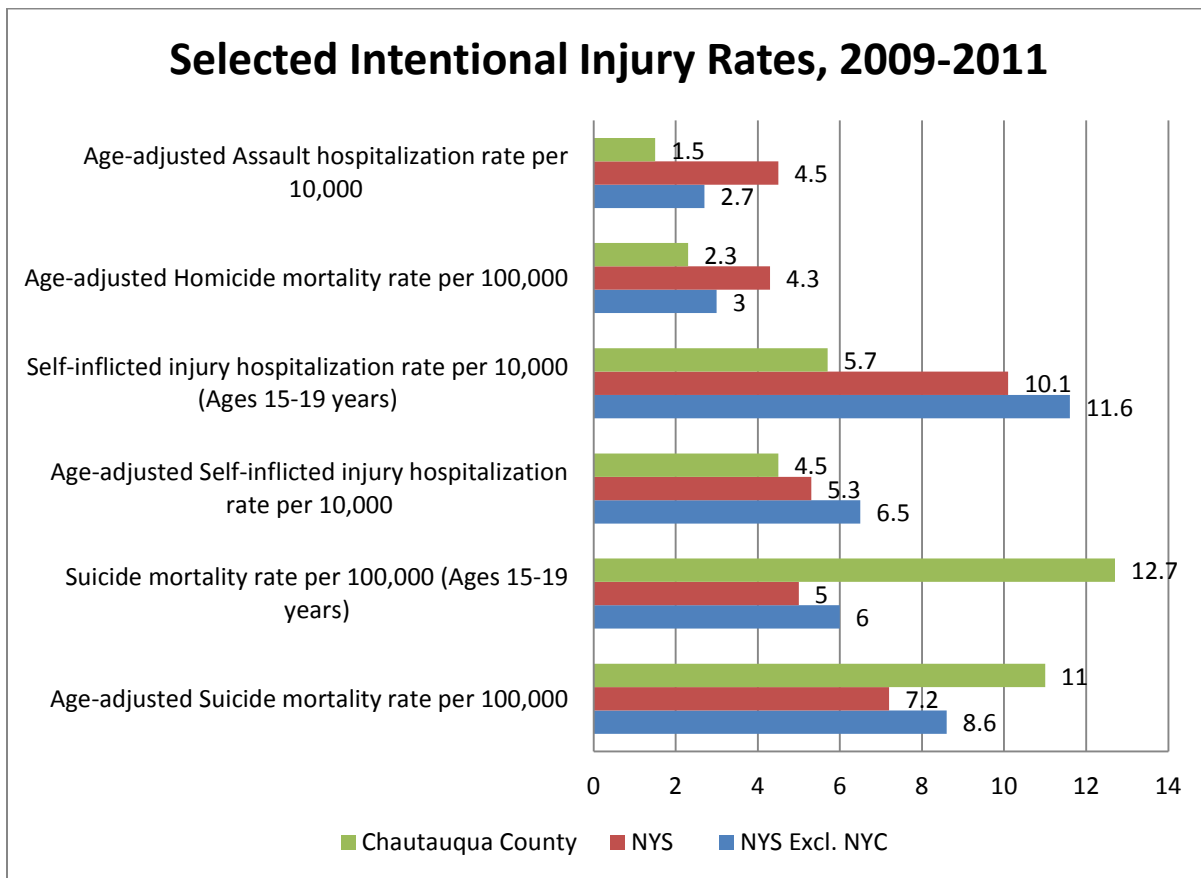
<i>ICD -9 groups</i>	<i>Description</i>	Chautauqua County		NYS
		<i>Count</i>	<i>Rate</i>	<i>Rate</i>
760.7	Noxious influences affecting fetus or newborn via placenta or breast milk	0	0	1.9
760.72 and 760.73	Narcotics and Hallucinogenic agents	9	22.4	13.9
760.75	Cocaine	9	22.4	10.13
760.79	Fetus or newborn affected by: -immune sera transmitted via placenta or breast milk -unspecified medicinal agents transmitted via placenta or breast milk -unspecified toxic substance transmitted via placenta or breast milk	25	62.3	23.64
763.5	Maternal anesthesia and analgesic reactions and intoxication	0	0	1.73
779.5	Drug withdrawal syndrome in newborn	27	67.2	20.37
Total		70	174.3	72.6

(Correspondence with Trang Nguyen, MD, Dr.PH, MPH, Deputy Director, Office of Public Health Practice, NYSDOH)

Intentional Injury to Self and Others

Chautauqua County experienced comparatively lower rates of assault hospitalizations, homicide mortality, and self-inflicted injury hospitalization than New York State and New York State excluding New York City from 2009 to 2011. During the same time period, the age-adjusted suicide mortality rate was significantly higher in Chautauqua County at 11 deaths per 100,000 residents than New York State (7.2) and New York State excluding New York City (8.6). The suicide mortality rate for teens ages 15-19 was also much higher, but the number of cases was fewer than ten, and therefore unstable.

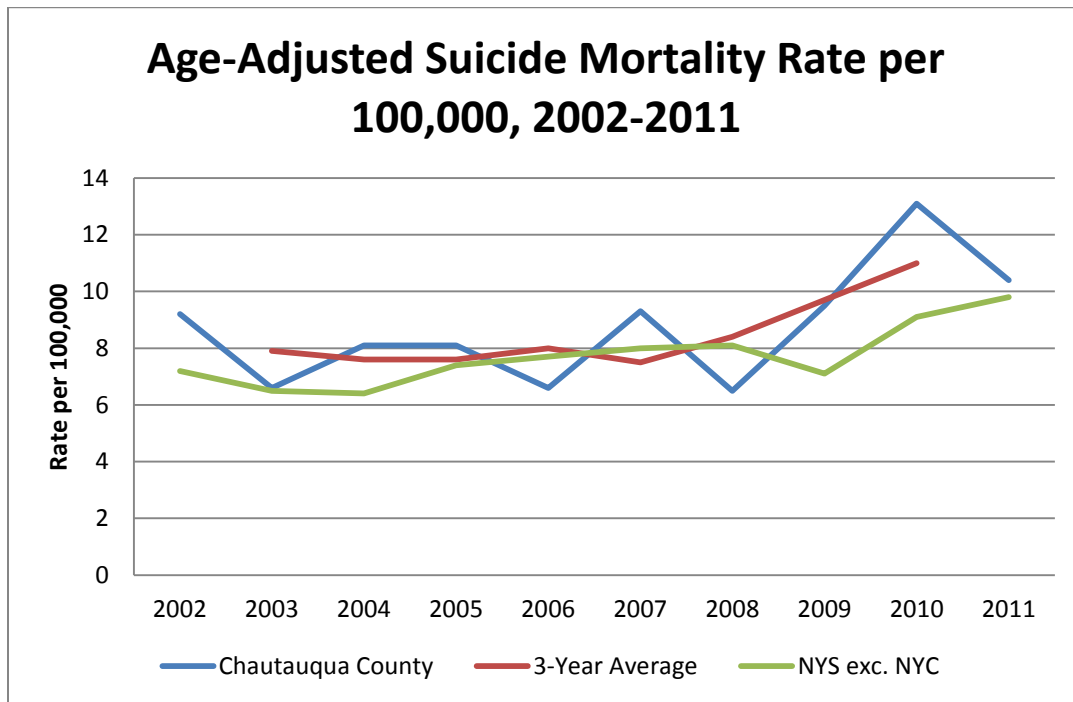
Figure 70. Selected intentional injury rates, 2009-2011



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

A look at the age-adjusted suicide mortality rate (Figure 71) per 100,000 over 2002-2011 shows a noticeable increase in 2010 and 2011.

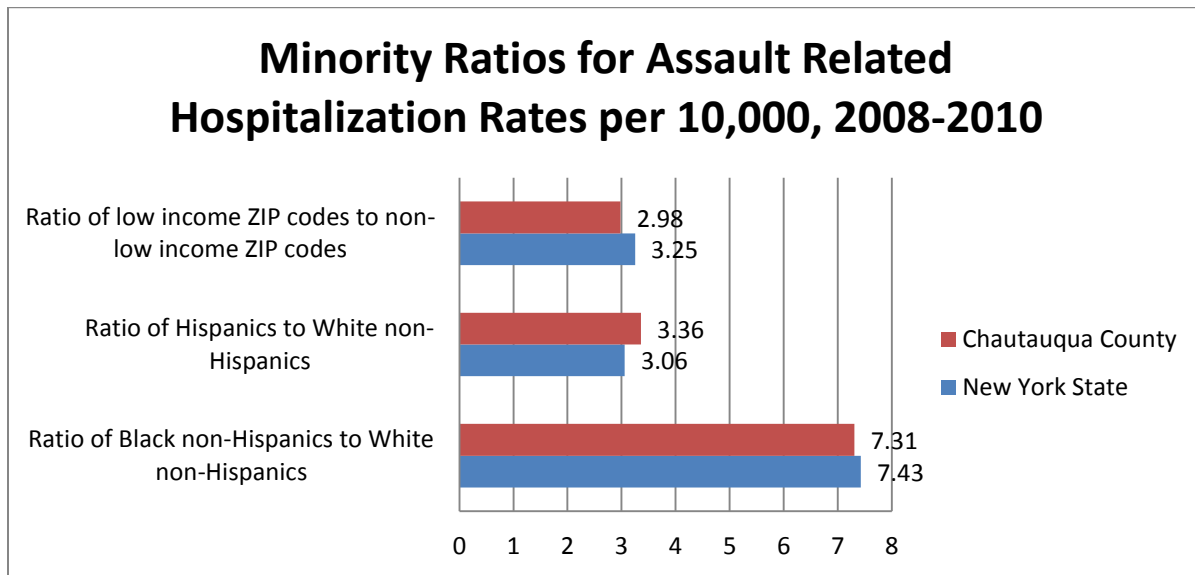
Figure 71. Age-adjusted suicide mortality rate per 100,000, 2002-2011



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

Assault related hospitalization rates per 10,000 were 2.98 times as great for patients from low income ZIP codes as compared to patients from non-low income ZIP codes. This ratio was slightly higher for New York State as a whole. The rate of assault related hospitalizations was 3.36 times greater for Hispanics than White non-Hispanics, and the rate for Black non-Hispanics was 7.31 times greater than for White non-Hispanics.

Figure 72. Minority ratios for assault related hospitalization rates per 10,000, 2008-2010



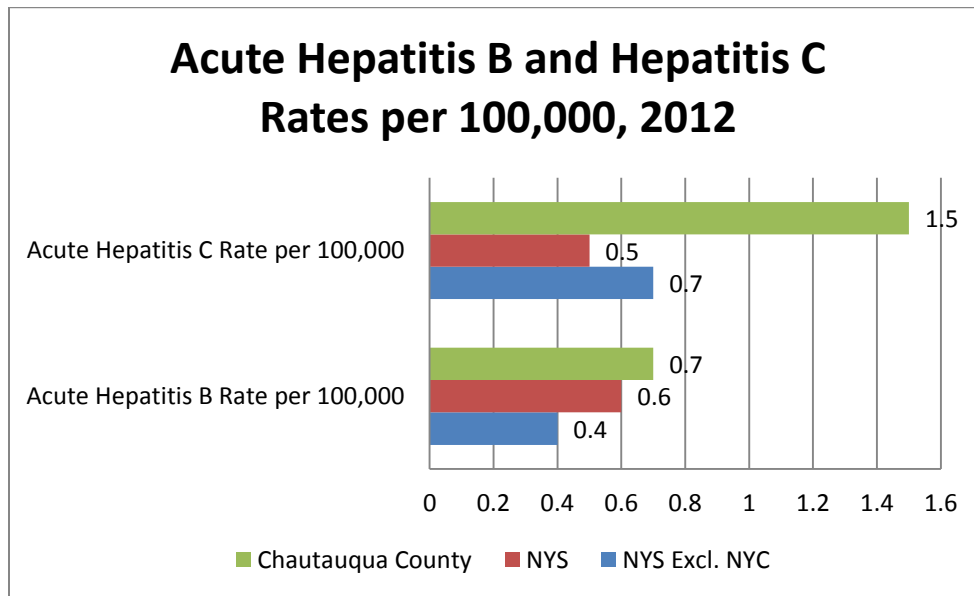
Source: NYSDOH Community Health Indicator Reports: Injury Indicators 2009-2011

Blood-Borne Diseases

Hepatitis B and C

The New York State Department of Health Communicable Disease Reports provide rates for Acute Hepatitis B and C. In 2012, there was one case of Acute Hepatitis B in Chautauqua County, resulting in a rate of 0.7 per 100,000 residents, compared to 0.6 in NYS and 0.4 in NYS excluding New York City. There were two cases of Acute Hepatitis C in Chautauqua County, resulting in a rate of 1.5 per 100,000. This was greater than the NYS rate of 0.5 and the NYS excluding NYC rate of 0.7. Because the number of cases for both Hepatitis B and C was so low, this rate is unstable.

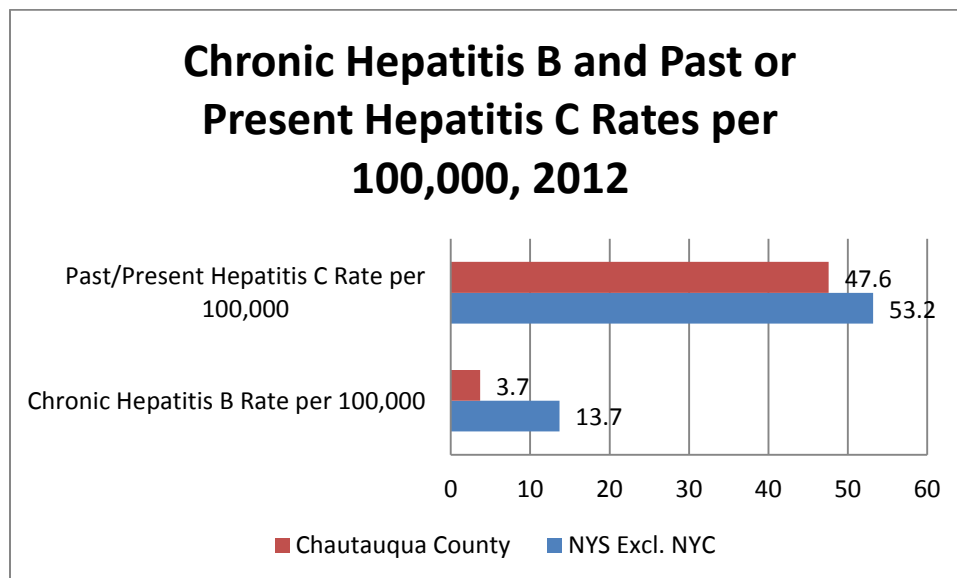
Figure 73. Acute hepatitis B and hepatitis C rates per 10,000, 2012



Source: NYSDOH Communicable Disease Reports, 2012

The rate of Chronic Hepatitis B in 2012 was 3.7 per 100,000 in Chautauqua County, compared to 13.7 in New York State excluding New York City. While lower than NYS excluding NYC rate, at 47.6 per 100,000 population, the rate of past/present Chronic Hepatitis C was much greater than that of Chronic Hepatitis B. In total, there were 64 cases of Past/Present Hepatitis C in Chautauqua County in 2012.

Figure 74. Chronic hepatitis B and past or present hepatitis C rates per 100,000, 2012

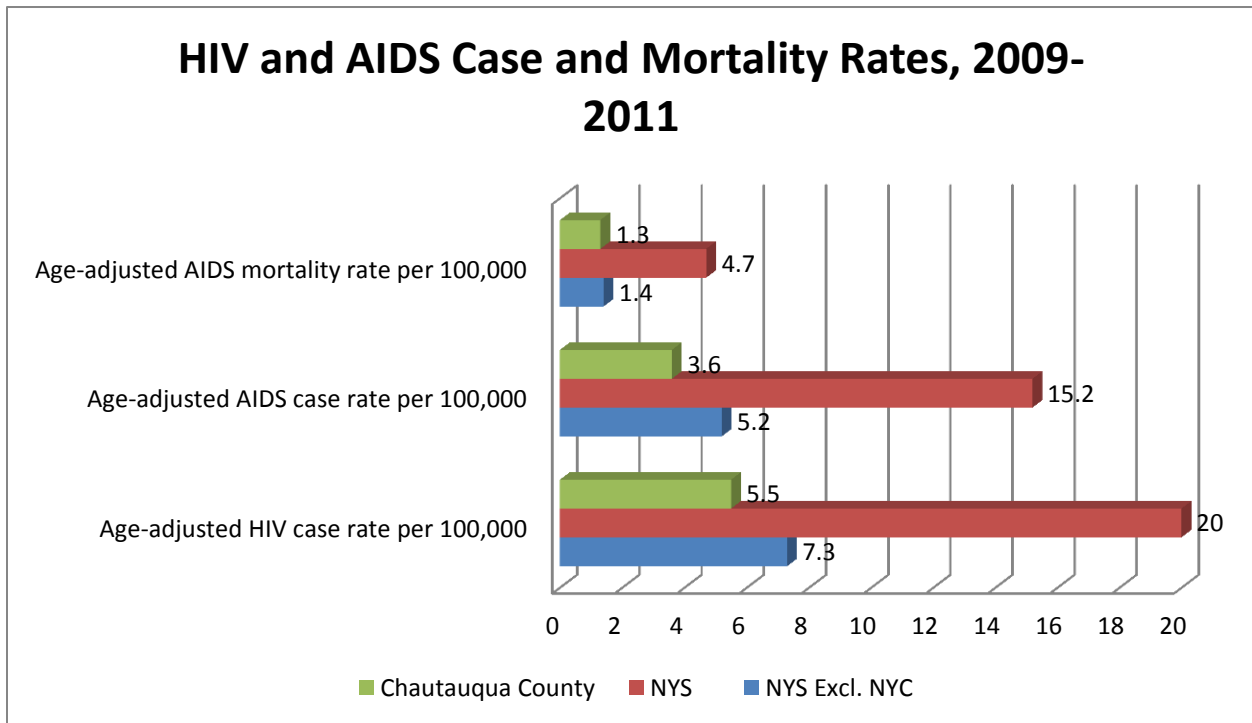


Source: NYSDOH Communicable Disease Reports, 2012

HIV and AIDS

In 2009-2011, 21 new cases of HIV occurred in Chautauqua County. The resulting age-adjusted case rate per 100,000 was 5.5 in the county, slightly lower than the NYS excluding NYC rate of 7.3, and significantly lower than the New York State rate of 20. During the same time period, there were 14 new cases of AIDS and 6 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.

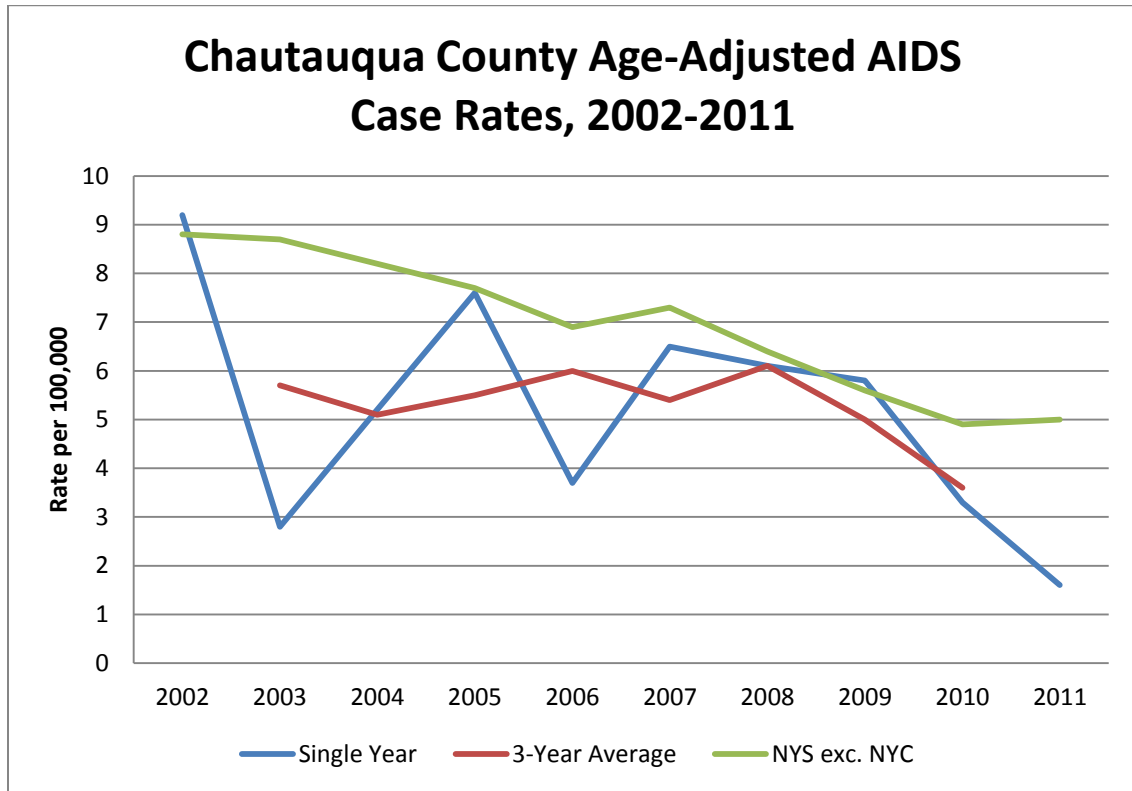
Figure 75. HIV and AIDS case and mortality rates, 2009-2011



Source: NYSDOH Community Health Indicator Reports: HIV and AIDS and Other Sexually Transmitted Infections Indicators, 2009-2011

Ten years of data for AIDS case rates shows a distinct downward trend in both Chautauqua County and New York State excluding New York City. This trend is evident in Figure 76.

Figure 76. Chautauqua County age-adjusted AIDS case rates, 2002-2011



Source: NYSDOH Community Health Indicator Reports: HIV and AIDS and Other Sexually Transmitted Infections Indicators, 2009-2011

Prevent HIV, STDs, Vaccine Preventable Diseases and Healthcare Associated Infections

“HIV/AIDS, sexually transmitted diseases (STDs) and hepatitis C (HCV) are significant public health concerns. New York State (NYS) remains at the epicenter of the HIV epidemic in the country, ranking first in the number of persons living with HIV/AIDS. By the end of 2010, approximately 129,000 New Yorkers were living with HIV or AIDS, with nearly 3,950 new diagnoses of HIV infection in 2010. Furthermore, 123,122 New Yorkers had STDs, representing 70 percent of all communicable diseases reported Statewide in 2010. The number of people with chronic or resolved cases of HCV in NYS exceeded 175,000 between 2001 and 2009. However, many of those with chronic HCV do not know they are infected, and recently it has been noted that more New Yorkers are dying from HCV than from HIV.

The same behaviors and community characteristics associated with HIV also place individuals and communities at risk for STDs and viral hepatitis. STDs increase the likelihood of HIV transmission and acquisition. Epidemiological data increasingly point to HIV, STDs and HCV as "syndemics", or infections which occur in similar groups of people with the same behavioral risk factors. Notably, in the United States in 2010, the leading cause of death among people with HIV was liver disease from co-infection with HCV.

Immunization is one of the most successful and safest public health strategies for preventing communicable diseases. High immunization rates have reduced vaccine-preventable disease (VPD) to extremely low levels in the United States. In New York State (NYS), high immunization levels are achieved by the time children reach school age and are supported by school entry laws. However, the immunization rates of very young children, 19-35 months of age, are still below the Healthy People 2020 goal of 80 percent. For vaccines recommended for adolescents, NYS has achieved the Healthy People 2020 goal only for Tdap, which is a school entry requirement for sixth grade. Parent education is needed to ensure that all children are immunized on schedule. Finally, pertussis, influenza and disease caused by human papilloma virus (HPV) remain priorities for intervention because of their high prevalence, their levels of morbidity and mortality, and the opportunity for prevention through vaccination.

Many Healthcare-Associated Infections are preventable. Since 2007, there has been a 41 percent reduction in central line associated bloodstream infections (CLABSIs), in NYS intensive care units; this means 669 fewer infections, and between 80 and 167 fewer deaths in 2011 than there would have been had the 2007 rates persisted. Additionally, the reduction in CLABSI rates resulted in savings of \$12 billion to 48 million from 2008-2011. Similarly, there has been a 13 percent reduction in surgical site infections (SSIs) in certain selected procedures (colon, hip

replacement, and coronary artery bypass graft) since 2007, which has resulted in reduced morbidity and mortality, and savings of \$9 million to \$27 million. Clostridium difficile infection (CDI) rates were publicly reported for the first time in 2010. The 2011 rates did not show a decrease yet, although the interpretation of the data is complicated by the fact that many hospitals have switched to more sensitive testing methods that would be expected to identify more infections.”

-New York State Prevention Agenda 2013-2017, Promote a Healthy and Safe Environment Action Plan

Vaccine Preventable Diseases

From 2009 to 2011, Chautauqua County rates of pertussis, Haemophilus Influenzae, and *E. coli* O157 exceeded those of New York State and New York State excluding New York City. Hospitalization rates for pneumonia and flu were also greater in Chautauqua County. During the same time period, Chautauqua County rates of mumps and Lyme disease were noticeably lower than the state rates.

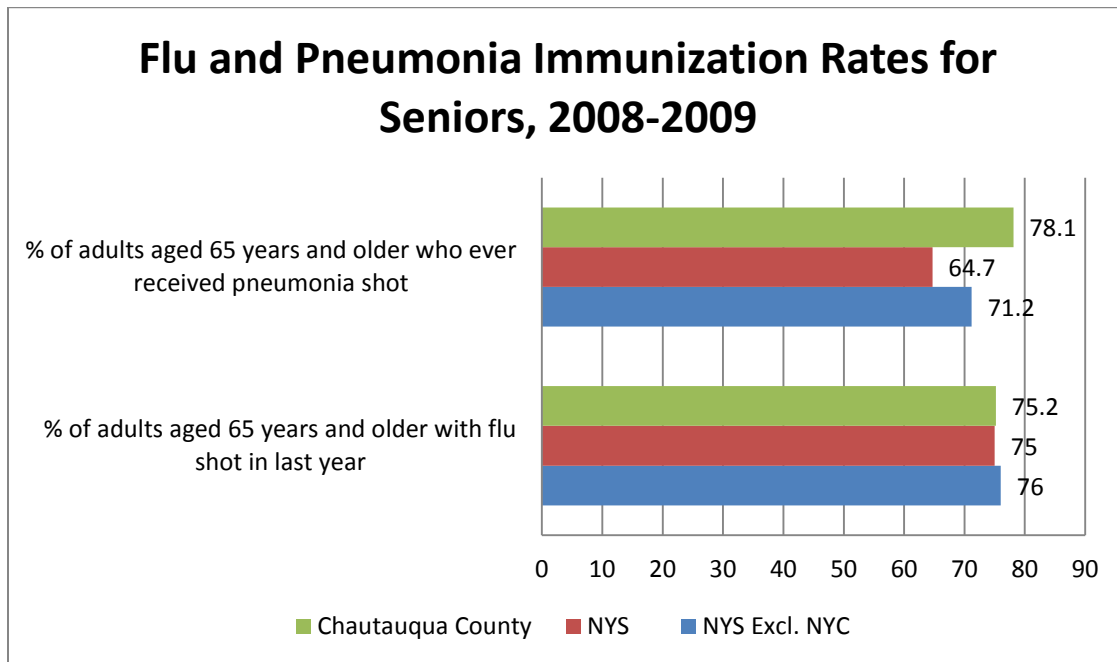
Table 30. Selected communicable disease counts and rates, 2009-2011

	3 Year Total	Chautauqua County	NYS Excl. NYC	NYS
Pneumonia/flu hospitalization rate (aged 65 years and older) per 10,000	912	136.8	132.7	122.3
Pertussis incidence rate per 100,000	47	11.7	5.7	4.2
Mumps incidence rate per 100,000	2	0.5	3.9	5.5
Meningococcal incidence rate per 100,000	2	0.5	0.2	0.2
H. influenza incidence rate per 100,000	15	3.7	1.6	1.5
Hepatitis A incidence rate per 100,000	0	0	0.5	0.7
Acute hepatitis B incidence rate per 100,000	2	0.5	0.5	0.7
Tuberculosis incidence rate per 100,000	2	0.5	2.1	4.9
E. coli O157 incidence rate per 100,000	5	1.2	0.7	0.6
Salmonella incidence rate per 100,000	37	9.2	12.6	13.6
Shigella incidence rate per 100,000	1	0.2	2.5	3.5
Lyme disease incidence rate per 100,000	18	4.5	62.8	40.4

Source: Community Health Indicators: Communicable Disease Indicators 2008-2009

Immunization rates for flu and pneumonia among Chautauqua County residents aged 65 years and older were relatively similar to state comparisons. From 2008 to 2009, 78.1% of county senior citizens had received the pneumonia shot, while 75.2% had received the flu shot.

Figure 77. Flu and pneumonia immunization rates for seniors, 2008-2009

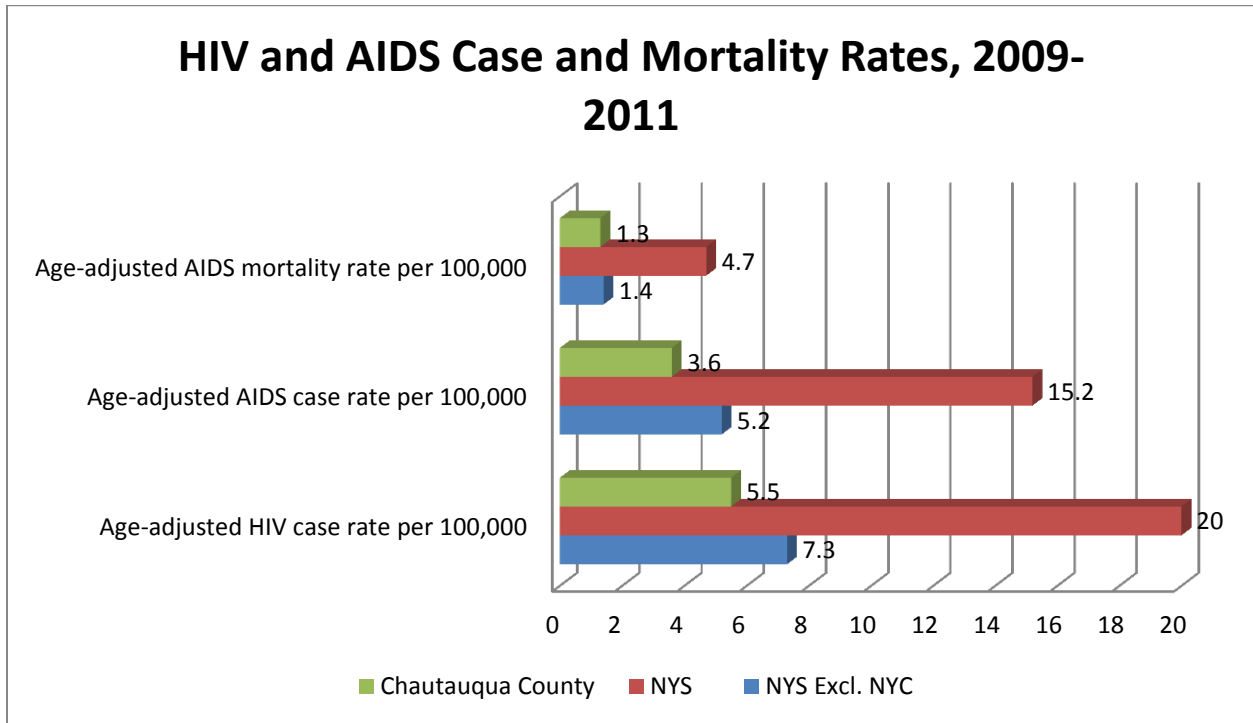


Source: NYSDOH Community Health Indicators: Communicable Disease Indicators 2008-2009

HIV/AIDS and STIs

In 2009-2011, 21 new cases of HIV occurred in Chautauqua County. The resulting age-adjusted case rate per 100,000 was 5.5 in the county, slightly lower than the NYS excluding NYC rate of 7.3, and significantly lower than the New York State rate of 20. During the same time period, there were 14 new cases of AIDS and 6 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.

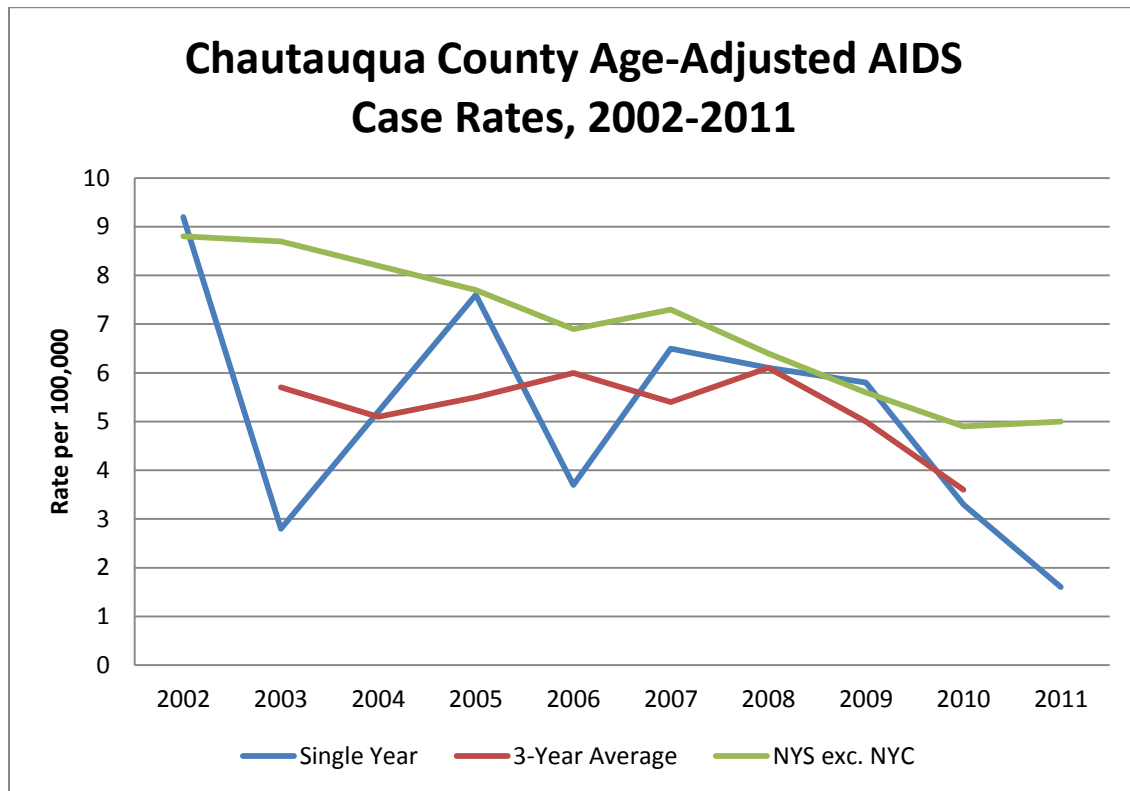
Figure 78. HIV and AIDS case and mortality rates, 2009-2011



Source: Community Health Indicators: HIV and AIDS and Other Sexually Transmitted Infections Indicators

Ten years of data for AIDS case rates shows a distinct downward trend in both Chautauqua County and New York State excluding New York City. This trend is evident in Figure 79.

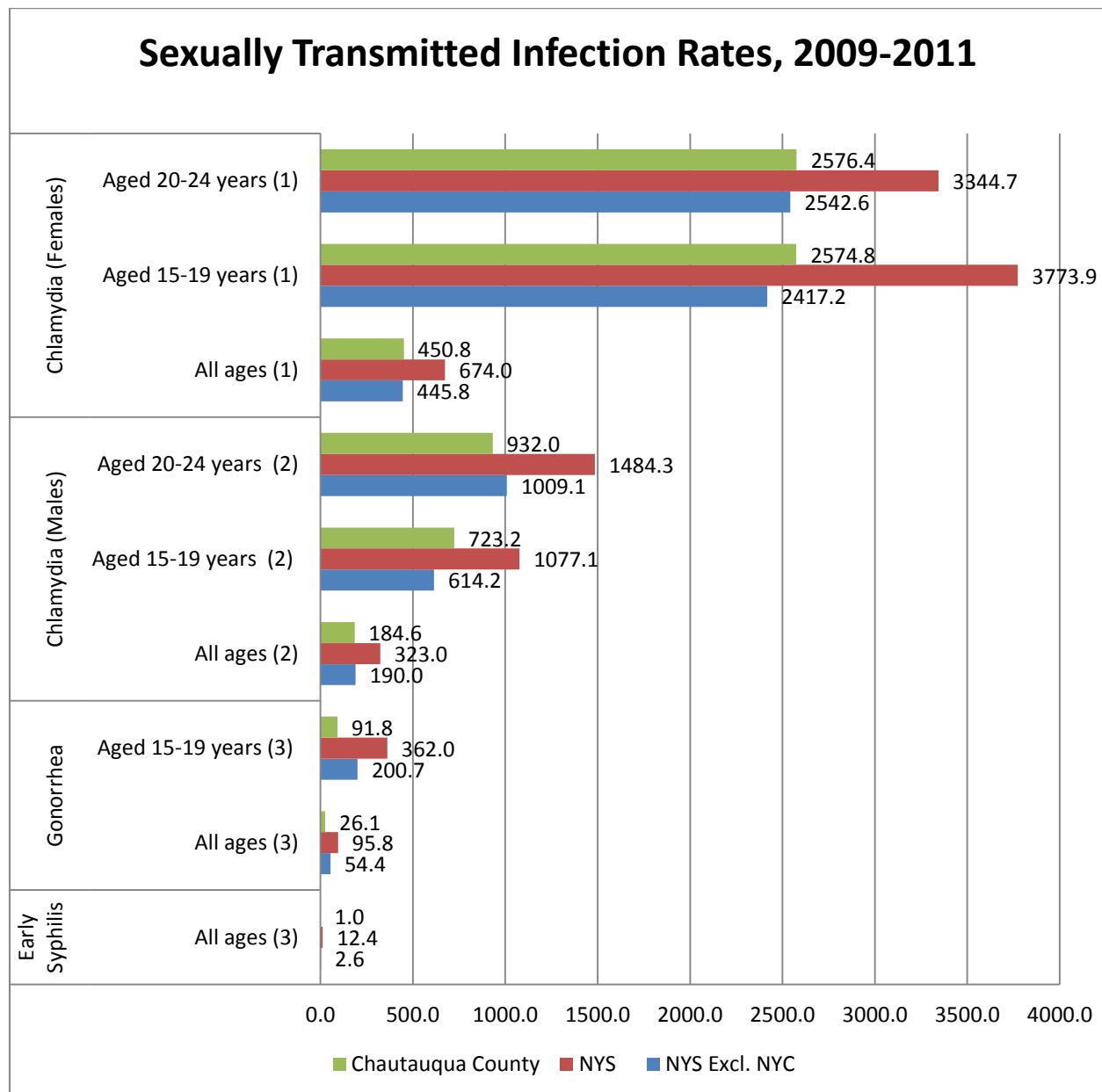
Figure 79. Chautauqua County age-adjusted AIDS case rates, 2002-2011



Source: Community Health Indicators: HIV and AIDS and other sexually transmitted infections indicators

During the time frame 2009-2011, 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 rates for females of each age group and males ages 15-19 were slightly higher in Chautauqua County than New York State excluding New York City. Across each of these geographies, reported sexually transmitted infections were most common among residents ages 15-19 and 20-24. Chlamydia was the most common STI with 922 cases among females and 366 cases among males from 2009 to 2011.

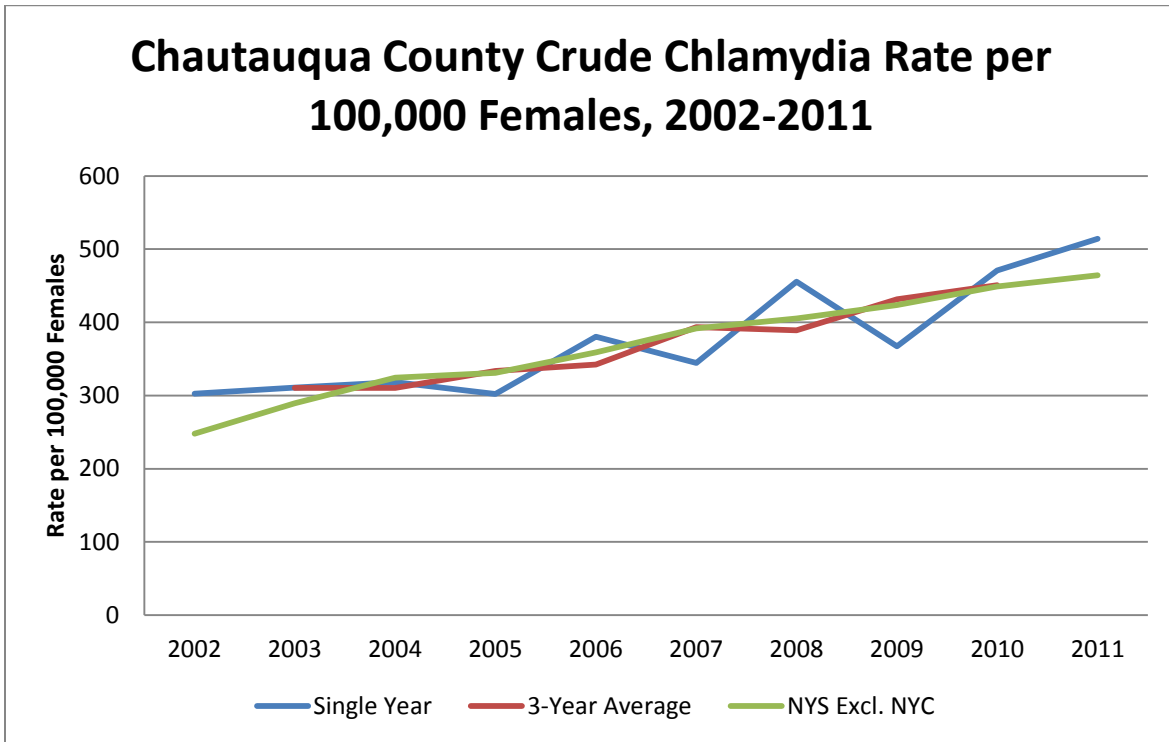
Figure 80. Sexually transmitted infection rates, 2009-2011



Source: Community Health Indicators: HIV and AIDS and Other Sexually Transmitted Infections Indicators
 (1) Rate per 100,000 Females (2) Rate per 100,000 Males (3) Rate per 100,000

A look at crude chlamydia rates among females in Chautauqua County from 2002 to 2011 reveals a noticeable upward trend (Figure 81). This increase is consistent with New York State excluding New York City.

Figure 81. Chautauqua County crude chlamydia rate per 100,000 females, 2002-2011



Source: Community Health Indicators: HIV and AIDS and Other Sexually Transmitted Infections Indicators

Health Challenges in Chautauqua County

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

These health challenges include:

- 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 resident suffering from poor mental health, and self-medication for these problems.
- Substance abuse among residents of all types, but especially as identified in pregnant mothers.

Behavioral Risk Factors

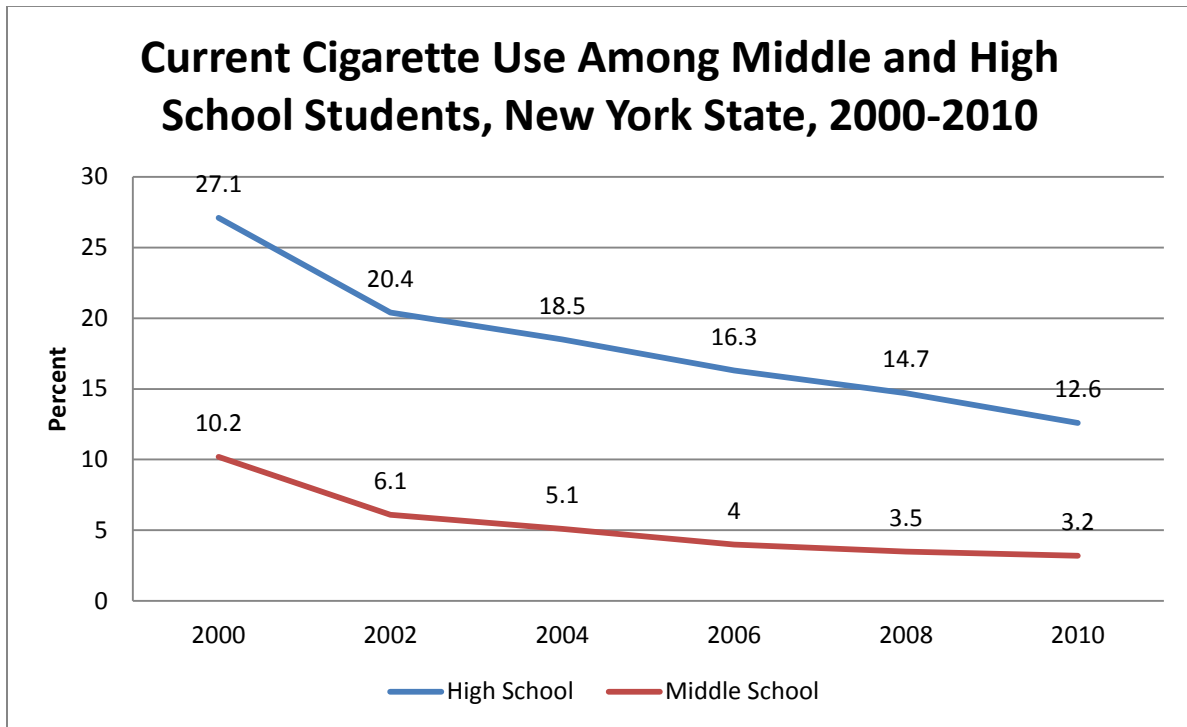
Poor behaviors and personal choices regarding tobacco use, food choices, and level of physical activity feed into problem of chronic disease in Chautauqua County.

Tobacco use

Self-reported tobacco use among adults is available through behavioral risk factor surveillance systems. NYSDOH estimated in 2008-2009 that 25.3% of Chautauqua County adults were smokers in the Expanded Behavioral Risk Factor Surveillance System (eBRFSS). The eBRFSS also estimated that 74.5% of Chautauqua County adults live in homes where smoking is prohibited. Preliminary data from the Community Transformation Grant found that about 29% of adults were current smokers (sampling favored Jamestown, Dunkirk and Silver Creek areas). These figures remain high when compared to state averages.

Current cigarette use among adolescents, while showing a strong decrease over ten years, was at 12.6% for high school students and 3.2% for middle school students in NYS acceding to the NYSDOH Youth Tobacco Survey.

Figure 82. Current cigarette use among middle and high school students, New York State, 2000-2010



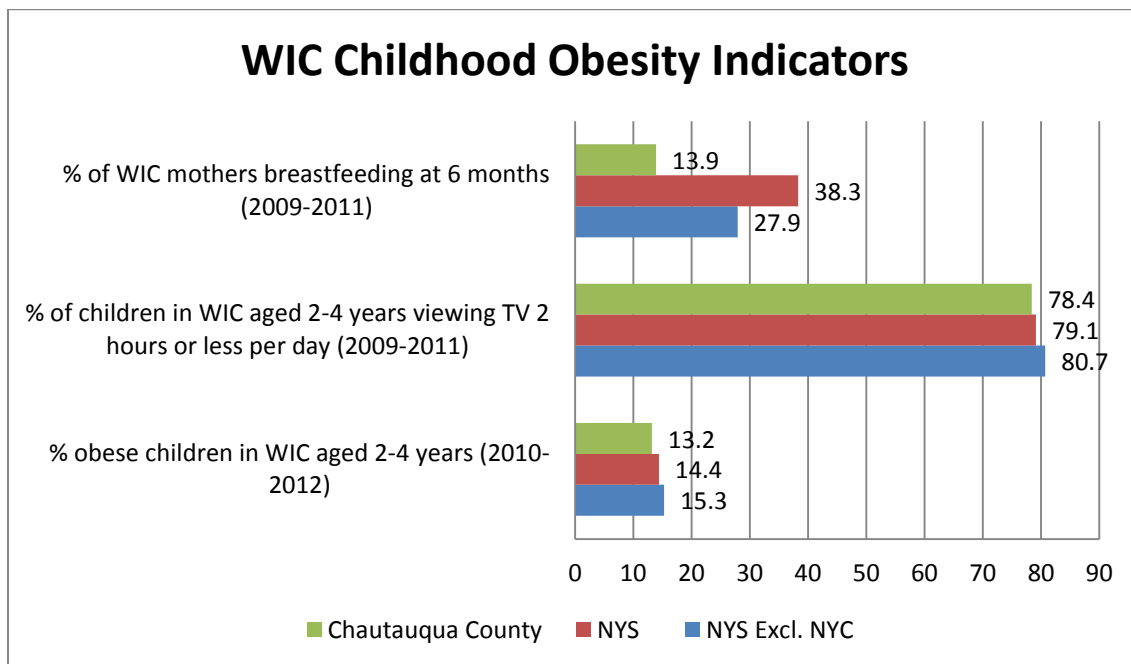
Source: NYSDOH Youth Tobacco Survey, 2000-2010

Overweight and Obesity, Nutrition and Physical Activity

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 2009-2011, 13.9% of mothers were still breastfeeding their babies at 6 months of age. This figure is much lower than the state comparison rates. In Chautauqua County, 78.4% of children in WIC ages 2-4 who viewed television two hours or less per day, which was just slightly lower than New York State (79.1%) and New York State excluding New York City (80.7%).

From 2010 to 2012, 13.2% of Chautauqua County children in WIC ages 2-4 were obese, which was lower than New York State (14.4%) and New York State excluding New York City (15.3%).

Figure 83. WIC childhood obesity indicators

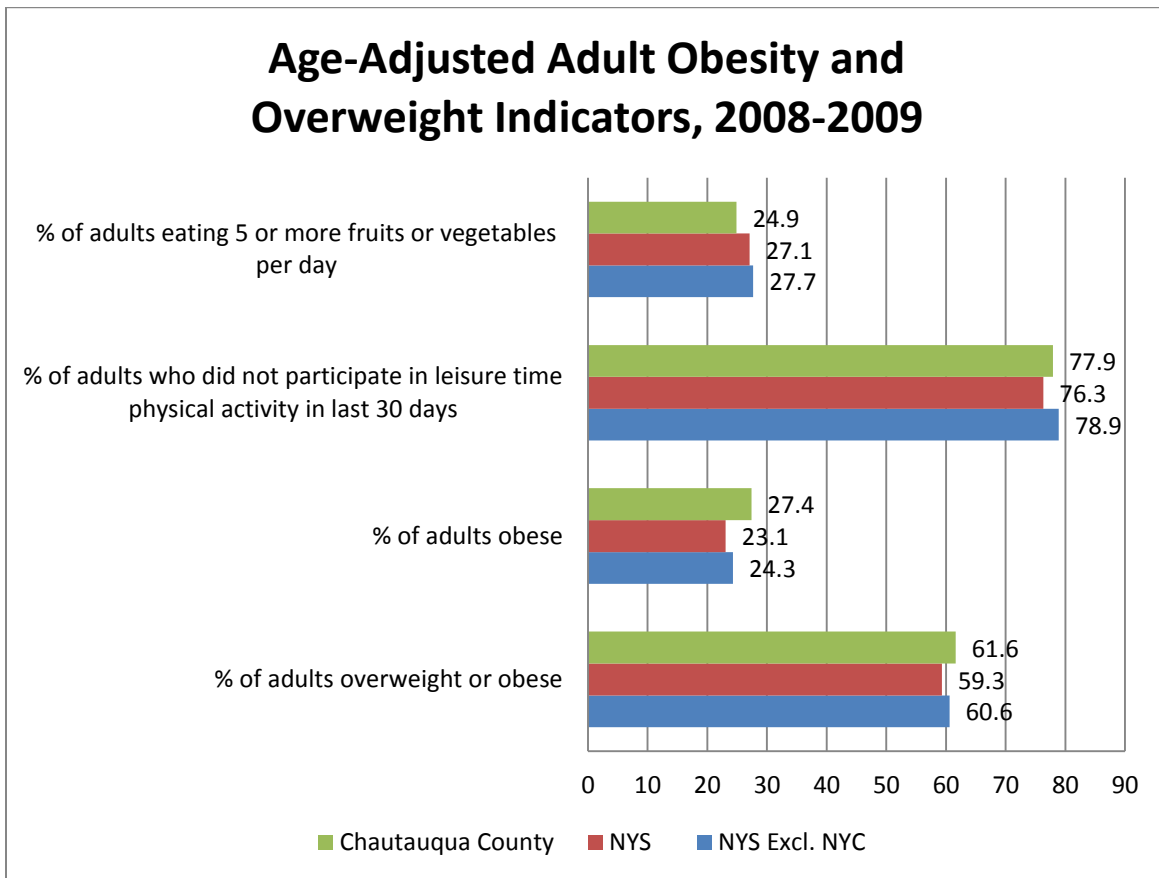


Source: NYSDOH Community Health Indicator Reports: Obesity indicators, 2008-2010

Self-reported weight statuses, along with related behaviors, are provided by the New York State Expanded Behavioral Risk Factor Surveillance System in 2008-2009. During this time frame, slightly fewer adults (ages 18 and older) in Chautauqua County reported eating 5 or more servings of fruits and vegetables per day (24.9%) than New York State (27.1%) and New York State excluding New York City (27.7%) comparisons. At 77.9%, the majority of Chautauqua County adult residents did not participate in leisure time physical activity in the last 30 days. Figures for state comparisons were relatively similar.

The percentage of adults who self-reported a BMI of 30 or higher was slightly greater in Chautauqua County (27.4%) than New York State (23.1%) and New York State Excluding New York City (24.3%). The percent of adults with a BMI of 25 or greater in Chautauqua County was 61.6%.

Figure 84. Age-adjusted adult obesity and overweight indicators, 2008-2009

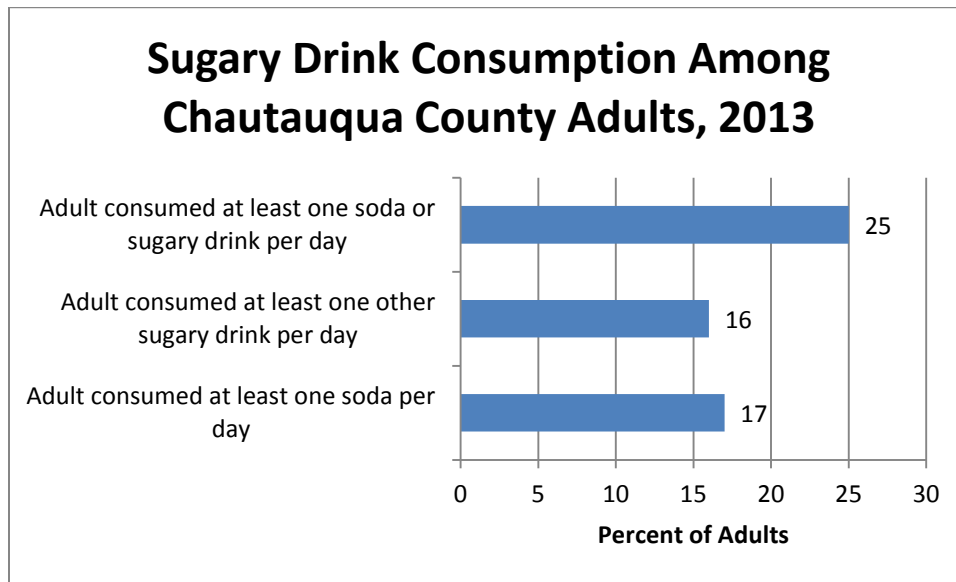


Source: NYSDOH Community Health Indicators: Obesity indicators 2008-2009

According to the US Centers for Disease Control and Prevention (CDC) Youth Online Youth Risk Behavior Surveillance System, in 2009 26.6% of New York State (NYS) high school students were overweight or obese. The same survey found that 79.1% of high school students consume less than five fruits or vegetables per day.

Sugar loaded beverages are a major contributor to obesity and chronic disease in NYS and the United States. In Chautauqua County, 25% of adults consumed at least one soda or sugary drink per day in 2013. Sampling for this survey favored Community Transformation Grant target areas of Dunkirk, Jamestown, and Silver Creek.

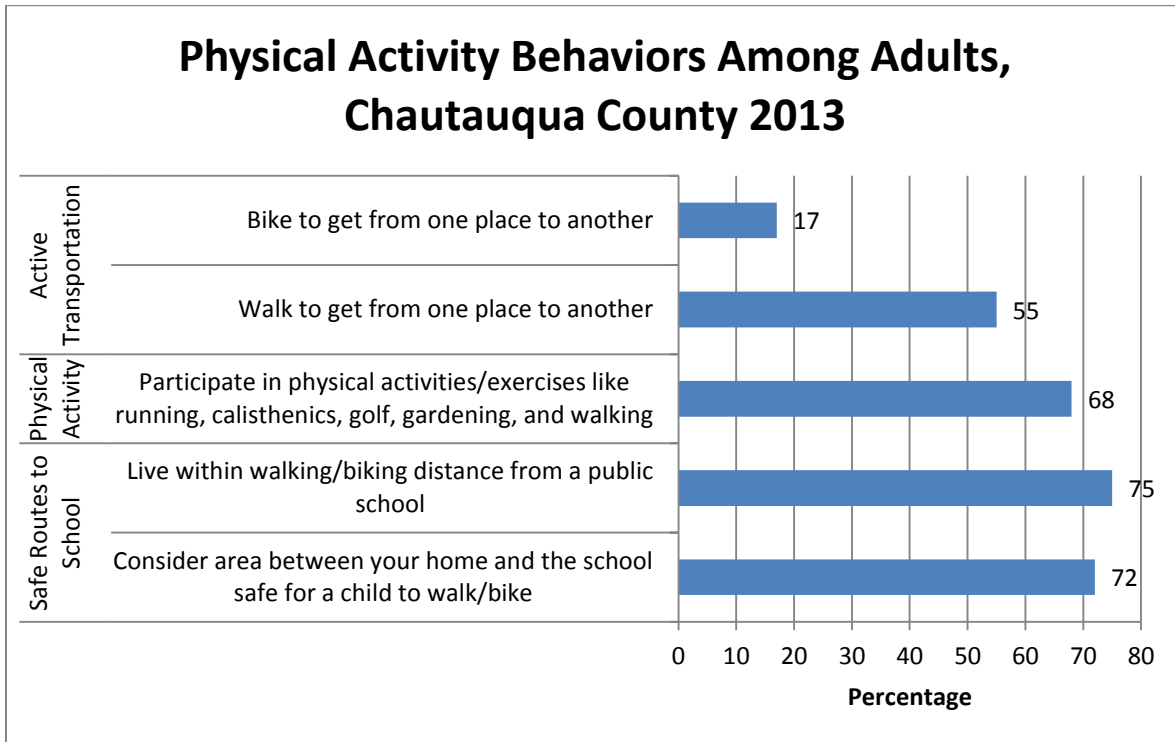
Figure 85. Sugary drink consumption among Chautauqua County adults, 2013



Source: Preliminary CTG Community Survey Data

According to preliminary behavioral data from the NYSDOH Community Transformation Grant BRFSS, 17% of adults in Chautauqua County use biking as a mode of active transportation, while 55% walk. Participation in physical activities like running, calisthenics, golf, gardening, and walking was common among 68% of adults. Most of the population lived within walking or biking distance from a public school (75%), the majority considering the route from their home to school as safe for kids to actively transport (72%). Sampling for this survey favored Community Transformation Grant target areas of Dunkirk, Jamestown, and Silver Creek.

Figure 86. Physical activity behaviors among adults, Chautauqua County, 2013



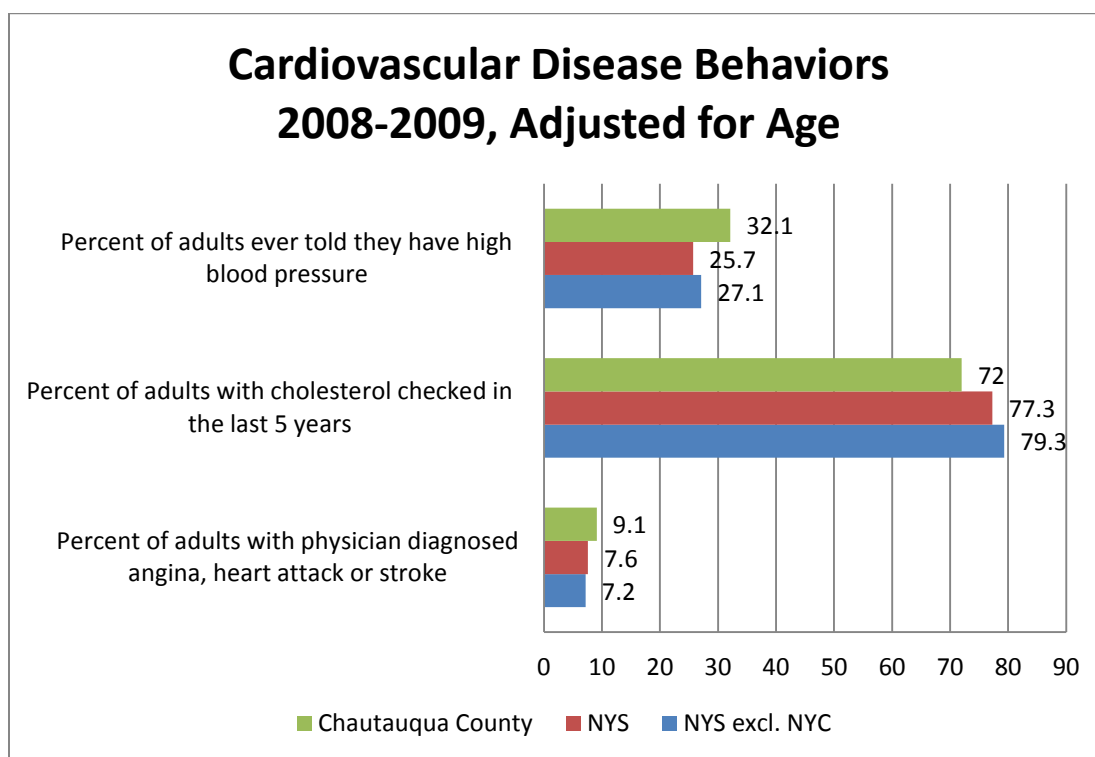
Source: Preliminary CTG Community Survey Data

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 2008-2009, 32.1% of county residents had been told by a physician that they have high blood pressure, higher than rate for both New York State and New York State excluding New York City. At 72%, proportionately fewer Chautauqua County residents had their cholesterol checked in the last five years. More adults in Chautauqua County had a diagnosis of angina, heart attack or stroke at 9.1%, compared to 7.6% for NYS and 7.2% for NYS excluding NYC.

Figure 87. Cardiovascular disease behaviors, 2008-2009, adjusted for age



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

Cancer Screenings

In Chautauqua County in 2008-2009, 73.9% (age-adjusted) of women aged 18 years and older with a pap smear in the past three years, compared to 82.7% in New York State as a whole, and 82.6% in New York State excluding New York City. During the same time frame, 77.6% of women aged 40 years and older with a mammography screening in the past 2 years in Chautauqua County. This figure was slightly lower than the state comparisons.

Table 31. Cancer screening rates for females in Chautauqua County, 2008-2009

	Chautauqua County	NYS	NYS excl. NYC
Age-adjusted % of women 18 years and older with pap smear in past 3 years (2008-2009)	73.9	82.7	82.6*
% of women 40 years and older with mammography screening in past 2 years (2008-2009)	77.6	79.7	81.9

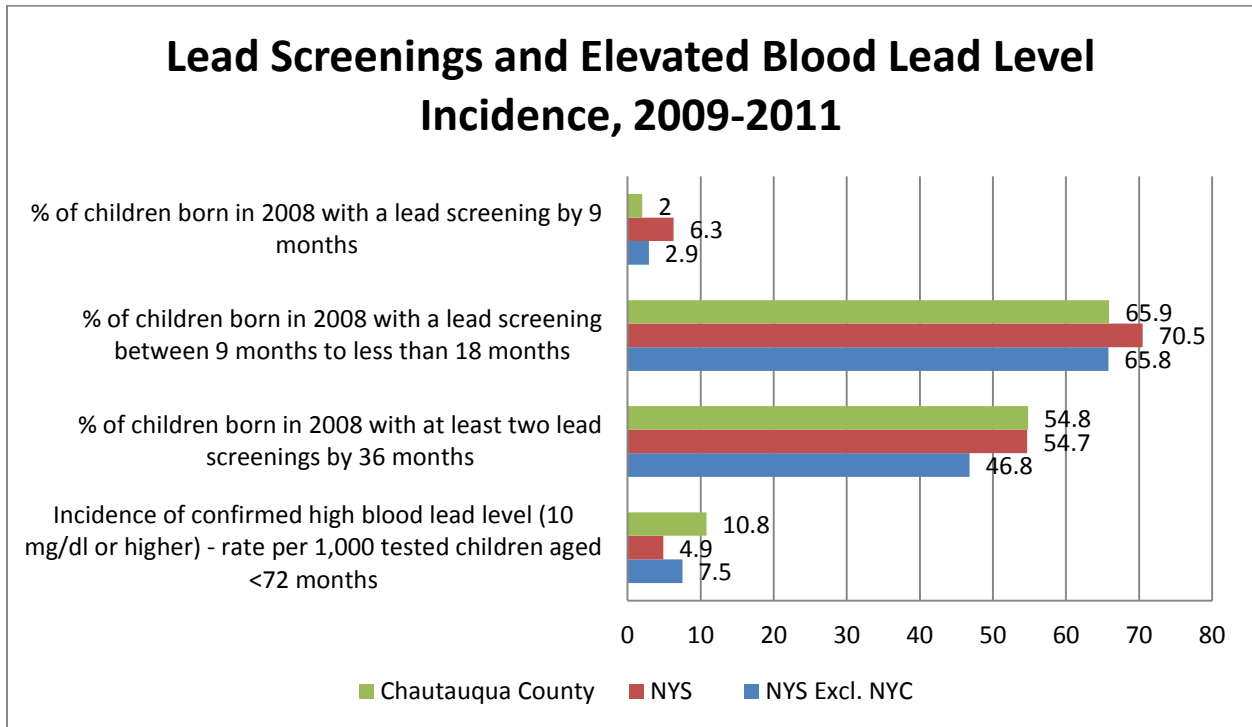
Source: NYSDOH Community Health Indicator Reports: Cancer Indicators, 2009-2011

Lead Screenings

Figure 88 displays lead screening and elevated blood lead level figures. Most Chautauqua County children born in 2008 (65.9%) were screened for lead between 9 and 18 months. This

figure is similar to that of Upstate New York. Children born in 2008 were less likely to be screened for lead at least twice by 36 months, with only 54.8% tested. This figure was similar to, while slightly higher than state comparisons.

Figure 88. Lead screenings and elevated blood lead level incidence, 2009-2011



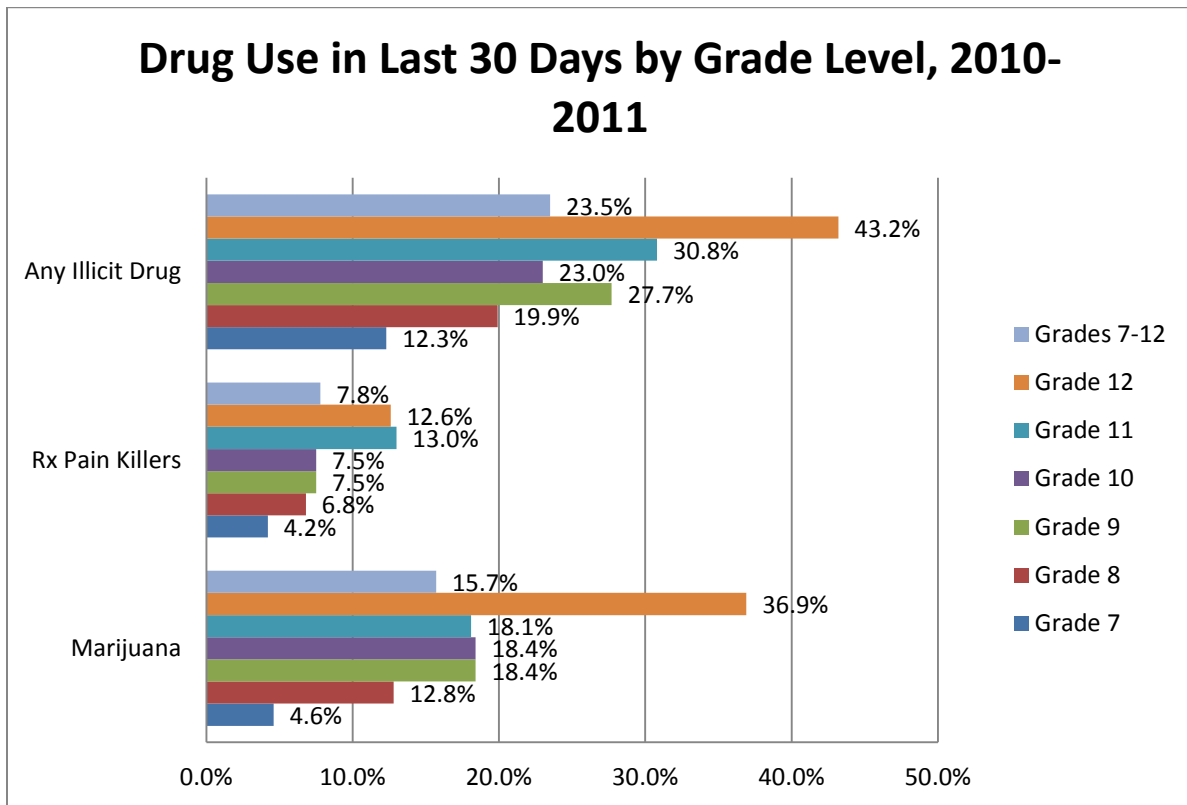
Source: NYSDOH Community Health Indicators: Child and Adolescent Health indicators 2009-2011

Adolescent Substance Abuse Behaviors

The Chautauqua Alcoholism & Substance Abuse Council (CASAC) and partners administered the Pride New York State Youth Development Survey (YDS) in the spring of 2011 in 6 of 8 Northern Chautauqua County school districts. Grades 7-12 were surveyed and 1,088 valid responses were collected. The survey asked students about drug use within the past 30 days, including alcohol, cigarettes, marijuana, prescription pain medications, and illicit drugs.

Among all grade levels, 23.5% of students had used any illicit drug, 7.8% had used prescription pain killers, and 15.7% had used marijuana within the last thirty days. Drug use generally increased with grade level. See Figure 89 for trends and details.

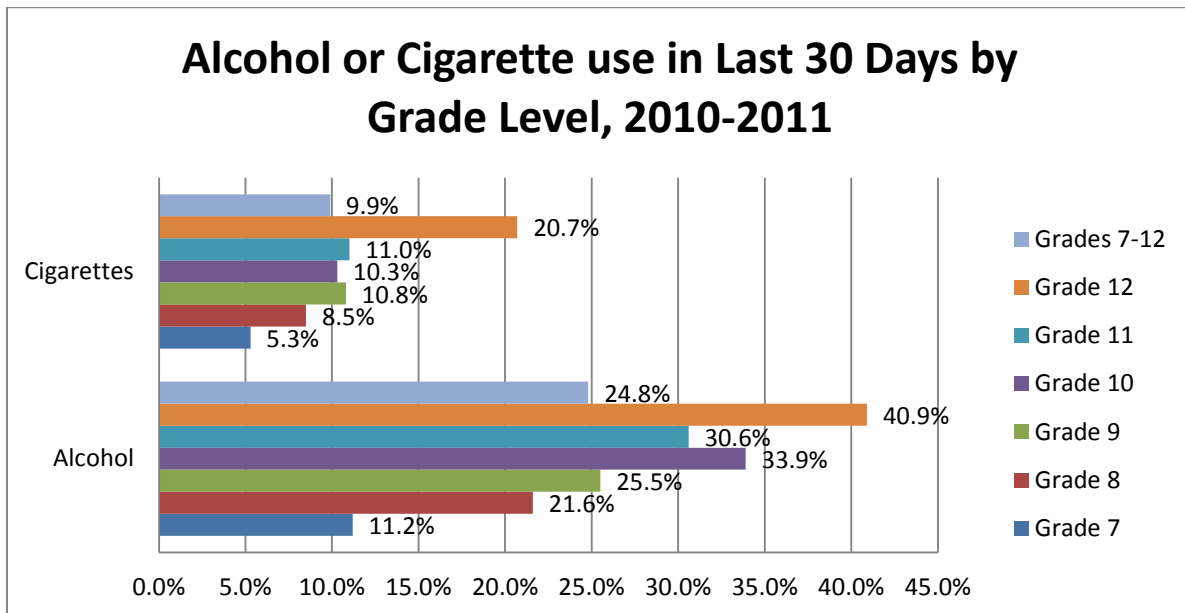
Figure 89. Drug use in last 30 days by grade level, 2010-2011



Source: CASAC, Pride New York State Youth Development Survey (YDS), 2011

Among all grade levels, 9.9% of students had used cigarettes, and 40.9% had used alcohol within the last thirty days. Alcohol and cigarette use generally increased with grade level. See Figure 90 for trends and details.

Figure 90. Alcohol or cigarette use in last 30 days by grade level, 2010-2011



Source: CASAC, Pride New York State Youth Development Survey (YDS), 2011

Environmental Risk Factors

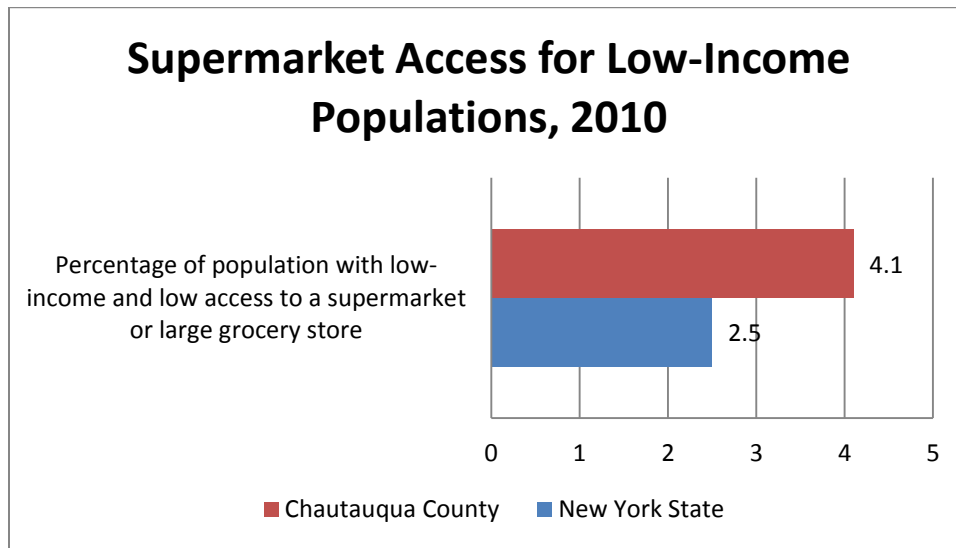
Air Quality

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 (PM_{2.5}) (µg/m³) 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 2008, average daily PM_{2.5} for Chautauqua County was measured at 13.4, the highest in New York State. During the same time period, the NYS average was 10.9. With the highest daily averages in the state, all eight counties in Western New York ranked in the fourth quartile. (County Health Rankings, CDC WONDER, 2008)

Access to Healthy Foods

According to the New York State Center for Environmental Health, 4.1% of Chautauqua County residents were of low-income status and also had low access to a supermarket or large grocery store in 2010. This rate is slightly higher than the New York State rate of 2.5%.

Figure 91. Supermarket access for low-income populations, 2010

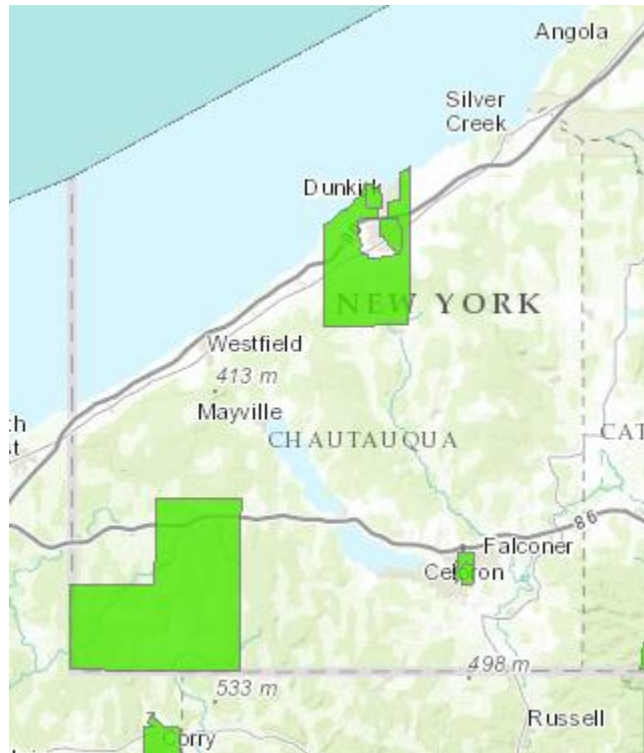


Source: NYSDOH Indicators for Tracking Public Health Priority Areas 2010

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 2013.

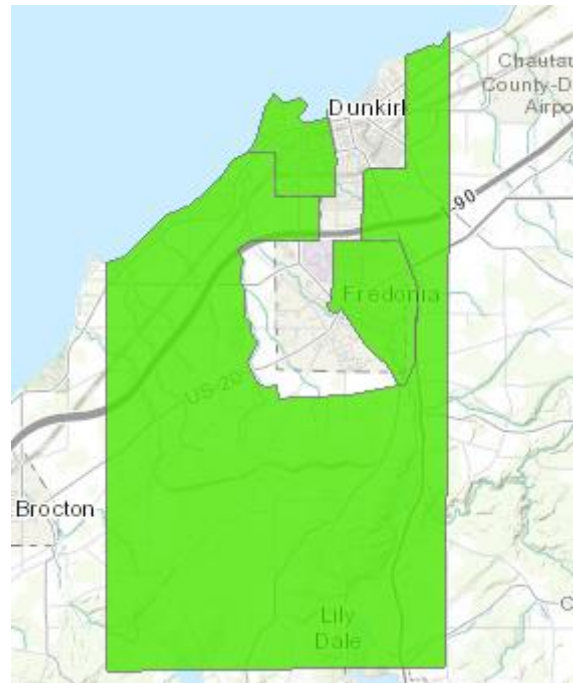
The photos below highlight (green) low-income census tracts where a significant number or share of residents is more than one mile (urban settings) or ten miles (rural settings) from the nearest supermarket. The food desert in the southwest portion of the county spans the Towns of Clymer, French Creek, 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, 2013)

Figure 92. USDA-designated food deserts in Chautauqua County, 2013



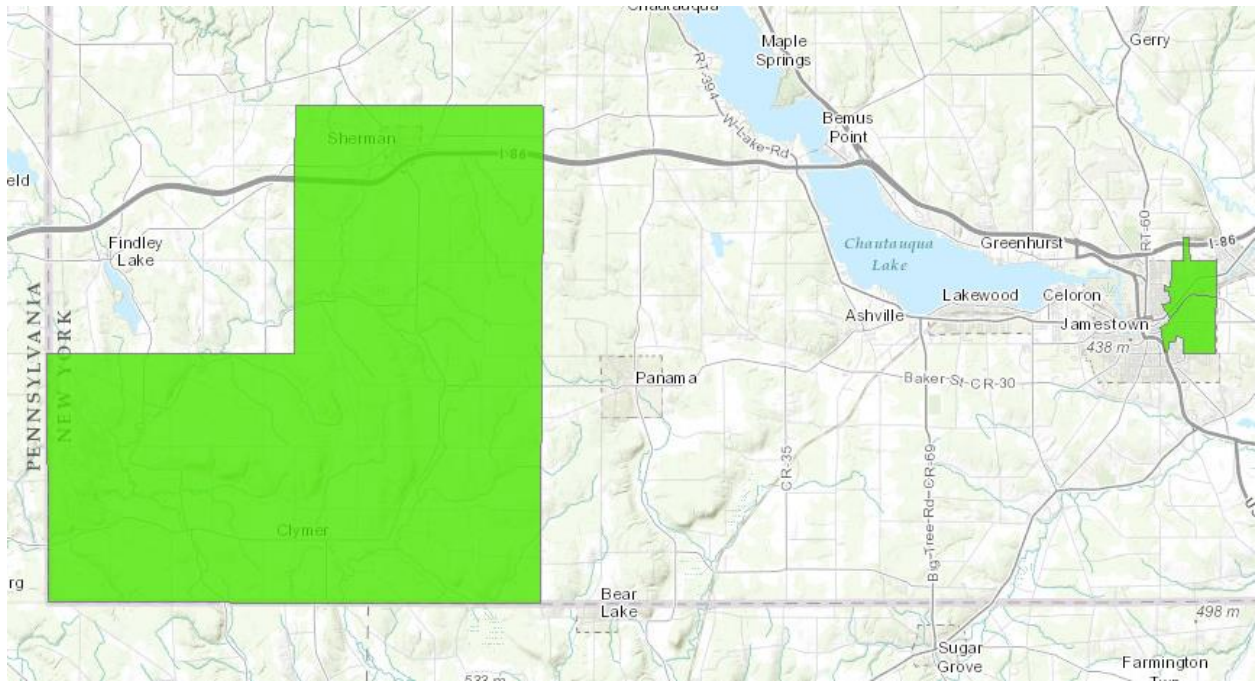
Source: USDA ERS Food Access Research Atlas, 2013

Figure 93. USDA-designated food deserts in North County, 2013



Source: USDA ERS Food Access Research Atlas, 2013

Figure 94. USDA-designated food deserts in South County, 2013

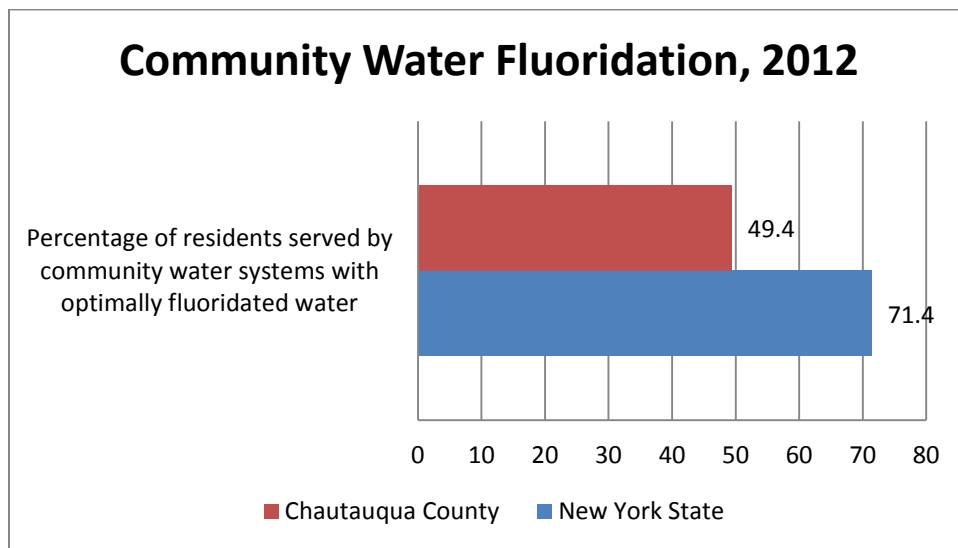


Source: USDA ERS Food Access Research Atlas, 2013

Community Water Fluoridation

According to the New York State Bureau of Water Supply and Protection, in 2012 49.4% of Chautauqua County residents were served by community water systems with optimally fluoridated water. This figure was much lower than the New York State percentage of 71.4%.

Figure 95. Community water fluoridation, 2012



Source: NYSDOH Tracking Indicators for Public Health Priority Areas, 2012

Three authorities provided fluoridated water to citizens in Chautauqua County: Erie County Water Authority, Jamestown Board of Public Utilities, and Village of Westfield Water Department. The following table details municipalities and schools served by each water supplier.

Table 32. Fluoridated water supplies and populations served in Chautauqua County, 2013

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

Source: Personal Correspondence with CCDHHS Environmental Health Unit, 2013

Socioeconomic Factors

As indicated in the demographic profile, poverty is a major issue in Chautauqua County, with 14.5% of all residents living below the Federal Poverty Level. 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 accessing a health care provider regularly 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.

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 November 2013, one policy for the City of Jamestown has been established. Complete streets activities are included in the Chautauqua County Health Network’s Creating Healthy Places to Live, Work, and Play and the CCDHHS’s Community Transformation Grant workplans. Table 33 presents preliminary findings for public opinions about environmental supports for physical activity in Chautauqua County, as measured by the NYSDOH in 2013 for the Community Transformation Grant.

Table 33. Public opinions about environmental supports for physical activity in Chautauqua County, 2013

Environmental Supports for Physical Activity	Percent
Neighbors are very or somewhat physically active	81%
Neighborhood is a very or somewhat pleasant place to walk	93%
Neighborhood has sidewalks	71%
Sidewalks are very well or somewhat maintained	76%
For walking at night, neighborhood street lighting is very good or good	52%
Neighborhood is extremely or quite safe from crime	67%
Use any private membership-only facilities like YMCA, health club, private gym in community for physical activity	27%
Use schools that are open in community for public recreation activities	24%
Not including schools, use public recreation centers like hockey rink, swimming pool, gym in community for physical activity	29%
Use walking trails, parks, playgrounds, sports fields in community for physical activity	61%
Use shopping malls in community for physical activity and/or walking programs	29%
Recreation/physical activity clubs, programs, organized events are very or somewhat important for physical activity	70%
Concerns about safety in your neighborhood/community influence level of physical activity	36%

Source: CTG Preliminary Data, 2013, (emphasis on Dunkirk, Jamestown, and Silver Creek)

Through the efforts of Tri-County Tobacco Free Programs 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. Over the past ten years, 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 August 2013, the Chautauqua County Legislature passed a local law banning tobacco use on all county properties, excluding parks and trails, to be implemented in late November of 2013.

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. Many of these wellness policies were passed when Chautauqua County held the Steps to a Healthier New York grant from 2003 to 2008.

Since September 2012, the CCDHHS has been working to implement healthy beverage policies at a number of locations throughout Chautauqua County, with heavy emphasis on the school districts of Dunkirk, Jamestown, and Silver Creek through the Community Transformation Grant. As of November, 2013, 2 youth-serving agencies have passed policies. CTG staff will

continue to work to create healthy beverage policies until September 2014. Table 34 presents preliminary public opinions about sugary drinks in Chautauqua County, as measured by the NYSDOH for the Community Transformation Grant in 2013.

Table 34. Public opinions about sugary drinks in Chautauqua County, 2013

	Percent
Favors banning sale of sugary drinks at elementary schools	69%
Favors banning sale of sugary drinks at middle schools	70%
Favors banning sale of sugary drinks at high schools	60%
Favors eliminating all vending machines that sell sugary drinks in public schools	65%
Favors replacing sugar drinks in public school vending machines with water, healthier beverage choices	87%
Favors forbidding afterschool programs at agencies like YMCA, Boys & Girls Club from serving sugary drinks	64%
Favors banning sale of sugary drinks in public buildings including town halls, courthouses	40%
Favors removing sugary drinks from vending machines in public buildings and replacing with water, healthier beverage choices	62%
Favors banning sale and/or distribution of sugary drinks at youth sporting events like Little League, Soccer, Pop Warner games	51%
Favors preventing local government agencies, towns, schools, counties from purchasing sugary drinks	42%

Source: CTG Preliminary Data, 2013 (emphasis on Dunkirk, Jamestown, and Silver Creek)

Other Unique Characteristics of the Community that Contribute to Health Status

Access to Care

Health Professional Shortage Area Designations

The primary care shortages throughout Chautauqua County are well recognized and thoroughly documented. All but a handful of townships in the County have been designated as geographic Primary Care Health Professional Shortage Areas (HPSA) with a score of 5, with our most populated city designated as a low-income HPSA with a score of 13. In addition, there are also county-wide Mental and Dental HPSAs both with a score of 16. The entire low income population in the county has been designated as a Medically Underserved Population (MUP) and there are also a total of 19 National Health Service Corps sites in the county. In addition to physician shortages, other access to care issues include a high uninsured and Medicaid population with limited safety net options and an aging physician base.

With a limited number of physicians and a high volume of individuals needing care, physicians are limited in terms of who 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 the hospitals' emergency departments, three article 28 clinics, and one FQHC. 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. 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. Three Article 28 clinics remain: The Resource Center located in Jamestown, Forestville Primary Care Clinic located in Forestville, 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, CCHN served as the lead in a successful New Access Point application for the development of The Chautauqua Center (TCC). TCC opened in January of 2013 and within 9 months was serving over 1,000 patients.

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

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.

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. Many assets and resources for health improvement in the three selected priority areas are available. Several of these assets and resources are described below; however, this is not an exhaustive list.

Community Services and Programs

CCDHS Services and Programs

CCDHHS Division of Public Health provides a number of services in the community that work to prevent disease and promote health and a good quality of life among County residents.

These include:

- **Cancer Services Program:** 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.
- **Community Transformation Grant:** The Community Transformation Grant: Small Communities aims to prevent the occurrence of future chronic disease in the county by creating long-lasting opportunities that will positively influence the health behaviors of children ages 0-18 across a continuum of child-centered environments. These environments include early child care institutions, schools, and the community at large. Efforts will focus on improving access to healthier foods and beverages, creating opportunities for safe physical activity, and reducing exposure to tobacco products and second-hand smoke. These systems-level changes will incorporate healthy behaviors into everyday life and work to make the healthier options the easier and more affordable choices to make. By focusing on high-risk populations, the CTG aims to reduce health disparities evident in low-income and minority communities.
- **Early Intervention and Preschool Special Education Programs:** Serves children who have or are at high risk for developmental delays (Early Intervention: birth to age 3, Preschool Special Education: ages 3 to 5).
- **Health Education:** Registered nurse health educators provide education on health issues to community agencies, schools, and youth groups.

- **Immunization Program:** Provides the 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.
- **Medicaid Obstetrical and Maternal Services (MOMS) Program:** Assists eligible moms with Medicaid applications, nutrition counseling with dietitian, health education and HIV counseling with a Registered Nurse, and psychosocial counseling with a social worker.
- **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.
- **Women, Infants, and Children Supplemental Nutrition Program (WIC):** Provides healthy foods for infants, children under 5, pregnant, postpartum, or breastfeeding women.

Chautauqua County Department of Mental Hygiene

Mental Health and Addiction Inpatient Services:

- Outpatient Mental Health Clinics
- School-based Clinics: Washington School Clinic, Dunkirk School Clinic, Chautauqua Lake School Clinic, Jamestown Community College, Bush Elementary School and Love Elementary School
- Crisis Services
- Mobile Crisis Team
- Crisis Hotline
- Outpatient Chemical Dependency Clinics

Chautauqua County Health Network Services and Programs

- **Clinical Integration:** Together, CCHN, IDS, and AMP are attempting to create a model system of health care that meets the needs of consumers as well as providers using the Chronic Care Model (CCM) as the blueprint for health system redesign. Our primary focus has been on rebuilding 10 independent primary care practices into an integrated network of Patient Centered Medical Homes (PCMH) and CCHN has facilitated successful service coordination and collaboration among network partners to increase Chautauqua County residents' access to both community and clinically-based programs

that span the continuum of care. Together, these programs and services create a robust system aimed at improving overall population health in Chautauqua County.

- *Creating Healthy Places to Live, Work, and Play (CHP)*: Through this NYSDOH awarded grant, CCHN is working to decrease obesity and ultimately reduce the burden of chronic disease by producing sustainable policy, systems, and environmental changes that make it easier for residents to eat healthy foods and be physically active. Activities are focused in Jamestown and Dunkirk and some accomplishments include: development and expansion of community gardens, Farmers' Market promotion, Farm to School initiatives, establishment of the Food Security Taskforce, elimination of food deserts, passage of the Complete Streets ordinance, creation of a community park coalition, and walkability and bikeability assessments.
- *Care Transition Intervention (CTI)*: The CTI initiative was launched as a collaborative effort including four local hospitals in July 2012 targeting Medicare Fee for Service beneficiaries. CTI is a patient/caregiver coaching model that includes a hospital visit before discharge, a home visit and three follow up phone calls in a 30 day period. The coaching focuses on building capabilities to self-manage medications, understanding the importance and proper response to "red flags", and scheduling timely physician follow up visits. Based on CMS data for Chautauqua County, two of our hospitals have already seen a significant increase in the 7-day post-discharge physician follow-up rate after implementation of the program.
- *Get Covered! Helpline*: CCHN established *Get Covered! (GC!) Helpline* services in April of 2005 to improve access to care for community members and provide information in one place to find affordable public and commercial options for medical care as well as dental, prescription, and vision coverage. Individuals calling the toll-free number for *GC!* can speak with a staff member who will gather personal, financial, and household information to determine their eligibility for affordable plan options. The operator provides the caller with a general explanation about products they may be eligible for, offers referrals when appropriate, and prepares a mailing packet containing reference material on coverage options and contact information for a facilitated or other plan enroller. With the opening of the state Health Insurance Marketplace (HIM), NY State of Health, CCHN will expand current *GC!* services as a Certified Application Counselor (CAC) Organization, which will allow staff to assist individuals through the enrollment process.
- *Guided Care Nursing (GCN)*: The John Hopkins GCN program is an evidence-based, nurse (RN) led, care management program to help engage patients and improve health outcomes through a facilitative approach of communication that evokes change and promotes self-management. Currently there are 5 GCNs embedded in PCMH practices in Chautauqua County who are serving a total of 90 diabetic patients. The program will continue to expand as there are already positive results such as decreases in HbA1c and

LDL lab values. GCNs have also been utilizing depression screening tools including PHQ 2 and 9, Beck's Depression Inventory, or Zung Self-rating Depression Scale and is currently vetting the depression care plan tools for those with a positive screening.

- *Living Healthy (LH)*: CCHN supports the growth of local capacity for delivering Chronic Disease Self-Management Programs (CDSMP); Living Healthy, Living Healthy with Diabetes, and Living Healthy with Chronic Pain. CDSMP, developed through the Stanford School of Medicine, is a 6-week program series where participants will learn how to cope with and better manage their chronic condition. So far, Chautauqua County has a total of two Master trainers and six lay leaders. CCHN is working with providers to train clinical staff and embed the programs within primary care practices and will be rolling out a series of Living Healthy with Chronic Pain courses to help those on pain medications explore alternatives and avoid addiction.
- *Diabetes Prevention Program (DPP)*: The CDC National Diabetes Prevention program is a series of classes where pre-diabetic participants will learn healthy lifestyle tips to prevent the onset of diabetes. A pilot of DPP began in Chautauqua County in late 2012 with 2 employer-based programs being offered (municipality and hospital) and 21 participants completing the program. DPP will be expanding in 2014, with the training of an additional 7 lifestyle coaches and a minimum of 6 programs being offered across the county.
- *Western New York Cancer Coalition Center for Reducing Cancer Disparities*: CCHN is currently partnering with Roswell Park Cancer Institute (RPCI) on a two-part NIH study as a local subcontractor to provide and study the effects of services to county residents including a clinically-based smoking cessation program that uses Audio Voice Reactive (AVR) reminder calls and a series of community-based workshops called *Now U Know* covering topics such as Cancer 101 and breast/cervical cancer. This includes *Esperanza Y Vida*, a subset of NUK, offered in Spanish specifically for the Hispanic community. In addition, the American Lung Association program, Freedom from Smoking, is also being offered.
- *Advance Care Planning*: CCHN has been working to incorporate Advance Care Planning into the community and practices since 2008. Currently, CCHN host a 6,000+ person, web-based, health-care proxy registry that is accessible by providers in the community. CCHN is also currently working with providers to incorporate the completion of Medical Orders for Life Sustaining Treatment.
- *Evidence-based Programs and Tools*: CCHN promotes the use of evidence-based programs and tools, especially those that assist our providers to identify, target, and manage our most chronically-ill patient populations through embedded best practices and interventions aimed at standardizing and improving the quality of care and overall patient outcomes. In addition to some of the programs mentioned above, others

include but are not limited to: Meaningful Use attestation, NCQA designations for Patient Centered Medical Home (PCMH) and Diabetes Recognition Program (DRP), and incorporation of a variety of assessment and screening tools including those for depression and fall prevention.

- *Chronic Disease Registries:* CCHN has incorporated the use of registries to assist providers with the identification and management of patients with specific diagnoses including DM and CVD. The data aggregation capabilities of the registries have allowed CCHN to create reports that drive decision making. Examples include: making determinations regarding best practices and interventions needed; targeting appropriate patients for services; assessing effectiveness and impact on individual as well as population health.
- *Health Information Exchange:* Currently, CCHN is working with AMP to expand the networks' existing technology infrastructure into a full-blown local Health Information Exchange (HIE), "Chautauqua Health Connects" (CHC), using the integrated product called Covisint Healthcare®. CHC was designed to work in complement with the RHIO, HEALTHeLINK and provides data aggregation capabilities, claims and clinical utilization analytics, and secure-messaging and referral communication applications. The Covisint system also includes a Master Patient Index feature, offering providers a more complete view of where patients are in the health care delivery system. The HIE will be used across our network to share clinical and claims data, refer patients to clinical and community-based programs, evaluate performance, monitor quality assessment and improvement activities, and measure whether population-based activities have shown improved health outcomes. CCHN will be working with the DHHS specifically to incorporate the use of the HIE into the MICHC project.

Lake Erie Regional Health System of New York (Brooks Memorial Hospital and TLC Health Network) Services and Resources

- Behavioral Health
- Chemical Dependency
- Diabetic Counseling
- Nutritional Counseling
- Obstetrics/Gynecology
- Cardiac Rehabilitation
- Cardiopulmonary
- Cancer Treatment Services

WCA Hospital Services and Community Resources

- Maternity Department
- Prepared Child Birth Classes
- Breast feeding classes
- New York OB/GYN Hospitalists at WCA (Delphi Clinic)
- Diabetes Education/Nutrition Services
- Certified Tobacco Cessation Program
- Psychiatry services
- Case Management
- Chemical Dependency program
- Mental Health Program Inpatient and Outpatient Adolescent - Adult
- Nutrition Services
- Wellness Program
- Medical Rehabilitation/Physical Therapy
- Cardiac Rehabilitation

Westfield Memorial Hospital Services and Community Resources

- Diabetes Self-Management Education
- Diabetes Prevention Program
- Immunizations
- Breast Cancer Awareness and Mammograms
- Bone Density Screenings
- Colorectal Cancer Screenings
- Cardiac Rehab

Additional Community Organizations and Programs

- Advocacy Services
- American Cancer Society
- Assertive Community Treatment Team
- Chautauqua Opportunities, Inc.
- Chautauqua County Rural Ministry
- Chautauqua Children's Safety Education Village
- Chautauqua Mental Health Association
- 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
- Mental Health Legal Aid Services
- National Alliance for Mental Illness- Family Services
- Personalized Recovery Oriented Services
- Respite Services
- Southern Tier Environments for Living Compeer Program
- Single Point of Access for Adults and Children
- Tapestry for Families and Youth
- The Chautauqua Center
- The Resource Center
- Tri-County Tobacco Free Programs
- United Way of Northern Chautauqua County
- United Way of Southern Chautauqua County
- 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
- Great Lakes Seaway Trail
- Fred J. Cusimano Westside Overland Trail
- Earl Cardot Eastside Overland Trail
- Abe Mattison Millrace 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 Develop completed a Greenways and Trails Plan in 2012 to inventory current assets and develop plans for future trail development and maintenance in Chautauqua County.

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:

- Chautauqua Institution Farmer's Market
- Chautauqua Produce Auction in Clymer, NY
- Downtown Jamestown Farmer's Market in Jamestown, NY
- Fredonia Farmer's Market in Fredonia, NY
- Westfield Farmer's Market in Westfield, NY

Methodology

Collaboration

The 2014-2017 community health assessment process involved a great deal of collaboration with hospital 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.

The CCCHPT core group included the following organizations and representatives:

- Brooks Memorial Hospital (BMH)
 - Scott Butler, Director of Community Relations
 - Kim Maben, Communications Specialist
- Chautauqua County Department of Health and Human Services
 - Breeanne Agett, Junior Planner
 - Christine Schuyler, Director of Health and Human Services
 - Angela Swartzman, Deputy Public Health Director
- Chautauqua County Department of Mental Hygiene
 - Pat Brinkman, Director of Mental Hygiene
- Chautauqua County Health Network
 - Ann Abdella, Executive Director
 - Kerri Brown, Project Coordinator
- P² Collaborative of Western New York
 - Kate Ebersole, Director of Care Transformation and Community Health Improvement
 - Christine Kemp, Coordinator of Community Health Improvement
 - Marissa Slevar, Intern
- The Chautauqua Center
 - Mike Pease, Executive Director
- TLC Health Network

- Scott Butler, Director of Community Relations
- Kim Maben, Communications Specialist
- WCA Hospital
 - Toni DeAngelo, Director of Community Wellness
- Westfield Memorial Hospital
 - Patty Ballman, Administrator
 - Kim Greiner, Registered Dietitian and Certified Diabetes Educator

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

Formal Planning Meetings were held on the following dates:

- February 15, 2013
- March 22, 2013
- July 9, 2013
- August 5, 2013
- September 6, 2013
- September 24, 2013
- October 10, 2013

The initial meeting of the CCCHPT involved an overview of the 2014-2017 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 P² Collaborative of Western New York's (P²) Community Health Improvement Team facilitated planning meetings, shared guidance from NYSDOH, and provided technical assistance to the CCCHPT. With funding from NYSDOH in conjunction with the Western New York Public Health Association, P² provided technical assistance to all eight county health departments throughout Western New York. The Community Health Improvement Team included Kate Ebersole, Director of Care Transformation and Community Health Improvement, Christine Kemp, MPH, coordinator of Community Health Improvement, and Marissa Slevar, MPH Candidate Intern.

The P² Collaborative of Western New York is a Robert Wood Johnson Foundation Aligning Forces for Quality organization which works to improve the health of Western New Yorkers. Efforts focus on quality improvement, community health planning, and health engagement programs. Kate Ebersole has 30 years of manufacturing, training and facilitation experience and is a certified coach. Christine Kemp holds a Master of Public Health degree in community health and health behavior from SUNY University at Buffalo. Marissa Slevar was a current MPH student at SUNY University at Buffalo.

The majority of the 2014-2017 Community Health Assessment was written by CCDHHS Junior Planner Breeanne Agett, who holds a Master of Public Health degree from SUNY Albany School of Public Health in Epidemiology. Core CCCHPT organizations provided narrative and data upon request. The Community Health Improvement Plan was developed collectively by the core group, and compiled by the CCDHHS.

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 three community conversations.

Public Input

The Chautauqua County Community Health Survey was open for responses from March 28, 2013 to June 26, 2013. 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 survey also asked residents which medical services they leave the county for and why. The P² Collaborative of WNY provided technical assistance in designing the survey. Survey results were automatically analyzed by Survey Monkey programming. The CCCHPT was 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 new federally qualified health center- The Chautauqua Center- has serves a primarily Hispanic patient population. Center staff assisted patients in filling out the surveys and also provided translation services.
- Paper copies of the survey were provided to the local Amish population at Cancer Services Program Clinics in Sherman and Clymer, and were also shared by employees with their Amish friends.
- 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 March 28 to June 2, 2013, 1,170 survey responses were collected: 1,027 responded electronically; 143 paper responses were collected. The majority of the respondents self-identified as Female (73.99%) and White/Caucasian (95.34%) and reported having some form of private health insurance (76.67%).

Community members' perceptions of health issues were also gathered at three "Community Conversations" sponsored by the P² Collaborative of WNY and the Chautauqua County Health Network. These conversations spanned Chautauqua County's geographic and cultural separations, covering the "North County" in Dunkirk, the "South County" in Jamestown, and the "West County" in Westfield. 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 issues and offer solutions in an open discussion facilitated by P² Collaborative representatives.

Specific dates, locations, and attendance for these Community Conversations were as follows:

- June 13, 2013 at WCA Hospital in Jamestown, NY (42 people present)
- June 20, 2013 at Dunkirk High School in Dunkirk, NY (10 people present)
- June 26, 2013 at Eason Hall in Westfield, NY (16 people present)

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. This stakeholder meeting was held on September 13, 2013.

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).

Additional behavioral and public input data was provided by the New York State Department of Health through the Community Transformation Grant, “Community Transformation in Small Communities Grant (CTG) Population Survey Preliminary Frequencies from Baseline Data (2013). A breakdown of ICD-9 codes regarding newborn drug-related discharges was provided by Trang Nguyen at the New York State Department of Health (2008-2010).

Demographic and socioeconomic data were gleaned from the U.S. Census Bureau website, and the NYS Education Department School Report Cards website. Table 35 provides a summary of data sources that were used to identify health issues in Chautauqua County.

When sufficient data was not available from the NYSDOH for a priority area, requests were sent out to local organizations to help compile data. The Chautauqua County Department of Mental Hygiene reached out to local practitioners to obtain data regarding mental health and substance abuse in Chautauqua County. For newborn drug-related hospital discharges, CCDHHS staff contacted NYSDOH representatives to obtain figures at the diagnosis-code level.

Table 35. Health and demographic data sources used

<i>Topic</i>	<i>Dates</i>	<i>Source</i>	<i>Website</i>
<i>NYS Community Health Indicator Reports</i> http://www.health.ny.gov/statistics/chac/indicators/			
<i>Cancer Indicators</i>			
Incidence and Mortality Rates	2008-2010	New York State Cancer Registry	http://www.health.ny.gov/statistics/cancer/registry/
Screening Rates	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
<i>Cardiovascular Disease Indicators</i>			
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Physician Diagnoses and Screening Rates	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
<i>Child and Adolescent Health Indicators</i>			
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/

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Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Blood lead levels and Screening Rates	2009-2011	NYS Child Health Lead Poisoning Prevention Program	http://www.health.ny.gov/environmental/lead/programs_plans/
<i>Cirrhosis/Diabetes Indicators</i>			
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Physician Diagnoses	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
<i>Communicable Disease Indicators</i>			
Incidence Rates	2009-2011	NYSDOH Bureau of Communicable Disease Control	http://www.health.ny.gov/diseases/communicable/control/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Immunization Rates	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
<i>Family Planning/Natality Indicators</i>			
Pregnancy, birth, fertility and abortion Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
<i>HIV/AIDS and STDs Indicators</i>			
HIV/Aids Case Rates	2009-2011	NYS AIDS Case Surveillance Registry, Bureau of HIV/AIDS Epidemiology	http://www.health.ny.gov/diseases/aids/about/surveillance.htm
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
STD Case Rates	2009-2011	Sexually Transmitted Disease Surveillance System, Bureau of STD Prevention and Epidemiology	http://www.health.ny.gov/statistics/diseases/communicable/std/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
<i>Injury Indicators</i>			
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Motor Vehicle Related Injury and Death Rates	2009-2011	New York State Governor's Traffic Safety Committee Institute for Traffic Safety Management and Research, NYS Department of Motor Vehicles	http://www.dmv.ny.gov/
<i>Maternal and Infant Health Indicators</i>			
Birth, Prematurity, Low birthweight Data	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/

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WIC Indicators	2008-2010	NYS Pregnancy Nutrition Surveillance System (PNSS), WIC Program	http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Drug-Related Discharges	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Obesity and Related Indicators			
School Student Weight Status	2010-2012	Student Weight status Category Reporting System (SWSCRS)	http://www.schoolhealthservicesny.com/datareporting.cfm?subpage=244
WIC Maternal Weight Status	2010-2012	NYS Pregnancy Nutrition Surveillance System (PNSS), WIC Program	http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm
WIC Moms Breastfeeding, Child's TV Viewing Rates	2009-2011	NYS Pregnancy Nutrition Surveillance System (PNSS), WIC Program	http://www.cdc.gov/PEDNSS/additional_tools/pnss_users_guide/index.htm
Adult Weight, Diabetes Statuses, Nutrition, Physical Activity Rates	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Occupational Health Indicators			
Cancer Incidence Rate	2009-2011	New York State Cancer Registry	http://www.health.ny.gov/statistics/cancer/registry/
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Elevated Blood Lead Level Rates	2009-2011	New York State Department of Health Heavy Metals Registry	http://www.health.ny.gov/environmental/workplace/heavy_metals_registry/
Fatal Work-Related Injuries	2009-2011	NYS Census for Occupational Injuries (CFOI) and NYC CFOI	http://www.health.ny.gov/statistics/chac/general/g83.htm
Oral Health Indicators			
3rd Grade Survey Data	2009-2011	Bureau of Dental Health, Oral Health Survey of 3rd Grade Children	http://www.health.ny.gov/prevention/dental/
Adult Dental Visits	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Emergency Department Rate	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Oral Cancer Mortality Rates	2008-2010	New York State Cancer Registry	http://www.health.ny.gov/statistics/cancer/registry/
Respiratory Disease Indicators			
Mortality Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/

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Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Adult Asthma Rates	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Socio-economic Status and General Health Indicators			
Access to Care, Poor Mental Health Days Data	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Overall Birth, Mortality, and Premature Death Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Emergency Department Utilization Rates	2009-2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Tobacco, Alcohol and Other Substance Abuse Indicators			
Hospitalization Rates	2009-2011	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Alcohol Related Motor Vehicle Injury and Death Rates	2009-2011	NYS Department of Motor Vehicles	http://www.dmv.ny.gov/
Behavioral Cigarette and Alcohol Use Data	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
<i>Chautauqua County Indicators for Tracking Public Health Priority Areas, 2013-2017</i> http://www.health.ny.gov/prevention_agenda/2013-2017/indicators/2013/chautauqua.htm			
Improve Health Status and Reduce Health Disparities			
Percentage of premature death	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Age-adjusted preventable hospitalizations rates	2008-2010	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Percentage of adults with health insurance	2010	US Census Bureau; 2010 Current Population Survey	http://www.census.gov/cps/data/cps/taletcreator.html
Age-adjusted percentage of adults who have a regular health care provider	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Promote a Healthy and Safe Environment			
Hospitalization rates (falls, assault)	2008-2010	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
ED visit rates (falls, occupational)	2008-2010	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Alternate modes of transportation	2007-2011	US Census Bureau: American Community Survey 5 year estimates	http://www.census.gov/acs/www/
Grocery store access for low-income residents	2010	USDA Food Environment Atlas	http://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas.aspx
Residents with fluoridated water	2012	National Water Fluoridation Reporting System	http://www.health.ny.gov/prevention/dental/fluoridation/
Prevent Chronic Diseases			

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Adult obesity	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Child/adolescent obesity	2010-2012	Student Weight Status Category Reporting System	http://www.health.ny.gov/prevention/obesity/statistics_and_impact/student_weight_status_data.htm
Adult cigarette smoking	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Adult cancer screenings	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
ED visit rates (asthma)	2008-2010	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Hospitalization rates (heart attack)	2010	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
Hospitalization rates (diabetes complications)	2008-2010	Statewide Planning and Research Cooperative System (SPARCS) NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/sparcs/
<i>Prevent HIV/STDs, Vaccine Preventable Diseases and Healthcare-Associated Infections</i>			
Immunizations for children, adolescents	2011	New York State Immunization Information System	http://www.health.ny.gov/prevention/immunization/information_system/
Adult flu immunizations	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
HIV case rate	2008-2010	New York State AIDS Case Surveillance Registry	http://www.health.ny.gov/diseases/aids/about/surveillance.htm#hiv aids
STD case rates	2010	New York State Sexually Transmitted Disease Surveillance System	http://www.health.ny.gov/statistics/diseases/communicable/std/
<i>Promote Healthy Women, Infants, and Children</i>			
Preterm births	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Breastfeeding in hospital	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Maternal mortality rate	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Well child visits	2011	National Healthcare Safety Network	http://www.cdc.gov/nhsn/dataStat.html
Health insurance for children	2010	United States Census Bureau (Income, poverty, and health insurance in the US: 2010, accessed 1/15/2012)	http://www.census.gov/; http://www.census.gov/prod/2011pubs/p60-239.pdf
Tooth decay, 3rd graders	2009-2011	Bureau of Dental Health, Oral Health Survey of 3rd Grade Children	http://www.health.ny.gov/prevention/dental/
Adolescent pregnancy rates	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Unintended pregnancy	2011	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
Health insurance for women	2010	US Census Bureau; 2010 Current Population Survey	http://www.census.gov/cps/data/cps/tablecreator.html
Birth spacing	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
<i>Promote Mental Health and Prevent Substance Abuse</i>			
Adults with poor mental health days	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/

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Adult binge drinking	2008-2009	NYS Expanded Behavioral Risk Factor Surveillance System	http://www.health.ny.gov/statistics/brfss/expanded/
Suicide rate	2008-2010	Vital Records NYSDOH Bureau of Biometrics and Health Statistics	http://www.health.ny.gov/statistics/vital_statistics/
<i>Community Transformation in Small Communities Grant (CTG) Population Survey Preliminary Frequencies from Baseline Data Collection- Chautauqua County</i>			
Behavioral data regarding weight, nutrition, physical activity, and tobacco use	2013	Community Transformation in Small Communities Grant (CTG) Population Survey Preliminary Frequencies from Baseline Data Collection- Chautauqua Co.	N/A
Public opinion data regarding sugary drinks, environmental supports for physical activity, and smoke free housing and schools	2013	Community Transformation in Small Communities Grant (CTG) Population Survey Preliminary Frequencies from Baseline Data Collection- Chautauqua Co.	N/A
<i>Demographic and Economic Data from Various Sources</i>			
Population over time	1820-2010	New York State Department of Economic Development, State Data Center, 2000; US Census Bureau American Fact Finder 2	esd.ny.gov/nysdatacenter/data/population_housing/countypophistory.pdf ; www.census.gov
Population estimates, Seasonal Homes, Disability Data	2012	U.S. Census Bureau American Community Survey 1-year estimates	http://www.census.gov/acs/www/
Population estimates of incorporated places	2010-2012	U.S. Census Bureau	http://www.census.gov/popest/data/cities/totals/2012/SUB-EST2012-3.html
Age and sex distributions, race and ethnicity, language, housing, transportation, income, employment, education	2007-2011	U.S. Census Bureau American Community Survey 5-year estimates	http://www.census.gov/acs/www/
Migrant population	2013	Personal correspondence with Lucy Johnson of SUNY Fredonia Migrant Education and Outreach Program, September 2013	N/A
Amish population	2009	Amish America Website	http://www.Amishamerica.com/new-york-amish/
Homeless population	2011-2012	Chautauqua County Homeless Management Information System (Personal correspondence with Eric Stronz at Chautauqua Opportunities, Inc.)	N/A
Per capita personal income county rankings	2012	Empire State Development, NYS Data Center	http://esd.ny.gov/NYSDataCenter/PersonalIncomeData.html
County economy figures	2007	U.S. Census Bureau Quick Facts	http://quickfacts.census.gov/qfd/index.html
Agricultural economy data	2007	USDA Agricultural Census 2007	http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/New_York/cp36013.pdf

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School enrollment, needs, demographics, resources, dropouts	2011-2012	New York State Education Department School Report Cards	https://reportcards.nysed.gov/
<i>Health Outcomes, Behaviors, and Environment Data from Various Sources</i>			
Crisis Hotline call data	2011-2013	Chautauqua County Department of Mental Hygiene, Crisis Services (Personal correspondence with Jon Anderson of CCDMH)	N/A
Tobacco use among school students	2000-2010	New York State Youth Tobacco Survey	http://www.health.ny.gov/prevention/tobacco_control/docs/2011-03-11_ny_state_brief_report_prevention.pdf
Juvenile arrests	2005, 2012	NYS Kids' Well-being Indicator Clearinghouse	http://www.nyskwic.org/get_data/county_report_detail.cfm?countyID=36013
Newborn drug-related discharge rates, ICD-9 code breakdown	2008-2010	NYSDOH; Personal Correspondence with Trang Nguyen, MD, Dr.PH, MPH, Deputy Director, Office of Public Health Practice, NYSDOH	N/A
Hepatitis B and C counts and rates	2012	NYSDOH Communicable Disease Reports	http://www.health.ny.gov/statistics/diseases/communicable/
Teens' fruit and vegetable consumption	2009	U.S. Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System	http://www.cdc.gov/HealthyYouth/yrbbs/
Alcohol, drug, and tobacco use among middle and high schoolers	2011	Chautauqua Alcoholism & Substance Abuse Council Pride New York State Youth Development Survey	N/A
Air quality data	2008	U.S. Centers for Disease Control WONDER Environmental Data	http://wonder.cdc.gov/
Air quality data rankings	2008	County Health Rankings	http://www.countyhealthrankings.org/
Food Deserts	2013	USDA ERS Food Research Atlas	http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx
Fluoridated water systems in Chautauqua County	2013	CCDHHS Environmental Health Unit (Personal Correspondence with Bill Boria, June 2013)	N/A

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 4th 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 three family and/or community problems identified in the Chautauqua County Community Health Survey were jobs (79.20%), not enough money (52.39%), and transportation (34.19%). The top three health issues individuals were more concerned about were health insurance (41.32%), obesity or overweight (37.43%), and cancer (23.24%).

Although health issues and solutions differed by area, the following topics were discussed in at least two of the three Community Conversations:

- Transportation
- Food accessibility
- Health literacy/education
- Poverty
- Lack of motivation
- Discrimination/Cultural Stigmatization
- Substance abuse

Proposed solutions discussed at the Community Conversations included:

- Increasing the number and promotion of community health events

- Free health screenings
- Community weight loss challenges
- Mentoring programs
- Support groups
- Improve public transportation

Priority Areas Selected

All four hospitals and the CCDHHS agreed to collaborate to address the Prevent Chronic Diseases and Promote Mental Health and Prevent Substance Abuse priority areas. Hospitals that provide labor and delivery services (BMH and WCA) 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. Community Transformation Grant, and Creating Healthy Places to Live, Work, and Play)

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 Memorial Hospital and WCA Hospital provide labor and delivery services and CCDHHS provide community programming in this area. TLC Health Network and Westfield Memorial Hospital were excluded from this priority area action plan because they do not provide labor and delivery services.
- CCDHHS was recently awarded Maternal and Infant Community Health Collaborative funds from NYSDOH to work in this priority area, in conjunction with local hospitals, community agencies, and prenatal care providers.

Prevention Agenda Priority Area: Promote Mental Health and Prevent Substance Abuse

- While there is not a great deal of mental health and substance abuse data available through the NYSDOH, this issue was identified when observing that newborn drug-related discharge rates were more than double the state average. Anecdotal evidence from professionals in the field supplemented the need identified for this priority area.
- Identified both in survey and at community conversations
- TLC Health Network and WCA Hospital provide mental health and chemical dependency services.
- Collaboration with the Chautauqua County Department of Mental Hygiene will help to bolster this initiative.

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 abuse, and prenatal care were in attendance of a half-day meeting to observe outstanding statistics, and provide specific guidance for the Community Health Improvement Plan. Thirty people were in attendance, representing sixteen organizations and twenty-seven different programs.

Stakeholders confirmed the issues that were presented and provided guidance regarding items to include in the Community Health Improvement Plan. The following table provides a list of organizations and representatives who attended the September 13 Community Health Improvement Plan Stakeholder Meeting.

Table 36. Organizations and representatives present at CHIP Stakeholder Meeting

Attending Organizations	Representative
Brooks Memorial Hospital	Theresa Schrantz
Chautauqua Alcohol and Substance Abuse Council	Kathleen Colby
Chautauqua County Department of Health and Human Services	Julie Apperson
Chautauqua County Department of Health and Human Services	Angela Swartzman
Chautauqua County Department of Health and Human Services	Breeanne Agett
Chautauqua County Department of Health and Human Services, Cancer Services Program	Darlene Rowe
Chautauqua County Department of Health and Human Services, Early Intervention Program	Denise Nichols
Chautauqua County Department of Mental Hygiene	Briana Postle
Chautauqua County Department of Mental Hygiene	Pat Brinkman

Chautauqua County Health Network	Kerri Brown
Chautauqua County Health Network	Ann Abdella
Chautauqua County Health Network	Janet Forbes
Chautauqua Lake Child Care Center	Beth Starks
Chautauqua Opportunities Inc.	Tarra Johnson
Chautauqua Opportunities Inc.	Jen Irwin
Delphi Health Care Partners	Melissa Bock
Eastside YMCA	Max Martin
Jamestown Psychiatric	Sandra Dohl
Jamestown Treatment Court, 8th Judicial District	Cathy Newton
Lake Erie Regional Health System	Scott Butler
Lake Erie Regional Health System	Kimberly Maben
P2 of WNY	Marissa Slevar
The Chautauqua Center	Mike Pease
WCA Hospital	Toni DeAngelo
WCA Hospital	Linda Johnson
WCA Hospital	Andy O'Brien
WCA Hospital	Mary Bosek
Westfield Memorial Hospital	Patty Ballman
Westfield Memorial Hospital	Kim Greiner
YMCA of Jamestown	Meg Pickard

Organizations that were invited to the CHIP Stakeholder Meeting, but were unable to attend are listed in Table 37.

Table 37. Organizations unable to attend CHIP Stakeholder Meeting

Invited Organizations
American Cancer Society
Chautauqua Mental Health Association
Cornell Cooperative Extension of Chautauqua County
Erie-2 Chautauqua Cattaraugus BOCES
Family Health Medical Services
The Resource Center
Tri-County Tobacco Free Programs
United Way of Southern Chautauqua County
WIC Program

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 2014-2017 Community Health Assessment and Community Health Improvement Plan available to the community through a number of means.

These include:

- Posting the CHA and CHIP documents on the County website
- Posting the CHA and respective CSPs on hospital websites (BMH, TLC Health Network, WCA, WMH)
- 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.)
- Develop and distribute educational brochure that aligns with NYSDOH's "Make New York the Healthiest State" brochure that will inform county residents of current and proposed efforts to improve community health.

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

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