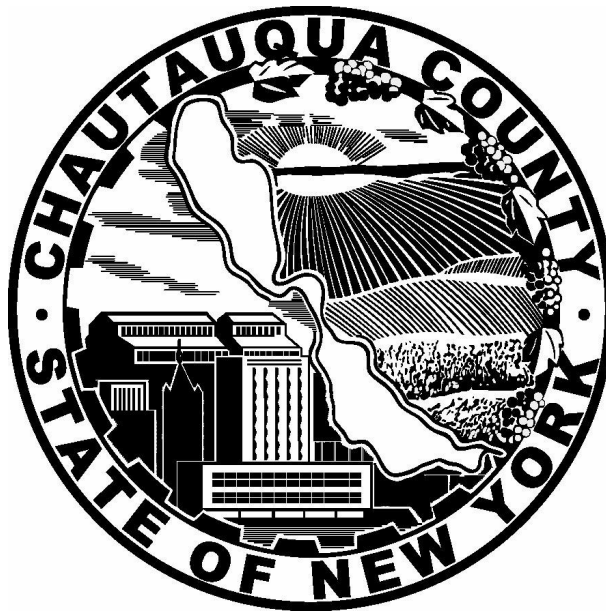


Community Health Assessment

Chautauqua County

2010-2013



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TABLE OF CONTENTS

SECTION 1: POPULATION AT RISK	1
A. DEMOGRAPHIC AND HEALTH STATUS INFORMATION	2
DEMOGRAPHIC INFORMATION	2
NATALITY	20
MORBIDITY	23
MORTALITY	40
B. BEHAVIORAL RISK FACTORS	49
C. THE LOCAL HEALTH CARE ENVIRONMENT	66
SECTION 2: LOCAL HEALTH UNIT CAPACITY PROFILE	71
SECTION 3: PROBLEMS AND ISSUES IN THE COMMUNITY	87
A. PROFILE OF COMMUNITY RESOURCES	88
B. ACCESS TO CARE	90
FINANCIAL BARRIERS	92
STRUCTURAL BARRIERS	93
PERSONAL BARRIERS	96
C. PROFILE OF UNMET NEEDS FOR SERVICES	98
SECTION 4: LOCAL HEALTH PRIORITIES	100
SECTION 5: OPPORTUNITIES FOR ACTION	104
PREVENTION AGENDA PRIORITY #1: CHRONIC DISEASE	105
DIABETES	105
TOBACCO CESSATION	106
PREVENTION AGENDA PRIORITY AREA #2: ACCESS TO CARE	108
INCREASED COVERAGE	108
PHYSICIAN RECRUITMENT AND RETAINMENT	109
PREVENTION AGENDA PRIORITY AREA #3: PHYSICAL ACTIVITY AND NUTRITION	112
PREVENTION AGENDA PRIORITY AREA #4: INFECTIOUS DISEASE	114

Section 1

Population at Risk

A. Demographic and Health Status Information

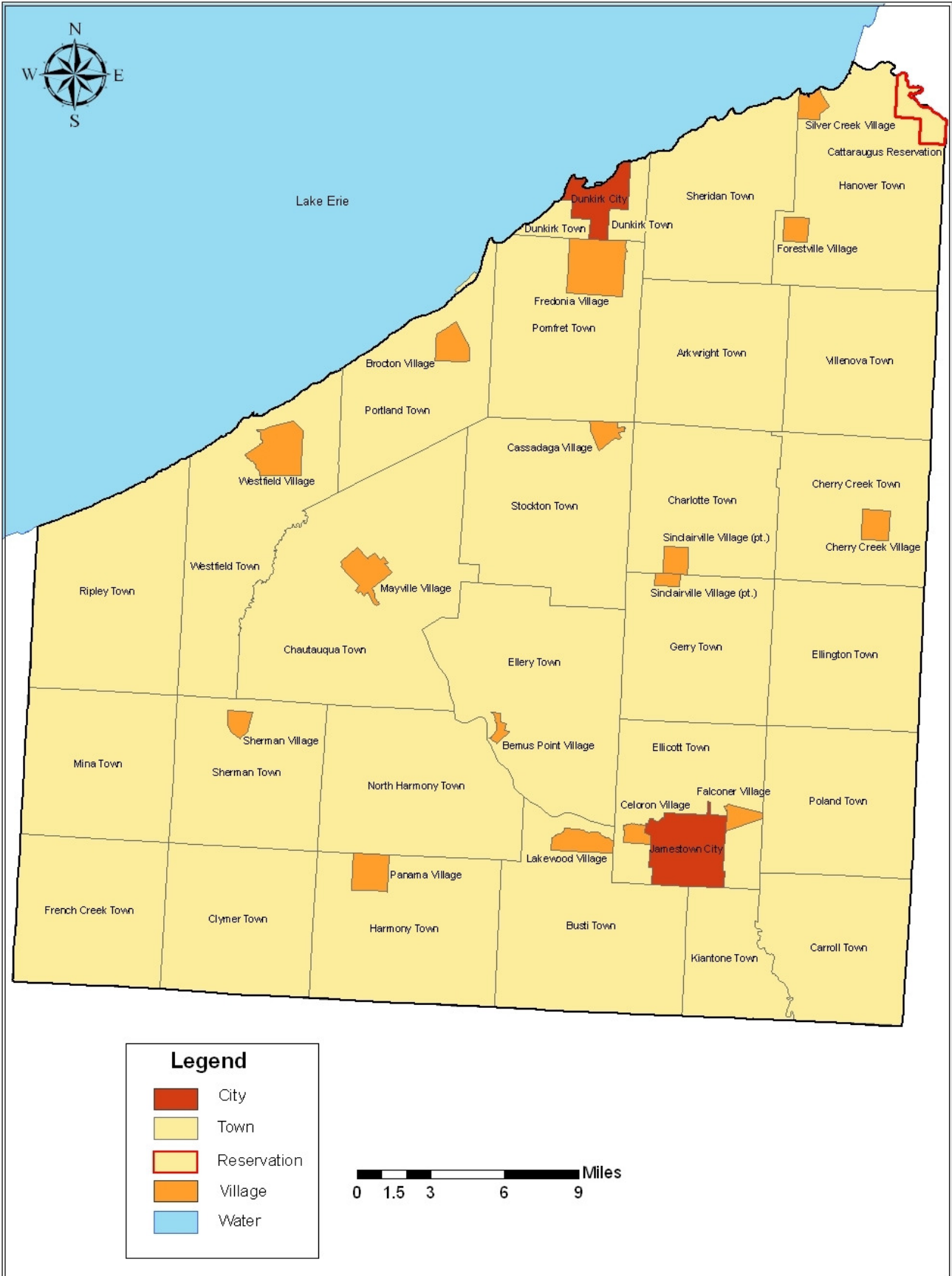
Geographic Location and Overall Population Size

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 geospatial reference for the towns, cities, villages, reservations, and places that comprise Chautauqua County. The map was prepared and provided by the New York State Department of Economic Development, Division of Policy and Research.

Map 1. Subdivisions and Places in Chautauqua County



Chautauqua County is comprised of two cities, Dunkirk and Jamestown, twenty-seven towns, and fifteen villages that cover 1065 square miles with a population of 139,750 at the time of the 2000 census. A 2007 population projection by the U.S. Census Bureau indicates that the County population declined to 133,945 (-4.2%) by 2007, ranking as the 23rd most populous county in New York State. By census definition, 58.8% of the County's population resides in urban areas, while 41.2% resides in rural areas. 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 "north county" region includes the City of Dunkirk containing a population of 12,085 in 2008. The "south county" region encompasses the City of Jamestown, the County's largest population center of 29,463 (Census Bureau 2008 estimates).

Population declines can result in 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. According to the U.S. Census bureau trends, Chautauqua County's population has steadily declined over the last decade and further declines are projected. The New York State Data Center ranks Chautauqua County 60th out of 62 counties for population change since the 2000 census, indicating that only two other counties (Cattaraugus, 61 and Hamilton, 62) had greater population declines. These declines are largely due to the economic difficulties experienced by Western New York, which lead to the loss of jobs, problems attracting new businesses and insufficient opportunities to retain young employees and college graduates.

The following table provides population estimates from 2000 to 2008 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 2000 Census.

Table 1. Census Population Estimates for Incorporated Places and Minor Civil Divisions 2000-08

NAME	Population								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Arkwright town	1126	1126	1129	1130	1130	1127	1115	1110	1107
Bemus Point village	340	339	337	334	333	335	335	334	334
Remainder of Ellery town	4236	4209	4247	4240	4228	4189	4151	4145	4153
Brocton village	1547	1530	1518	1502	1489	1470	1453	1446	1442
Remainder of Portland town	3955	3990	4039	3834	3910	3859	3859	3888	3886
Carroll town	3635	3597	3582	3566	3535	3499	3464	3452	3460
Cassadaga village	676	666	664	656	651	642	636	632	630
Remainder of Stockton town	1655	1638	1638	1625	1612	1593	1580	1580	1575
Cattaraugus Reservation	23	23	23	22	22	22	22	22	22
Celoron village	1295	1274	1264	1250	1236	1219	1204	1197	1193
Cherry Creek village	551	545	541	535	530	523	517	514	513
Remainder of Cherry Creek town	601	607	612	618	611	603	598	596	594
Clymer town	1501	1497	1502	1512	1505	1489	1478	1487	1488
Dunkirk city	13131	12933	12816	12670	12525	12350	12194	12125	12085

Dunkirk town	1387	1370	1356	1353	1344	1330	1310	1307	1304
Ellington town	1639	1632	1624	1614	1644	1626	1625	1627	1628
Falconer village	2540	2507	2483	2456	2427	2393	2362	2350	2342
Forestville village	770	759	752	743	734	725	716	714	714
Fredonia village	10706	10700	10621	10565	10725	10702	11096	11053	11064
Remainder of Pomfret town	3997	3981	3972	3936	3922	3894	3864	3859	3858
French Creek town	935	944	977	1006	1042	1062	1076	1085	1101
Jamestown city	31730	31506	31163	30811	30448	30040	29667	29545	29463
Remainder of Ellicott town	5445	5437	5451	5414	5378	5331	5273	5251	5242
Kiantone town	1385	1381	1384	1381	1380	1389	1396	1395	1397
Lakewood village	3258	3209	3183	3154	3125	3094	3064	3047	3041
Remainder of Busti town	4502	4476	4471	4453	4430	4397	4365	4348	4352
Mayville village	1756	1753	1751	1732	1731	1721	1695	1687	1685
Remainder of Chautauqua town	2910	2883	2880	2870	2854	2838	2821	2819	2825
Mina town	1176	1183	1188	1186	1184	1176	1169	1168	1165
North Harmony town	2521	2523	2509	2498	2499	2485	2471	2461	2454
Panama village	491	484	480	475	469	465	460	459	460
Remainder of Harmony town	1848	1831	1822	1819	1805	1795	1775	1767	1761
Poland town	2467	2445	2431	2414	2402	2380	2361	2347	2350
Ripley town	2636	2619	2614	2632	2651	2666	2656	2648	2653
Sheridan town	2838	2567	2553	2532	2509	2483	2461	2454	2448
Sherman village	714	703	697	689	680	671	662	660	658
Remainder of Sherman town	839	829	832	849	844	840	840	845	842
Silver Creek village	2896	2859	2839	2838	2837	2832	2826	2808	2799
Remainder of Hanover town	3972	3958	3940	3919	3891	3866	3819	3826	3826
Sinclairville village (pt.)	555	547	542	536	531	523	518	517	521
Remainder of Charlotte town	1158	1168	1176	1192	1190	1177	1180	1174	1169
Sinclairville village (pt.)	110	109	108	107	106	105	104	103	105
Remainder of Gerry town	1944	1938	1932	1919	1905	1886	1876	1869	1877
Villanova town	1121	1116	1118	1121	1123	1127	1130	1140	1136
Westfield village	3481	3439	3478	3465	3459	3427	3387	3373	3361
Remainder of Westfield town	1751	1741	1740	1736	1732	1712	1696	1703	1706
Chautauqua County	139750	138604	138008	136945	136338	135092	134336	133953	133789

Source: US Census Bureau Annual Estimates of Incorporated Places 2000 Through July 1, 2008

Age and Sex Distributions

The distribution of genders in the County is approximately equal overall, comprised of 49.4% males and 50.6% females. However, sex distributions fluctuate by age group. There are more males (52.86%) than females among children less than 5 years old and among children between 10 and 14 years (55.28% male). The greatest difference is demonstrated among residents aged 85 years and older, for which the population is composed of 74% females and only 26% males. Given that the life expectancy for women is greater than that for men, the difference is logical.

The median age of Chautauqua County residents is 39.6 years, slightly higher than the New York State median of 37.7 years. A greater proportion of residents in Chautauqua County are over the age of 65 and 85 than the New York State as a whole (15.6% compared to 13.18% and

2.47% compared to 1.86%, respectively). The County has an old and aging population, which is an indicator of special health care needs for elderly populations.

Table 2. Chautauqua County Population by Age and Sex

	Both sexes	% Both sexes	Male	Female	% Male
Total:	133,945	100.00%	66,170	67,775	49.40%
Under 5 years	6,672	4.98%	3,527	3,145	52.86%
5 to 9 years	7,033	5.25%	3,040	3,993	43.22%
10 to 14 years	8,334	6.22%	4,607	3,727	55.28%
15 to 17 years	6,681	4.99%	3,405	3,276	50.97%
18 and 19 years	4,929	3.68%	2,282	2,647	46.30%
20 years	3,074	2.29%	1,538	1,536	50.03%
21 years	2,726	2.04%	1,646	1,080	60.38%
22 to 24 years	5,273	3.94%	2,538	2,735	48.13%
25 to 29 years	9,411	7.03%	5,574	3,837	59.23%
30 to 34 years	6,699	5.00%	3,256	3,443	48.60%
35 to 39 years	6,552	4.89%	2,885	3,667	44.03%
40 to 44 years	9,321	6.96%	4,865	4,456	52.19%
45 to 49 years	10,554	7.88%	5,426	5,128	51.41%
50 to 54 years	10,056	7.51%	4,994	5,062	49.66%
55 to 59 years	8,777	6.55%	4,131	4,646	47.07%
60 and 61 years	2,741	2.05%	1,326	1,415	48.38%
62 to 64 years	4,212	3.14%	2,351	1,861	55.82%
65 and 66 years	2,834	2.12%	1,406	1,428	49.61%
67 to 69 years	2,918	2.18%	1,586	1,332	54.35%
70 to 74 years	4,084	3.05%	1,709	2,375	41.85%
75 to 79 years	4,714	3.52%	1,977	2,737	41.94%
80 to 84 years	3,042	2.27%	1,241	1,801	40.80%
85 years and over	3,308	2.47%	860	2,448	26.00%
Selected Age Groups					
18 years and over	105,225	78.56%	51,591	53,634	49.03%
21 years and over	97,222	72.58%	47,771	49,451	49.14%
62 years and over	25,112	18.75%	11,130	13,982	44.32%
65 years and over	20,900	15.60%	8,779	12,121	42.00%
Median age (years)	39.6				

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

Race

While predominantly Caucasian, Chautauqua County ranks 34th among New York counties in terms of the percentage of its population identifying itself as a race or a racial mixture other than white. The counties ranking ahead of Chautauqua typically include a larger metropolitan

area, such as Erie (City of Buffalo), Onondaga (City of Syracuse) and logically surrounding New York City counties. The U.S. Census Bureau population projections for 2007 indicate that of residents categorized as being of one race (98.2%), 96% were white, 2.1% were black or African American, 0.3% were American Indian or Alaska Natives, 0.5% were Native Hawaiian and other Pacific Islander, and 1.1% were some other race. Of residents representing two or more races (1.8%), the majority were white and black or African American (47.1%) and white and American Indian or Alaska Natives (32.1%).

Table 3. Racial Distribution of Persons in Chautauqua County, 2007

Total population	133,945	100%
One race	131,587	100%
Two or more races	2,358	100%
One race	131,587	98.20%
White	126,344	96.00%
Black or African American	2,768	2.10%
American Indian and Alaska Native	370	0.30%
Asian	595	0.50%
Native Hawaiian and Other Pacific Islander	0	0.00%
Some other race	1,510	1.10%
Two or more races	2,358	1.80%
White and Black or African American	1,110	47.10%
White and American Indian and Alaska Native	756	32.10%
White and Asian	228	9.70%
Black or African American and American Indian and Alaska Native	49	2.10%

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

Hispanics are the fastest growing ethnic group in the County and in the nation, currently making up 4.7% of the County's population. According to the U.S. Census Profile most of the Hispanic population lives in the County's urban areas: with 45% residing in Dunkirk and 25% living in Jamestown. However, there are Hispanic residents throughout the entire County. The largest portion of the County's Hispanic/Latino population is Puerto Rican (86.5%).

Table 4. Distribution of Hispanic or Latino Ethnicity Among Chautauqua County Races, 2007

HISPANIC OR LATINO AND RACE	Chautauqua County		New York State	
	Population	Percentage	Population	Percentage
Total population	134,474	100%	19,280,753	100%
Hispanic or Latino (of any race)	6,311	4.70%	3,126,718	16.20%
Mexican	296	0.20%	375,617	1.90%
Puerto Rican	5,459	4.10%	1,079,477	5.60%
Cuban	159	0.10%	69,076	0.40%
Other Hispanic or Latino	397	0.30%	1,602,548	8.30%
Not Hispanic or Latino	128,163	95.30%	16,154,035	83.80%
White alone	122,721	91.30%	11,633,079	60.30%

Black or African American alone	2,576	1.90%	2,850,495	14.80%
American Indian and Alaska Native alone	451	0.30%	51,773	0.30%
Asian alone	709	0.50%	1,291,827	6.70%
Native Hawaiian and Other Pacific Islander alone	18	0.00%	4,790	0.00%
Some other race alone	34	0.00%	109,585	0.60%
Two or more races	1,654	1.20%	212,486	1.10%
Two races including Some other race	22	0.00%	22,056	0.10%
Two races excluding Some other race, and Three or more races	1,632	1.20%	190,430	1.00%

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

There is a strong migrant presence in the area's agricultural workforce. The Chautauqua Opportunities, Inc. Migrant Health Program reports that approximately 280 migrants were present in the County from April 2008 to March 2009. 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. In fact, the U.S. Census indicates that only 23 Native Americans residing in the County actually live on the reservation, which actually spans 3 counties: Chautauqua, Erie, and Cattaraugus.

The last significant population that must be mentioned is the thriving communities of Amish within the County. 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 2,000-2,500 Amish residents in the County, comprising about 2% of the total population.

Language and cultural differences can create barriers to the provision of health knowledge, health education and service delivery. U.S. Census Bureau 2005-2007 American Community Survey indicates that 6.5% 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. Distribution of Languages Spoken in the Homes of Chautauqua County Residents, 2007

Population 5 years and over	127,460	100%
English only	119,150	93.50%
Language other than English	8,310	6.50%
Speak English less than "very well"	2,931	2.30%
Spanish	4,744	3.70%
Speak English less than "very well"	1,854	1.50%
Other Indo-European languages	3,007	2.40%
Speak English less than "very well"	754	0.60%
Asian and Pacific Islander languages	438	0.30%
Speak English less than "very well"	251	0.20%
Other languages	121	0.10%
Speak English less than "very well"	72	0.10%

Source: U.S. Census Bureau, 2005-2007 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. Given the unique customs that are practiced in the County, public education efforts must be expressed in a culturally and linguistically appropriate manner.

Chautauqua County Household and Housing Data

In 2007 there were 54,556 households in Chautauqua County (See Table 1). The average household size was 2.3 people, which is comparable to the state average of 2.63 people. The majority of households were families (65.5%), which include married-couple families (48.9%), and other families (16.6%). Nonfamily households made up 34.5% of all households in the County. The majority of nonfamily households were residents living alone (27.8%), 11.1% of whom were aged 65 years or older. 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

HOUSEHOLDS BY TYPE	Chautauqua County		New York State	
Total households	54,556	100%	7,099,940	100%
Family households (families)	35,733	65.50%	4,594,823	64.70%
With own children under 18 years	15,015	27.50%	2,117,702	29.80%
Married-couple family	26,667	48.90%	3,222,112	45.40%
With own children under 18 years	9,873	18.10%	1,413,595	19.90%
Male householder, no wife present, family	2,611	4.80%	349,988	4.90%
With own children under 18 years	1,192	2.20%	148,191	2.10%
Female householder, no husband present, family	6,455	11.80%	1,022,723	14.40%
With own children under 18 years	3,950	7.20%	555,916	7.80%
Nonfamily households	18,823	34.50%	2,505,117	35.30%
Householder living alone	15,176	27.80%	2,087,504	29.40%

65 years and over	6,044	11.10%	731,419	10.30%
Households with one or more people under 18 years	16,420	30.10%	2,344,560	33.00%
Households with one or more people 65 years and over	13,884	25.40%	1,795,662	25.30%
Average household size	2.3	(X)	2.63	(X)
Average family size	2.82	(X)	3.3	(X)

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

The Homeless Management Information System for Chautauqua County reports that from January 1, 2008 through December 31, 2008, there were 173 homeless families in the County. Of homeless residents, 108 (62.4%) were single individuals, 55 (31.8%) were female headed single-parent families, 5 (2.9%) were two-parent families, 4 (2.3%) were two adults with no children, and 1 (0.6%) was classified as 'other'. (Information from Chautauqua Opportunities 2009 Needs Assessment)

The U.S. Census Bureau 2007 American Community Survey indicates that there are approximately 65,693 housing units in Chautauqua County, 83.0% of which are occupied, leaving 17.0% vacant. Of those units, the majority (65.0%) are one-unit detached single family homes. The remaining housing units are mostly buildings containing two or more units and 6.7% are mobile homes. Most housing units are inhabited by the owners (67.4%) but still many are rented out (32.6%). Housing structures in the County are relatively old with 45.9% built in 1939 or earlier, compared to 34.8% in New York State. In Chautauqua County, 53.0% of homes were built prior to 1950, compared to 44.1% 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.

Income Level

Based on income and poverty data, Chautauqua County is one of the poorest counties in the state. The 2007 median income for Chautauqua County's 54,556 households is \$38,942, ranked by the Bureau of Labor Statistics as the fourth lowest of the 62 New York State counties. The U.S. Census Bureau estimates that 77.1% of households received earnings, 32.4% received Social Security (mean income \$13,969) and 20.0% received retirement income (mean income \$16,160) other than Social Security. The totals exceed 100% because some households received income from more than one source.

The median family household income (\$47,616) was greater than the median nonfamily household income (\$24,964) in 2007. Overall, 10.1% of households had an income of less than \$10,000.

Table 7. Income and Benefits of Chautauqua County Residents, 2007 Inflation-Adjusted Dollars

	Chautauqua County		New York State	
Total households	54,556	100%	7,099,940	100%
Less than \$10,000	5,523	10.10%	584,805	8.20%
\$10,000 to \$14,999	3,472	6.40%	397,138	5.60%
\$15,000 to \$24,999	7,371	13.50%	732,718	10.30%
\$25,000 to \$34,999	7,107	13.00%	669,858	9.40%
\$35,000 to \$49,999	10,674	19.60%	933,524	13.10%
\$50,000 to \$74,999	11,571	21.20%	1,270,315	17.90%
\$75,000 to \$99,999	4,628	8.50%	844,181	11.90%
\$100,000 to \$149,999	3,112	5.70%	910,077	12.80%
\$150,000 to \$199,999	517	0.90%	358,310	5.00%
\$200,000 or more	581	1.10%	399,014	5.60%
Median household income (dollars)	38,942	(X)	53,514	(X)
Mean household income (dollars)	48,983	(X)	77,865	(X)
With earnings	42,058	77.10%	5,606,885	79.00%
Mean earnings (dollars)	48,348	(X)	80,853	(X)
With Social Security	17,699	32.40%	1,961,271	27.60%
Mean Social Security income (dollars)	13,969	(X)	14,887	(X)
With retirement income	10,926	20.00%	1,282,181	18.10%
Mean retirement income (dollars)	16,160	(X)	21,599	(X)
With Supplemental Security Income	3,545	6.50%	367,981	5.20%
Mean Supplemental Security Income (dollars)	6,508	(X)	7,832	(X)
With cash public assistance income	1,972	3.60%	197,196	2.80%
Mean cash public assistance income (dollars)	2,323	(X)	3,377	(X)
With Food Stamp benefits in the past 12 months	6,430	11.80%	675,890	9.50%
Families	35,733	100%	4,594,823	100%
Less than \$10,000	1,926	5.40%	228,201	5.00%
\$10,000 to \$14,999	1,518	4.20%	169,127	3.70%
\$15,000 to \$24,999	3,597	10.10%	375,250	8.20%
\$25,000 to \$34,999	4,441	12.40%	397,232	8.60%
\$35,000 to \$49,999	7,364	20.60%	593,152	12.90%
\$50,000 to \$74,999	8,718	24.40%	863,311	18.80%
\$75,000 to \$99,999	4,160	11.60%	635,804	13.80%
\$100,000 to \$149,999	3,126	8.70%	727,625	15.80%
\$150,000 to \$199,999	411	1.20%	288,648	6.30%
\$200,000 or more	472	1.30%	316,473	6.90%
Median family income (dollars)	47,616	(X)	64,602	(X)
Mean family income (dollars)	57,029	(X)	89,772	(X)
Per capita income (dollars)	20,644	(X)	29,885	(X)
Nonfamily households	18,823	100%	2,505,117	100%
Median nonfamily income (dollars)	24,694	(X)	33,393	(X)
Mean nonfamily income (dollars)	32,650	(X)	53,012	(X)

Median earnings for workers (dollars)	24,040	(X)	31,263	(X)
Median earnings for male full-time, year-round workers (dollars)	40,434	(X)	47,198	(X)
Median earnings for female full-time, year-round workers (dollars)	28,313	(X)	38,830	(X)

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

According to the U.S. Census Bureau American Community Survey poverty rates of 2007, 14.9% of all Chautauqua County residents live below the federal poverty level. Approximately 23% of children ages 0 to 17 years old and 26% of children less than five years old are living in poverty, compared to 9.6% of people aged 65 and over. The Health and Human Services federal poverty guideline (2007) for a family of four was an income of \$20,659. Ten percent of all families and 31% of families with a female householder and no husband present had incomes below the poverty level.

Table 8. Percentage of Families and People Whose Income in the Past 12 Months is Below the Poverty Level, 2007

	Chautauqua County	New York State
All families	9.60%	10.30%
With related children under 18 years	17.00%	15.90%
With related children under 5 years only	25.00%	15.10%
Married couple families	3.60%	5.00%
With related children under 18 years	6.60%	6.70%
With related children under 5 years only	4.80%	5.60%
Families with female householder, no husband present	30.90%	26.40%
With related children under 18 years	44.40%	36.10%
With related children under 5 years only	61.80%	41.50%
All people	14.90%	13.70%
Under 18 years	23.70%	19.40%
Related children under 18 years	22.20%	19.10%
Related children under 5 years	25.90%	21.40%
Related children 5 to 17 years	21.10%	18.20%
18 years and over	12.40%	12.00%
18 to 64 years	13.00%	12.00%
65 years and over	9.60%	11.70%
People in families	10.80%	11.30%
Unrelated individuals 15 years and over	31.20%	23.60%

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

Health outcomes are directly correlated with education and socioeconomic status. Poverty is the single largest identifiable factor preventing the attainment of many of the Healthy People 2010 objectives. Health issues in Chautauqua County are impacted by a combination of poverty, cultural differences, language and literacy barriers and education levels. Obesity, high teen pregnancy, low birth rates and lack of access to health care are a few of the Healthy People 2010 indicators that are directly related to poverty in Chautauqua County. The clear

relationship between poverty and health risks suggest that heavy emphasis be placed on the health needs of low income families, particularly female-headed households with children.

Employment

In 2007, 66,370 (60.7%) Chautauqua County residents were in the labor force and 118 (0.1%) were in the armed forces. Of those, 4,772 (4.4%) were unemployed. The Chautauqua County Workforce Investment Board (WIB) indicates that the unemployment rate has increased since the last US Census Bureau American Community Survey, particularly given the drastic economic downturn that began in the fall of 2008. As of June 2009, the County unemployment rate is 8.7%, which is similar to the state rate of 8.6%, and slightly lower than the national unemployment rate of 9.7%.

Table 9. Employment Status of Chautauqua County Residents, 2007

	Chautauqua County		New York State	
	Count	Percentage	Count	Percentage
Population 16 years and over	109,303	100%	15,419,544	100%
In labor force	66,370	60.70%	9,716,173	63.00%
Civilian labor force	66,252	60.60%	9,692,378	62.90%
Employed	61,480	56.20%	9,090,584	59.00%
Unemployed	4,772	4.40%	601,794	3.90%
Armed Forces	118	0.10%	23,795	0.20%
Not in labor force	42,933	39.30%	5,703,371	37.00%

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

The most prevalent occupation category among employed civilians over the age of 16 included management, professional, and related occupations (27.7%). The next most common occupation categories were: production, transportation and material moving occupations (22.0%), sales and office occupations (20.6%), service occupations (18.1%) and construction, extraction, maintenance and repair occupations (9.3%). The last category included farming, fishing, and forestry occupations and employs 2.2% of the specified population. Private wage and salary workers made up the majority of the workforce with 48,000 employees (78.1%), followed by government workers (15.2%).

Table 10. Occupations of Chautauqua County Residents, 2007

	Chautauqua County		New York State	
	Count	Percentage	Count	Percentage
Civilian employed population 16 years and over	61,480	100%	9,090,584	100%
Management, professional, and related occupations	17,018	27.70%	3,382,604	37.20%
Service occupations	11,158	18.10%	1,724,839	19.00%
Sales and office occupations	12,684	20.60%	2,319,402	25.50%
Farming, fishing, and forestry occupations	1,377	2.20%	23,290	0.30%
Construction, extraction, maintenance and repair occupations	5,723	9.30%	713,099	7.80%
Production, transportation, and material moving occupations	13,520	22.00%	927,350	10.20%
CLASS OF WORKER				
Private wage and salary workers	48,000	78.10%	6,975,847	76.70%
Government workers	9,319	15.20%	1,508,866	16.60%
Self-employed workers in own not incorporated business	3,929	6.40%	589,279	6.50%

Unpaid family workers	232	0.40%	16,592	0.20%
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Source: U.S. Census Bureau, 2007 American Community Survey

The educational services, and health care and social assistance industry employs the most residents of all industries in the County with 23.4%, similar to the state percentage of 25.5%. Manufacturing (18.3%), retail trade (11.5%), and arts, entertainment, and recreation, and accommodation and food services (10.4%) industries were the closest followers in 2007. The manufacturing and agricultural (3.5%) industries employ a greater proportion of the population in the County than in the state (7.5% and 0.6%, respectively). The professional, scientific, and management, and administrative and waste management services industry employs a much lower proportion of county residents (4.8%) than state residents (10.8%).

Table 11. Industry of Employment for Chautauqua County Residents, 2007

Civilian employed population 16 years and over	Chautauqua County		New York State	
	Count	Percentage	Count	Percentage
Agriculture, forestry, fishing and hunting, and mining	2,124	3.50%	55,796	0.60%
Construction	3,313	5.40%	562,762	6.20%
Manufacturing	11,271	18.30%	682,200	7.50%
Wholesale trade	1,750	2.80%	263,951	2.90%
Retail trade	7,094	11.50%	954,581	10.50%
Transportation and warehousing, and utilities	3,654	5.90%	499,696	5.50%
Information	1,541	2.50%	293,840	3.20%
Finance and insurance, and real estate and rental and leasing	2,516	4.10%	805,622	8.90%
Professional, scientific, and management, and administrative and waste management services	2,180	3.50%	981,121	10.80%
Educational services, and health care and social assistance	14,396	23.40%	2,321,797	25.50%
Arts, entertainment, and recreation, and accommodation, and food services	6,374	10.40%	784,786	8.60%
Other services, except public administration	2,981	4.80%	447,564	4.90%
Public administration	2,286	3.70%	436,868	4.80%

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

The leading industry in Chautauqua County is educational and health care and social assistance (23.4%). The remaining majority of the employed population greater than 16 years of age work in manufacturing (18.3%), retail trade (11.5%), and arts, entertainment, recreation, accommodation, and food services (10.4%). The agriculture, forestry, fishing and hunting and mining industry employs 3.5% of the County population, compared to 0.6% for the state's population. While only a small fraction of the County works in that industry, agriculture continues to contribute to the County's economy.

With \$2.7 billion in manufacturer's shipments in 2002 (US Census Quickfacts), the manufacturing sector provides the base for the County's economy. The retail, service, and tourism sectors closely follow with \$1.2 billion in sales in 2002. Farming continues to contribute to the County's economy, as well as the associated food processing industry. With 584 commercial farms (2007), approximately 20,000 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 in Chautauqua County

For a county of its size and geographic location, Chautauqua is home to a surprising array of high quality, and in several cases unique, educational opportunities.

Educational Resources

The County's educational system includes the State University of New York at Fredonia, Jamestown Business College, and Jamestown Community College, 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 popular with the locals as well, each of these educational institutions draws non-native students and tourists into the County seasonally and year-round. This population flux impacts the local economy and has the potential to affect health status by assisting in the importation and exportation of infectious diseases.

Public education is offered by 18 school districts in Chautauqua County (see 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.

Chautauqua County Public School Districts:

Bemus Point CSD	Frewsburg CSD
Brocton CSD	Jamestown City SD
Cassadaga Valley CSD	Panama CSD
Chautauqua Lake CSD	Pine Valley CSD
Clymer CSD	Ripley CSD
Dunkirk City SD	Sherman CSD
Falconer CSD	Silver Creek CSD
Forestville CSD	Southwestern CSD
Fredonia CSD	Westfield CSD

*CSD= Central School District

Chautauqua County post-secondary educational opportunities:

- University Colleges (SUNY Colleges)

SUNY Fredonia

SUNY Empire State College (one center in Buffalo and multiple units in Western NY)

- Community Colleges
 - Jamestown Community College (JCC)
- Private Institutions
 - Jamestown Business College (JBC)

School Populations and Risk Indicators

Table 12 lists the total enrollment, racial distribution of students, and attendance rate in all public school districts in Chautauqua County. The total public school population for Chautauqua County was 21,112 in the 2007-2008 school year (elementary, middle, and high schools). Reflecting the racial distribution of the County, white students made up the majority (85.9%) of all public school students. Black students contributed to 3.9% of the public school enrollment, while 7.9% of students were of Hispanic ethnicity. School district-specific racial and ethnic statistics, need/resource capacity levels, and annual attendance percentages are provided in Table 12.

Table 12: 2007-2008 Public School Enrollment, racial distribution of students and annual attendance percentage

School District	Need/Resource Capacity (N/RC) level	Enrollment 2007-2008					Annual Attendance Percentage (2006-07)
		Total	% White	% Black	% Hisp	% Other	
Bemus Point	average	763	97	1	1	1	94%
Brocton	high	637	94	1	4	0	95%
Cassadaga Valley	high	1203	97	1	2	0	94%
Chautauqua Lake	average	794	94	2	1	3	96%
Clymer	average	435	97	1	1	2	96%
Dunkirk	high	2103	52	9	38	2	93%
Falconer	average	1333	96	2	1	1	96%
Forestville	average	596	95	0	4	1	95%
Fredonia	average	1694	92	1	4	2	95%
Frewsburg	average	917	97	2	0	1	96%
Jamestown	high	4948	77	8	12	3	94%
Panama	average	660	98	1	0	0	96%
Pine Valley	high	718	97	1	2	1	96%
Ripley	high	354	99	1	0	0	95%
Sherman	high	478	98	1	1	0	96%
Silver Creek	high	1115	81	2	3	14	94%
Southwestern	average	1551	93	1	1	4	96%
Westfield	high	813	93	1	4	1	96%

Source: NYS Education Department School Report Cards

Dunkirk, Jamestown, and Silver Creek had the most racially and ethnically diverse school populations. Of Dunkirk students, 9% were black and 38% were Hispanic. Jamestown students

were 8% black and 12% Hispanic. The largest proportion of "other race or ethnicity" was demonstrated in the Silver Creek school district, which educates a relatively large proportion of the Native American population, due to its close proximity to the Cattaraugus Indian Reservation in Irving, NY. The remaining school districts were comprised of more than 90% white students.

Percentage of annual attendance was 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 13 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 13: Statistics for Public School Districts in Chautauqua County

School District	Drop Outs and Youth at Risk							Pupil: Personnel services ratio (2007-08)	Pupil: Teacher Ratio (2007-08)
	Census Poverty Index (2007)	N (%) Free/ Reduced Lunch (2007-08)	(LEP) N (%) (2007-08)	Suspension N (%) (2006-07)	Drop out N (%) (2006-07)	N (%) Entered GED program	N (%) to college		
Bemus Point	12.1	87 (11%)	1 (0%)	4 (0%)	5 (1%)	0 (0%)	77 (90%)	109	10.9
Brocton	17.2	334 (52%)	3 (0%)	30 (5%)	5 (2%)	0 (0%)	45 (85%)	91	9.6
Cassadaga Valley	14	520 (43%)	0 (0%)	0 (0%)	20 (4%)	0 (0%)	65 (75%)	133.6	11.4
Chautauqua Lake	18.1	321 (40%)	0 (0%)	12 (1%)	10 (3%)	0 (0%)	52 (84%)	99.3	9.3
Clymer	29.2	176 (41%)	0 (0%)	14 (3%)	3 (2%)	0 (0%)	18 (62%)	88.8	8.7
Dunkirk	33.8	1348 (66%)	228 (11%)	178 (8%)	56 (6%)	3 (0%)	106 (72%)	75.1	9.6
Falconer	14.4	412 (31%)	0 (0%)	25 (2%)	13 (2%)	0 (0%)	96 (85%)	133.3	12.1
Forestville	14.9	213 (36%)	0 (0%)	16 (3%)	3 (1%)	0 (0%)	41 (79%)	101	11
Fredonia	11.5	384 (22%)	20 (1%)	41 (2%)	19 (2%)	0 (0%)	139 (92%)	161.3	10.9
Frewsburg	10	234 (26%)	0 (0%)	15 (2%)	6 (1%)	0 (0%)	68 (79%)	120.7	13
Jamestown	28	2755 (56%)	187 (4%)	346 (7%)	64 (3%)	39 (2%)	214 (66%)	102	10.9
Panama	19.5	203 (31%)	0 (0%)	7 (1%)	12 (4%)	0 (0%)	39 (67%)	165	9.9
Pine Valley	28.9	304 (42%)	0 (0%)	51 (7%)	8 (3%)	0 (0%)	47 (72%)	110.5	9.7
Ripley	13.7	233 (66%)	0 (0%)	46 (12%)	9 (5%)	0 (0%)	26 (76%)	118	8.7
Sherman	25.8	281 (59%)	2 (0%)	17 (3%)	1 (1%)	0 (0%)	16 (64%)	119.5	10.8
Silver Creek	16.5	452 (41%)	3 (0%)	36 (3%)	12 (2%)	0 (0%)	65 (80%)	101.4	9.9
Southwestern	11.4	396 (26%)	7 (0%)	84 (5%)	15 (2%)	0 (0%)	99 (76%)	124.1	11.7
Westfield	17.2	397 (49%)	13 (2%)	29 (4%)	7 (2%)	0 (0%)	36 (70%)	101.6	10.1

LEP= Limited English Proficient

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 2007 were demonstrated by Dunkirk (33.8), Clymer (29.2), Pine Valley (28.9), and Sherman (25.8). 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: Dunkirk (66%), Ripley (66%), Sherman (59%), Jamestown (56%), and Brocton (52%). Bemus Point, Fredonia, Frewsburg, and Southwestern 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 (11%) and Jamestown (4%) school districts have the highest proportions of Limited English Proficient (LEP) in the County. LEP is not a major burden for the remaining school districts.

Suspension and drop out statistics are used as indicators of youths at risk. Ripley (12%), Dunkirk (8%), Pine Valley (7%), and Jamestown (7%) school districts had the highest percentages of discipline by suspension during the 2006-2007 school year. Dunkirk (6%) and Ripley (5%) school districts ranked the highest for proportions of students who dropped out of school for the 2006-2007 school year.

Fredonia (92%) and Bemus Point (90%) school districts had the highest proportions of graduating students who went on to pursue higher education at a 2 or 4-year college while Clymer (62%), Sherman (64%), and Jamestown (66%) had the lowest. Dunkirk, Clymer, and Brocton had the lowest ratio of students to personnel services staff, while Ripley, Clymer, and Chautauqua Lake had the lowest number of students per teacher for the 2007-2008 school year.

Table 14 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 14: School Enrollment for the Chautauqua County Population Aged 3 years and older

SCHOOL ENROLLMENT	Chautauqua County		New York State	
	Population	Percentage	Population	Percentage
Population 3 years and over enrolled in school	33,145	100%	5,071,883	100%
Nursery school, preschool	808	2.40%	311,456	6.10%
Kindergarten	1,352	4.10%	225,471	4.40%
Elementary school (grades 1-8)	13,324	40.20%	1,940,425	38.30%
High school (grades 9-12)	8,626	26.00%	1,123,603	22.20%
College or graduate school	9,035	27.30%	1,470,928	29.00%

Source: U.S. Census Bureau, 2007 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 than Chautauqua County.

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. Table 15 compares and provides educational attainment data for Chautauqua County and New York State residents.

Table 15: Highest level of educational attainment for Residents 25 years and older, 2007

	Chautauqua County		New York State	
	Population	%	Population	%
Population 25 years and over	89,223	100%	12,900,108	100%
Less than 9th grade	2,695	3.00%	922,700	7.20%
9th to 12th grade, no diploma	10,485	11.80%	1,134,653	8.80%
High school graduate (includes equivalency)	35,191	39.40%	3,793,882	29.40%
Some college, no degree	13,881	15.60%	1,916,226	14.90%
Associate's degree	9,951	11.20%	1,042,663	8.10%
Bachelor's degree	9,637	10.80%	2,345,752	18.20%
Graduate or professional degree	7,383	8.30%	1,744,232	13.50%
<hr/>				
Percent high school graduate or higher	85.20%	(X)	84.10%	(X)
Percent bachelor's degree or higher	19.10%	(X)	31.70%	(X)

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

The majority of County residents claim that high school or GED is their highest level of educational attainment (39.4%). Chautauqua County has fewer residents over the age of 25 with less than a 9th grade education than New York State. The proportion of residents who have a bachelor's or graduate or professional degree is much higher for New York State (18.2%, 13.5%) than Chautauqua County (10.8%, 8.3%). The percent of residents over 25 who completed high school in Chautauqua County is comparable that of New York State. However, New York State has greater than 10% more residents holding a bachelor's degree or higher.

Natality

New York State Vital Statistics provides birth and fertility rates for the County by mother's age and race. The birth rate for Chautauqua County in 2007 was 11.2 per 1,000 residents, which was comparable to neighboring counties and New York State as a whole. The fertility rate was 55.7 per 1,000 female residents aged 15 to 44 years, which was slightly lower than neighboring Cattaraugus County (63.4) and New York State as a whole (61.9). Among teenage fertility, the highest rate was demonstrated by females aged 18-19 (44.0). Among girls aged 15-17, the fertility rate was 15.7, which is slightly lower than Cattaraugus County (18.6) and greater than New York State as a whole (13.2) and New York State excluding New York City (10.9). Fertility rates experienced by 10 to 14 year olds were low (0.8) and comparable to the state (0.3). A glance at past vital statistics shows that teenage fertility rates were lower in 2007 than in years past, particularly among girls aged 18-19. The greatest disparity was seen between 2005 (57.8) and 2007 (44.0). There was a surprisingly lower rate of fertility among women aged 30-34 in the County (74.7) compared to Cattaraugus County (99.4) and the state (106.2).

Table 16. Live Birth and Fertility rates by Mother's Age, 2007

County	Category		Mother's Age								
	Birth Rate ¹	Fertility Rate ²	10-14	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+ ³
Allegany	10.6	48.7	0	11.8	25.9	61.9	100.9	74.4	26.4	9.2	0.6
Cattaraugus	12.4	63.4	0.8	18.6	63.4	95.2	104.7	99.4	37.5	5	0.6
Chautauqua	11.2	55.7	0.8	15.7	44	87.1	104.9	74.7	32.6	5.1	0.4
NYS	13.1	61.9	0.3	13.2	43.2	74.4	106.2	105.5	56.7	12.9	1.1
NYS excl. NYC	11.8	59.2	0.3	10.9	38	64.8	104.1	119.8	59.8	11.3	0.8

1 Live Birth Rates based on live births per 1,000 population.

2 Fertility Rates based on live births per 1,000 female population 15-44.

3 Fertility Rates for Age 45+ based on live births to women aged 45+ per 1,000 female population 45-49.

All other rates are age-specific fertility rates.

Source: Vital Statistics of New York State 2007

In 2007, there were 222 teenage pregnancies among girls aged 15 to 19 years in Chautauqua County. The overall rate was 39.4 pregnancies per 1,000 females in the County aged 15 to 19 years. Of the total pregnancies, 163 ended up as live births, 47 were intentionally aborted, and 12 were ended in spontaneous fetal deaths. The County rate of 39.4 is lower than both the New York State (58.4) and New York State excluding New York City (41.6) rates. The Chautauqua County rate is lower than Cattaraugus County (47.3) but higher than Allegany County (26.1). The majority of pregnancies, 65.8%, occurred among girls who were 18 or 19 years old. Additionally, there were four pregnancies among girls less than 15 years old that were not accounted for in the teenage pregnancy statistics.

Data from the previous five years (2002-2006) suggests that the numbers and rates of teen pregnancy in the County fluctuate over time, but that a lower than normal rate was demonstrated in 2007. The highest rate in the past five years was demonstrated in 2005, during which there were 266 pregnancies and a rate of 48.7, which exceeded the state rate.

Table 17. Teenage Pregnancies, 2007

County	Teenage (15-19) Pregnancies				
	Total #	Total Rate	Live Births #	Induced Abortion #	Spon Fetal Deaths #
Allegany	66	26.1	51	11	4
Cattaraugus	142	47.3	113	24	5
Chautauqua	222	39.4	163	47	12
NYS	39,910	58.4	17,599	21,293	1,018
NYS Exc. NYC	17,140	41.6	9,191	7,623	326

Source: Vital Statistics of New York State 2007

Teen Pregnancy Rate= Teenage Pregnancies (15-19) per 1,000 female population aged 15-19.

The percentage of babies that were born to white mothers is much greater in Chautauqua County (92.7%) than in New York State (65.1%) and New York State excluding New York City (77.7%). There was a higher percentage of babies born to Hispanic mothers in the County than to neighboring Cattaraugus and Allegany counties, but much lower than that of the whole state. The proportion of babies born to black and other race mothers is much lower in the County than the rest of the state.

Table 18. Live Births by Race/Ethnicity and Resident County New York State, 2007

County	Race ¹ /Ethnicity					
	Total ²	White	Black	Other	Not Stated	Hispanic ³
Allegany	525	516 (98.3%)	1 (0.2%)	6 (1.1%)	2 (0.4%)	5 (1.0%)
Cattaraugus	996	842 (84.5%)	14 (1.4%)	74 (7.4%)	66 (6.6%)	14 (1.4%)
Chautauqua	1,504	1394 (92.7%)	17 (1.1%)	62 (4.1%)	31 (2.1%)	95 (6.3%)
NYS	252,662	164555 (65.1%)	52450 (20.8%)	35324 (14.0%)	333 (0.1%)	60326 (23.9%)
NYS exc. NYC	129,730	100836 (77.7%)	13506 (10.4%)	15162 (11.7%)	226 (0.2%)	19992 (15.4%)

1 Race variable is coded differently for births recorded in NYS Exclusive of NYC and births recorded in NYC. For this table, "White Alone" is pooled with "White" and "Black Alone" is pooled with "Black". See the Technical Notes for details.

2 Total Births = White + Black + Other + Not Stated.

3 Hispanic Births is a separate count equal to Hispanic White + Hispanic Black + Hispanic Other + Hispanic Not Stated.

Source: Vital Statistics of New York State 2007

In 2007, there were 129 low birth weight babies (<2500 grams) born in Chautauqua County, which made up 8.6% of all live births. Occurrence of low birth weight births were most common among mothers aged 20-29 years. For the entire state, low birth weight births were most often born to women aged 25 to 34 years old, slightly older than mothers in the County.

Table 19. Low Birthweight Live Births (< 2500 grams) by Mother's Age and Resident County New York State, 2007

County	Mother's Age										
	Total	< 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Allegany	38	0	1	3	8	8	9	5	4	0	0
Cattaraugus	71	0	6	7	17	20	12	6	3	0	0
Chautauqua	129	0	2	15	48	38	15	7	3	1	0
NYS	20,560	27	518	1,208	4,015	4,975	5,213	3,389	1,029	185	1
NYS excl. NYC	10,005	16	239	630	1,936	2,452	2,544	1,654	459	74	1

1 Race variable is coded differently for births recorded in NYS Exclusive of NYC and births recorded in NYC. For this table, "White Alone" is pooled with "White" and "Black Alone" is pooled with "Black". See the Technical Notes for details.

2 Fertility Rates based on live births per 1,000 female population 15-44.

3 Fertility Rates for Age 45+ based on live births to women aged 45+ per 1,000 female population 45-49.

Source: Vital Statistics of New York State 2007

Morbidity

Cancer

Both male and female Chautauqua County residents experience a proportionately greater incidence rate of all invasive cancers than New York State residents as a whole. Specifically, from 2002-2006 Chautauqua County males experienced a higher incidence rate of urinary bladder cancer, prostate cancer, lung and bronchus cancer, and cancer of the oral cavity and pharynx than New York State. Prostate (153.2 average annual cases) and lung and bronchus (63.8 average annual cases) cancers were the greatest cancer burdens for males in the County. While the overall cancer incidence rate is higher for females in Chautauqua County than for females in New York State, for individual cancers, the incidence rates are quite similar. The greatest difference, however, is seen for female breast cancer incidence (Chautauqua County rate 138.4, NYS rate 124.5). Breast (118.2 average annual cases) and lung and bronchus (54.8 annual cases) cancers were the greatest cancer burdens for Chautauqua County females from 2002 to 2006.

Table 20. Cancer Incidence 2002-2006 for Chautauqua County and New York State Residents

Cancer	Incidence							
	Males				Females			
	Chautauqua County		New York State		Chautauqua County		New York State	
	Average Annual Cases	Rate per 100,000 Males	Average Annual Cases	Rate per 100,000 Males	Average Annual Cases	Rate per 100,000 Females	Average Annual Cases	Rate per 100,000 Females
All Invasive Malignant Tumors	471	654.1	50145.4	577.5	412.8	468	49368	434.4
Oral cavity and pharynx	13.6	18.7	1334.2	14.6	5.8	6.8	671	5.9
Esophagus	10.4	14	762.4	8.7	2	1.9	280.2	2.4
Stomach	6.6	9.3	1117	13.1	4.4	4.7	795.4	6.7
Colorectal	37.4	52.2	5185.6	60.8	41.6	43	5443	45.8
Colon excluding rectum	25.8	36.2	3629.8	43.1	33	33.6	4112.6	34.3
Rectum & rectosigmoid	11.6	16	1555.8	17.8	8.6	9.4	1330.4	11.4
Liver / intrahepatic bile duct	6.4	9	1010	11.2	1.6	1.8	416.4	3.6
Pancreas	8.6	12.2	1228.8	14.4	12.6	13.4	1374.6	11.4
Larynx	4.8	6.6	644.4	7.2	2.4	3	181.2	1.6
Lung and bronchus	63.8	88	6801.6	79.5	54.8	58.7	6253.4	54.1
Melanoma of the skin	15.4	21.8	1622.6	18.4	13.4	16.5	1273.2	11.7
Female breast					118.2	138.4	13860.8	124.5
Cervix uteri					4.8	6.8	923	8.7
Corpus uterus and NOS					26.4	31.4	3215	28.5
Ovary					15	17.4	1569.6	14
Prostate	153.2	210.4	14576.4	166.3				
Testis	3.6	6	504.2	5.3				
Urinary bladder (incl. in situ)	39.4	54.8	3537	42.3	12.4	13.3	1317.8	11.1
Kidney and renal pelvis	14.6	20	1806.8	20.3	8.8	10	1116	9.8
Brain and other nervous system	6.2	8.7	742.6	8.3	4.6	5.9	611.6	5.7
Thyroid	3.2	4.4	547.4	5.9	11	15.2	1678.8	16.2
Hodgkin lymphoma	2.8	4.2	355.2	3.8	2.8	3.7	301.4	3
Non-Hodgkin lymphomas	17.8	24.7	2171	24.7	16.8	18.8	1969.6	17.3

Multiple myeloma	8.4	11.8	675.4	7.9	5	5.2	629	5.4
Leukemias	10.8	15.6	1449.8	16.9	10.8	11.9	1156.2	10.1

Incidence data are provisional, November 2008.

Rates are per 100,000 persons, age-adjusted to the 2000 US standard population, with 95% confidence intervals.

Rates based on fewer than 4 cases or deaths per year are unstable and should be used with caution. NOS =

Not otherwise specified.

Source: New York State Cancer Registry

Lung & Bronchus Cancer

The incidence of lung & bronchus cancer is more prevalent among males than females in both Chautauqua County and New York State. A more in depth glance at lung & bronchus cancer shows that incidence fluctuated over time. Chautauqua County experienced fewer than usual cases in 2001 and 2005, while neighboring Cattaraugus and Allegany Counties experienced more than usual. The age-adjusted incidence rate for lung & bronchus cancer is lower than its neighboring counties and Western New York, but higher than the New York State total.

Table 21. Lung & Bronchus Cancer Incidence 2001-2005

Region/County	Incident Cases						Population 2003	Crude Rate	Adjusted Rate
	2001	2002	2003	2004	2005	Total			
Allegany	53	38	47	39	51	228	50,562	90.2	81.3
Cattaraugus	87	65	65	60	76	353	83,354	84.7	72
Chautauqua	104	127	127	123	107	588	137,645	85.4	67.4
Region Total	1,462	1,398	1,455	1,443	1,387	7,145	1,577,585	90.6	73.7
NYS Total	12,840	13,026	13,044	13,048	12,929	64,887	19,190,115	67.6	63.8

Source: 2002-2006 Vital Statistics Data as Of April, 2008

Adjusted Rates Are Age Adjusted to the 2000 United States Population

Female Breast Cancer

Female breast cancer incidence varied from 2001 to 2005 in Chautauqua County. While it appears that a downward trend is occurring, additional and more recent data is needed to determine if this is a true pattern. The age-adjusted incidence rate 2001-2005 for this type of cancer is greater in Chautauqua County than neighboring counties, the Western New York region, and New York State as a whole.

Table 22. Female Breast Cancer Incidence 2001-2005

Region/County	Cases						Population 2003	Crude Rate	Adjusted Rate
	2001	2002	2003	2004	2005	Total			
Allegany	32	31	38	45	29	175	25,297	138.4	115.5
Cattaraugus	70	62	82	68	49	331	42,456	155.9	124.8
Chautauqua	132	119	127	124	98	600	70,460	170.3	128.5
Region Total	1,278	1,345	1,305	1,333	1,248	6,509	812,964	160.1	122.4
NYS Total	13,801	13,802	13,800	13,665	13,584	68,652	9,913,690	138.5	118.9

Adjusted Rates Are Age Adjusted to the 2000 United States Population

Source: 2002-2006 Vital Statistics Data as Of April, 2008

The New York State Department of Health Cancer Registry provides colorectal, breast, lung and bronchus, and prostate cancer incidence data at the ZIP code level. Observed numbers of cases from 2002 to 2006 were compared to expected number of cases, which is the case number that would result in a rate equal to that of New York State.

The number of female breast cancer cases was 50% to 100% higher than expected in Mayville and Stockton. Clymer experienced more than 50% fewer breast cancer cases than expected. Observed prostate cancer incidence among males was 50% to 100% higher than expected in Bemus Point, Cherry Creek, Falconer, Kennedy, and Sherman. Prostate cancer among Lakewood males was more than 100% greater than expected. The number of observed lung and bronchus cancer cases was more than 100% greater than expected for females in Irving and more than 50% below expected among males in Mayville. Colorectal cancer incidence for males in Irving was 50% to 100% greater than expected. Sherman and Brocton both observed more than 100% greater than expected colorectal cancer cases among females. More than 50% fewer male colorectal cancer cases than expected were observed in Bemus Point, Falconer, and Lakewood. Among females, colorectal cancer cases were more than 50% below expected in Sinclairville, Lakewood, Falconer, Irving, and Ashville.

Asthma

Healthy People 2010 describes asthma as:

Asthma is a serious and growing health problem. The Healthy People 2010 Initiative states that an estimated 14.9 million persons in the United States have asthma. The number of people with asthma increased by 102 percent between 1979-1980 and 1993-1994. Asthma was the tenth most common principal diagnosis in emergency department (ED) visits in 1996. Among diseases commonly seen in outpatient departments, asthma was the ninth most frequent diagnosis. Asthma is responsible for about 500,000 hospitalizations, 5000 deaths, and 134 million days of restricted activity a year. Chronic Obstructive Pulmonary Disease (COPD) covers a wide range of illnesses including asthma, pneumonia, influenza (flu), emphysema, and chronic bronchitis.

SPARCS data paints an interesting picture of asthma morbidity in Chautauqua County. Over all age groups, the age-adjusted rate of hospital discharges per 10,000 residents for the County is lower than the region and the state. Among residents aged 0 to 17 years, the hospital discharge rate is much lower than the region and the state (10.9 compared to 19.6 and 29.6, respectively). For adults aged 18 to 64 years, the rate is comparable to the region and slightly lower than the state. Asthma rates in New York City are the highest in the state and if it were excluded from the asthma statistics, state rates would be much lower. Hospital discharge rates were most surprising for adults 65 years old and older, with a rate of 24.2 per 10,000 residents in that age group, compared to a state rate of 30.0 and a region rate of 17.7.

Table 23. Asthma Hospital Discharges - Rate per 10,000 Population, Total

Region/County	Discharges				Population 2006	Crude Average Rate	Adjusted Average Rate
	2005	2006	2007	Total			
Allegany	65	44	53	162	50,267	10.7	12
Cattaraugus	97	87	63	247	81,534	10.1	10.6
Chautauqua	176	152	137	465	135,357	11.5	11.3
Region Total	2,105	1,995	1,723	5,823	1,549,334	12.5	12.8
NYS Total	39,927	40,205	37,950	118,082	19,306,183	20.4	20.5

Source: 2005-2007 SPARCS Data as of February, 2009
Adjusted Rates are Age-adjusted to the 2000 United States Population

Table 24. Asthma Hospital Discharges - Rate per 10,000 Population, Age 0-17

Region/County	Discharges				Population 2006	Average Rate
	2005	2006	2007	Total		
Allegany	21	11	17	49	10,397	15.7
Cattaraugus	46	44	23	113	18,747	20.1
Chautauqua	35	37	25	97	29,540	10.9
Region Total	712	758	561	2,031	344,837	19.6
NYS Total	13,846	13,901	12,321	40,068	4,514,342	29.6

Source: 2005-2007 SPARCS Data as of February, 2009

Table 25. Asthma Hospital Discharges - Rate per 10,000 Population, Age 18-64

Region/County	Discharges				Population 2006	Average Rate
	2005	2006	2007	Total		
Allegany	31	22	27	80	32,622	8.2
Cattaraugus	29	27	28	84	50,771	5.5
Chautauqua	79	65	69	213	84,481	8.4
Region Total	899	867	775	2,541	968,687	8.7
NYS Total	18,417	18,720	18,182	55,319	12,269,155	15

Source: 2005-2007 SPARCS Data as of February, 2009

Table 26. Asthma Hospital Discharges and Rates per 10,000 residents 65+ years of age

Region/County	Discharges				Population 2006	Average Rate
	2005	2006	2007	Total		
Allegany	13	11	9	33	7,248	15.2
Cattaraugus	22	16	12	50	12,016	13.9
Chautauqua	62	50	43	155	21,336	24.2
Region Total	494	370	387	1,251	235,810	17.7
NYS Total	7,664	7,584	7,447	22,695	2,522,686	30.0*

NYSDOH 2005-2007 Asthma Hospital Discharge Data (2009)

Unfortunately, these numbers do not likely paint an accurate picture of the burden of asthma in the County. The NYSDOH Prevention Quality Indicator website provides hospital admissions data for respiratory, diabetes, cardiovascular and acute conditions at the ZIP code level for all counties in the state. Due to Chautauqua County's lack of tertiary care facilities and close proximity to Pennsylvania hospitals in Erie and Corry, PA, many county residents travel across the state border for care. Because Pennsylvania hospitals are not required to report admissions

to New York State, we are missing data for the southwestern portion of the County. That being said, PQI data indicate that Forestville (511) and Sinclairville (384) of the North County, and Jamestown (418), Kennedy (411), and Frewsburg (324) of the South County demonstrated the highest age and sex-adjusted rates of hospital respiratory discharges in the County. It is also important to mention that the rates for Kennedy and Sinclairville may be unstable, as each municipality demonstrated fewer than 10 hospital admissions. This instability holds true for several other towns and villages in the County.

Table 27. All Respiratory Admissions to Chautauqua County Hospitals

Zip	Name	Area Population	Admissions	Area Rate	Admissions as % Expected	Area rate Adj. Age/Sex
14062	Forestville	2,605	14	557	145	511
14701	Jamestown	31,146	145	467	119	418
14747	Kennedy	1,883	8	425	117	411
14782	Sinclairville	1,868	8	428	109	384
14738	Frewsburg	2,959	11	389	92	324
14718	Cassadaga	1,837	6	354	90	318
14716	Brocton	2,775	6	216	82	289
14048	Dunkirk	11,938	41	343	82	289
14733	Falconer	2,867	10	349	82	288
14784	Stockton	720	2	347	79	276
14712	Bemus Point	2,696	9	334	77	270
14136	Silver Creek	4,087	12	294	69	243
14787	Westfield	4,212	12	297	69	241
14757	Mayville	2,985	8	285	67	237
14710	Ashville	2,962	7	253	64	225
14750	Lakewood	3,459	9	275	61	214
14063	Fredonia	12,395	19	153	53	187
14081	Irving	2,686	4	168	40	140
14767	Panama	1,527	2	164	37	131
14775	Ripley	2,218	3	158	37	129
14740	Gerry	1,320	2	189	30	105
14723	Cherry Creek	991	1	151	29	102
14728	Dewittville	1,023	1	147	24	84
14724	Clymer	1,798	1	56	16	55
14736	Findley Lake	297	0	0	0	0
14769	Portland	893	0	56*	0	0
14781	Sherman	1,588	0	31*	0	0
	State	19,306,183		351		

*Rate results from 0.5 Admissions (Admissions rounded to whole number)

Rates are per 100,000 adult population in area

Bold zip codes rank among top five in two of the three disease categories

Heart Disease and Stroke

A major cause of disability, heart disease is the leading cause of death in the United States. NYSDOH SPARCS data suggest that both crude and age-adjusted hospital discharge rates are

significantly lower than the state and NYS excluding New York City for cardiovascular disease, disease of the heart, coronary heart diseases, congestive heart failure, and cerebrovascular disease. It is unlikely that the data completely represents the County due to travel across the state border by residents to access care at a tertiary facility.

Table 28. Heart Disease and Stroke Hospitalizations for Chautauqua County 2004-2006

Indicator	3 Year Total	County Rate	NYS Rate	Sig. Dif.	NYS Rate excl. NYC	Sig. Dif.	Ranking Quartile
CARDIOVASCULAR DISEASE							
Hospitalization rates per 10,000 (ICD9 390-459)							
Crude	6,037	147.5	198.4	Yes	199.3	Yes	1st
Age-adjusted	6,037	116.7	184.2	Yes	176.8	Yes	1st
DISEASE OF THE HEART							
Hospitalization rates per 10,000 (ICD9 390-398, 402, 404-429)							
Crude	4,120	100.7	139.8	Yes	142.5	Yes	1st
Age-adjusted	4,120	79.2	129.6	Yes	126.2	Yes	1st
CORONARY HEART DISEASE							
Hospitalization rates per 10,000 (ICD9 402, 410-414, 429)							
Crude	1,543	37.7	65.8	Yes	66.5	Yes	1st
Age-adjusted	1,543	30.3	61.2	Yes	59.1	Yes	1st
CONGESTIVE HEART FAILURE							
Hospitalization rates per 10,000 (ICD9 428)							
Crude	1,267	31	35.4	Yes	34.3	Yes	2nd
Age-adjusted	1,267	23.2	32.4	Yes	29.9	Yes	1st
CEREBROVASCULAR DISEASE (STROKE)							
Hospitalization rates per 10,000 (ICD9 430-438)							
Crude	1,061	25.9	28.9	Yes	30.4	Yes	1st
Age-adjusted	1,061	20.2	26.7	Yes	26.8	Yes	1st

Source: NYSDOH County Health Assessment Indicators (June 2008)

Due to Chautauqua County's lack of tertiary care facilities and close proximity to Pennsylvania hospitals in Erie and Corry, PA, many county residents travel across the state border for care. Because Pennsylvania hospitals are not required to report admissions to New York State, we are missing data for the southwestern portion of the County. That being said, PQI data indicate that the highest age-adjusted rates per 100,000 residents of circulatory hospital admissions were all demonstrated by the North County in Stockton (1116), Cherry Creek (749), Irving (600), Dunkirk (588), and Silver Creek (578). It is important to recognize that the rates generated for Stockton and Cherry Creek may not be stable due to their respective low populations of 720 and 991 residents and low number of admissions 8 and 7.

Table 29. All Circulatory Admissions to Chautauqua County Hospitals

Zip	Name	Area Population	Admissions	Area Rate	Admissions as % Expected	Area rate Adj. Age/Sex
14784	Stockton	720	8	1181	201	1116
14723	Cherry Creek	991	7	757	135	749
14081	Irving	2,686	18	670	108	600
14048	Dunkirk	11,938	96	808	106	588
14136	Silver Creek	4,087	34	832	104	578
14701	Jamestown	31,146	200	642	97	537
14750	Lakewood	3,459	24	694	97	538
14733	Falconer	2,867	18	645	86	478
14712	Bemus Point	2,696	15	575	78	435
14782	Sinclairville	1,868	9	482	70	388
14062	Forestville	2,605	10	403	68	376
14747	Kennedy	1,883	7	372	67	371
14710	Ashville	2,962	11	371	66	366
14063	Fredonia	12,395	33	270	62	343
14767	Panama	1,527	5	327	60	331
14787	Westfield	4,212	17	415	55	305
14738	Frewsburg	2,959	10	355	49	273
14740	Gerry	1,320	7	530	47	259
14716	Brocton	2,775	5	198	46	256
14769	Portland	893	2	224	39	215
14775	Ripley	2,218	5	225	38	212
14757	Mayville	2,985	5	184	26	143
14781	Sherman	1,588	2	157	23	126
14718	Cassadaga	1,837	1	82	10	54
14724	Clymer	1,798	0	28*	0	0
14728	Dewittville	1,023	0	0	0	0
14736	Findley Lake	297	0	0	0	0
	State	19,306,183		554		

*Rate results from 0.5 Admissions (Admissions rounded to whole number)

Rates are per 100,000 adult population in area

Bold zip codes rank among top five in two of the three disease categories

Infectious Diseases

Sexually Transmitted Diseases

Overall, infectious disease rates in the County are somewhat low. Of all types of communicable diseases, sexually transmitted diseases (STDs) cause the greatest disease burden. Chlamydia is the most common STD, likely because cases can be asymptomatic. In 2007, there were 294 cases of Chlamydia, resulting in a rate of 217.2 cases per 100,000 residents. This rate was much lower than the New York State rate (417.6) and slightly lower than New York State excluding New York City (417.6). However, the incidence rate was much greater than neighboring Allegany (109.4) and Cattaraugus Counties (92).

Gonorrhea was the second most common STD in Chautauqua County in 2007, with 61 cases and a rate of 45.1 cases per 100,000 residents. Similar to the incidence of Chlamydia, Chautauqua County's rate was lower than the state but much greater than Allegany or Cattaraugus Counties'.

The incidences of early and late Syphilis are both very low in the County and neighboring counties. In 2007, there was 1 case of early Syphilis in the County, resulting in a rate of 0.7 cases per 100,000 residents, compared to a rate of 2.8 in New York State excluding New York City. There were no cases of late Syphilis in the County in 2007; the New York State excluding New York City rate was 4.4.

Table 30. Sexually Transmitted Diseases, 2007

County	Chlamydia		Gonorrhea		Syphilis Early		Syphilis Late	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Allegany	55	109.4	6	11.9	0	0	0	0
Cattaraugus	75	92	11	13.5	0	0	0	0
Chautauqua	294	217.2	61	45.1	1	0.7	0	0
NYS Excl NYC	29874	269.3	7389	66.6	305	2.8	485	4.4
NYS Total	80629	417.6	17699	91.7	2224	11.5	2764	14.3

Source: NYSDOH Communicable Disease Annual Reports

There seems to be an upward trend in the incidence of STDs in the County. During the time period from 2001 to 2007, the incidence rate of Chlamydia was at its lowest in 2001 with 175.4 cases per 100,000 residents and at its highest in 226.8 in 2006. The trend seems to be gradual and positive. During the same time period, the incidence rate of Gonorrhea was at its lowest in 2001 at 23.4 cases per 100,000 residents. The highest incidence rate occurred in 2005 with a rate of 51.5. Early Syphilis increased from 0 cases per year 2001-2003 to 1 case per year every year from 2004-2007. Late Syphilis increased and then decreased from 2001 to 2007, starting at 0 cases per year in 2001, peaking at 6 cases per year in 2003 and gradually decreasing to 0 in 2007.

Table 31. Sexually Transmitted Diseases in Chautauqua County 2001-2007

Year	Chlamydia		Gonorrhea		Syphilis Early		Syphilis Late	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2001	240	175.4	32	23.4	0	0.0	0	0.0
2002	271	193.9	45	32.2	0	0.0	2	1.4
2003	277	198.2	61	43.6	0	0.0	6	4.3
2004	291	208.2	61	43.6	1	0.7	5	3.6
2005	265	189.6	72	51.5	1	0.7	4	2.9
2006	317	226.8	59	42.2	1	0.7	4	2.9
2007	294	217.2	61	45.1	1	0.7	0	0.0

Source: NYSDOH Communicable Disease Annual Reports

HIV/AIDS

In 2007, there were 19 newly diagnosed cases of Human Immunodeficiency Virus (HIV) in Chautauqua County when prisoners were included in the count. Excluding prisoners, there were 17 County residents diagnosed with HIV. From 2004 to 2006, the newly diagnosed HIV case rate was 6.8 per 100,000 in Chautauqua County. For New York State excluding New York City, the case rate was 8.2 per 100,000 residents. New York City accounts for the vast majority of cases in the state; when included in the count, the New York State rate increased to 24.0 per 100,000 residents. The United States case rate was 18.5 in 2006.

Including prisoners, there were eight newly diagnosed AIDS cases in Chautauqua County in 2007, resulting in a cumulative AIDS count of 169. Excluding prisoners, there were seven newly diagnosed AIDS cases, resulting in a cumulative AIDS count of 139. From 2004 to 2006, the AIDS case rate in Chautauqua County was 5.4 cases per 100,000 residents, which is drastically lower than the New York State rate of 23.8 and slightly lower than the New York State excluding New York City rate of 8.2.

Table 32. Newly Diagnosed HIV and AIDS Cases as of December 2007

Area	Including Prisoners			Excluding Prisoners		
	Newly Dx HIV	Newly Dx AIDS	Cumulative AIDS	Newly Dx HIV	Newly Dx AIDS	Cumulative AIDS
Cattaraugus	6	8	96	4	6	58
Allegany	0	0	25	0	0	24
Chautauqua	19	8	169	17	7	139
NYS Excl. NYC	920	913	35787	871	801	28799

***"Prisoners" refers to persons incarcerated in state correctional facilities at time of diagnosis.*
 Source: NYSDOH HIV/AIDS Surveillance Annual Report (2009)

As of December 2007, there were 128 people living with HIV including prisoners and 83 people living with HIV excluding prisoners in Chautauqua County. Living with AIDS in the County were 106 people including prisoners and 87 excluding prisoners. Overall, there are 234 persons living with HIV or AIDS in the County. Both excluding and including prisoners, there are many more cases in Chautauqua County than in comparable Cattaraugus and Allegany Counties.

Table 33. Living HIV and AIDS Cases as of December 2007

Area	Including Prisoners			Excluding Prisoners		
	HIV	AIDS	HIV/AIDS	HIV	AIDS	HIV/AIDS
Cattaraugus	34	65	99	17	32	49
Allegany	9	14	23	9	13	22
Chautauqua	128	106	234	83	87	164
NYS Excl. NYC	10400	16860	27260	7726	12896	20622

***"Prisoners" refers to persons incarcerated in state correctional facilities at time of diagnosis.*
 Source: NYSDOH HIV/AIDS Surveillance Annual Report (2009)

New York State is divided into "Ryan White Regions" for the analysis and organization of HIV and AIDS statistics in the state. Chautauqua County is included in the "Buffalo Ryan White Region" along with Allegany, Cattaraugus, Erie, Genesee, Niagara, Orleans, and Wyoming

Counties. The NYSDOH HIV/AIDS Surveillance Annual Report (2009) states that in the Buffalo region among all newly diagnosed non-prisoner HIV cases, 70% were males and most cases were aged 30 to 49 years. New diagnosis of HIV was most common among black residents (49.2%) and white residents (34.6%). Most new cases resulted from sexual activity; 50% of HIV transmission was due to homosexual activity among men, while 21.5% of transmission was due to heterosexual activity.

Tuberculosis

Tuberculosis (TB) is referred to by the CDC as "one of the world's most deadliest diseases." Each year there are about two million deaths caused by TB in the world. In 1989 the CDC introduced the Advisory Committee for the Elimination of Tuberculosis (ACET) which announced its goal to completely eliminate the disease in the United States. In 2009, tuberculosis is still present within our country. In Chautauqua County the rate of TB is quite low at 1.5 cases per 100,000 residents from 2004 to 2006. In the same time period, New York State experienced a rate of 6.8 and the United States had a rate of 4.4 cases per 100,000 residents in 2007.

Lyme Disease

Lyme disease has increased in prevalence in New York State since it first became reportable in 1986. This disease is a bacterial infection caused by the bite of an infected deer tick which can cause several health complications. Treated early with antibiotics, infected persons can usually recover quickly and completely. The NYDOH and local health departments investigate the spread of Lyme disease in the state, in addition to other tick-borne diseases such as babesiosis, ehrlichiosis, and Rocky Mountain spotted fever. With a rate of 1.5 cases per 100,000 residents from 2004 to 2006, the burden of Lyme disease in Chautauqua County is not as great as that for New York State (26.2). However, the rate for the County is greater than that of the Western New York Region (0.6). In the region, Chautauqua County has the third highest rate of Lyme disease.

Other Infectious Diseases

Among the remaining infectious diseases, the greatest burdens for Chautauqua County stem from laboratory confirmed influenza, Strep Groups A and B invasive and Strep Pneumonia Invasive.

Influenza, also known as the 'flu,' is a respiratory illness caused by influenza viruses that are transmitted from person to person through fomites released during coughing or sneezing. This disease can cause mild to severe illness and is potentially fatal, particularly to the elderly populations, young children, and persons with certain health conditions. On average, in the United States, five to twenty percent of the population contracts the flu. More than 200,000 people are hospitalized due to complications associated with flu and approximately 36,000 people die because of the flu every year. New flu vaccines are developed every year and being vaccinated is the best way to prevent flu illness. The rate of laboratory confirmed influenza was much greater at 53.2 cases per 100,000 residents in 2007 than for New York State (23.4), New York State excluding New York City (34.9) and both Cattaraugus (7.4) and Allegany (31.8) Counties.

The New York State Department of Health reports:

Group A streptococci are bacteria commonly found in the throat and on the skin. The vast majority of GAS infections are relatively mild illnesses, such as strep throat and impetigo. Occasionally, however, these bacteria can cause much more severe and even life threatening diseases such as necrotizing fasciitis (occasionally described as "the flesh-eating bacteria") and streptococcal toxic shock syndrome (STSS). In addition, people may carry group A streptococci in the throat or on the skin and have no symptoms of disease. The rate of Strep Group A Invasive in the County was 4.4 in 2007, higher than the state both including (2.7) and excluding (2.7) New York City, and than Cattaraugus County (1.2). Allegany County, at 6 cases per 100,000 residents, had a higher rate than Chautauqua County.

Streptococci bacteria are spread from one person to another by direct contact with throat and nose discharges or infected skin lesions. Strep Group B infections are more common among newborns than any other age group. Invasive Strep B infections are those that occur where the bacteria have entered a part of the body that is not usually exposed to bacteria and can be fatal, particularly among the ill and elderly populations. Invasive diseases can cause blood stream infections, pneumonia, skin and soft-tissue infections, and bone and joint infections. While very rare, group B strep can also cause meningitis, an infection of the fluid and lining surrounding the brain.

Strep pneumonia invasive disease is transmitted from person to person and is potentially fatal. The groups most at risk for contracting this disease are children under 2 years old, blacks, American Indians and Alaska Natives, children who attend group day care centers, and persons with underlying medical conditions such as HIV or sickle-cell disease. For both Strep Group B Invasive and Strep Pneumonia Invasive, Chautauqua County's rate was greater than all comparison groups at 11.8 cases per 100,000 residents.

Table 34. Counts and Rates (per 100,000 residents) for Selected Infectious diseases 2007

County	Laboratory Confirmed Influenza	Laboratory Confirmed Influenza	Strep Group A Invasive	Strep Group A Invasive	Strep Group B Invasive	Strep Group B Invasive	Strep Pneumonia Invasive	Strep Pneumonia Invasive
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Allegany	16	31.8	3	6	3	6	7	13.9
Cattaraugus	6	7.4	1	1.2	4	4.9	5	6.1
Chautauqua	72	53.2	6	4.4	16	11.8	19	14
NYS Excl NYC	3871	34.9	295	2.7	755	6.8	1263	11.4
NYS Total	4584	23.4	521	2.7	810	4.2	2267	11.7

Source: NYSDOH Communicable Disease Annual Reports

Obesity

As in the United States and the state of New York, the magnitude of the obesity epidemic is growing in Chautauqua County. BRFSS data from Steps to a Healthier Chautauqua County

indicates that the percentage of the population that is obese has gradually increased from 26.9% to 27.8% from 2005 to 2007. The most recent statistics (2007) suggest that the majority of the population (62.6%) is overweight or obese. Having a BMI status that indicates overweight or obese conditions is a risk factor for several chronic illnesses.

Table 35. BMI Category by Gender 2005-2007

Year	Respondents	BMI Category							
		Total		Neither Overweight Nor Obese		Overweight		Obese	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
2004-2005	Total	106623	100.0%	37980	36.8%	37340	36.2%	2777	26.9%
	Male	51301	100.0%	14781	29.0%	20573	40.4%	15622	30.6%
	Female	55322	100.0%	23198	44.5%	16767	32.2%	12155	23.3%
2005-2006	Total	101994	100.0%	36745	36.0%	37551	36.8%	27698	27.2%
	Male	51128	100.0%	14879	29.1%	20998	41.1%	15252	29.8%
	Female	50866	100.0%	21866	43.0%	16554	32.5%	12446	24.5%
2006-2007	Total	102555	100.0%	38304	37.4%	35722	34.8%	28529	27.8%
	Male	51138	100.0%	15451	30.2%	20280	39.7%	15407	30.1%
	Female	51417	100.0%	22853	44.4%	15442	30.0%	13122	25.5%

Source: Steps to a Healthier Chautauqua County BRFS

While the BRFS data are only estimates, it appears that the prevalence of obesity in the County has slightly increased from 26.9% during the first survey in 2005 to 27.8% during the time of the third survey in 2007. For all years, there was a greater portion of males in both the overweight and obese BMI categories than females.

Table 36. Obesity by Age Group 2006-2007

		2006-2007						TOTAL	
		Age group						Count	Percent
		18-34		35-64		65+			
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
BMI category	Neither overweight or obese	16085	52.20%	14943	29.70%	7114	34.00%	38142	37.30%
	Overweight	8086	26.20%	19512	38.70%	7957	38.00%	35554	34.80%
	Obese	6659	21.60%	15922	31.60%	5879	28.10%	28460	27.90%
TOTAL		30829	100.00%	50377	100.00%	20950	100.00%	102156	100.00%
Overweight or obese	No	16085	52.20%	14943	29.70%	7114	34.00%	38142	37.30%
	Yes	14744	47.80%	35434	70.30%	13836	66.00%	64014	62.70%
TOTAL		30829	100.00%	50377	100.00%	20950	100.00%	102156	100.00%

Source: Steps to a Healthier Chautauqua County BRFS

During the 2006-2007 BRFS, obesity (31.6%) and overweight (38.7%) BMI status was most prevalent among County residents aged 35 to 64 years. The lowest prevalence of obesity (21.6%) and overweight (26.2%) BMI status was experienced by county residents aged 18-34. However, even in the category with the lowest prevalence, nearly half of the population

(47.8%) was either overweight or obese. Overall, the majority of county residents over the age of 18 were overweight or obese (62.7%).

Education level was not as highly correlated with BMI status as race or age. However, a slightly lower proportion of overweight people exist in the less than high school education group than in the high school or more than high school groups.

Table 37. Overweight and Obesity Status of Chautauqua County Residents by Race, 2006-2007

		2006-2007								TOTAL	
		Race								Count	Percent
		White, non-Hispanic		Black, non-Hispanic		Other, non-Hispanic		Hispanic			
		Count	Percent	Count	Percent	Count	Percent	Count	Percent		
BMI category	Neither overweight or obese	35667	37.40%	88	16.60%	668	25.50%	1658	54.40%	38080	37.50%
	Overweight	33218	34.80%	139	26.30%	1093	41.70%	956	31.40%	35406	34.80%
	Obese	26557	27.80%	302	57.10%	857	32.80%	432	14.20%	28149	27.70%
TOTAL		95442	100.00%	529	100.00%	2618	100.00%	3046	100.00%	101635	100.00%
Overweight or obese	No	35667	37.40%	88	16.60%	668	25.50%	1658	54.40%	38080	37.50%
	Yes	59775	62.60%	441	83.40%	1950	74.50%	1388	45.60%	63555	62.50%
TOTAL		95442	100.00%	529	100.00%	2618	100.00%	3046	100.00%	101635	100.00%

Source: Steps to a Healthier Chautauqua County BRFSS

Obesity was most prevalent among black, non-Hispanic (57.1%) and other race, non-Hispanic residents (32.8%). The BRFSS data reports that the majority of each race group is either overweight or obese. Of white, non-Hispanics, 62.6% were either overweight or obese, compared to 82.4% of black, non-Hispanics, 74.5% of other, non-Hispanics and 45.6% of Hispanic residents.

Obese BMI status was more common among people who were part of an unmarried couple (31.8%) than in any other marital status. Separated or never-married persons had the highest proportion of non-obese or over weight residents (53.0% and 51.3%, respectively).

Adults living in a household with 3 children had a lower proportion of obesity (21.4%) but a higher proportion of overweight (40.4%) residents than those with one or two children. Those with 4 ore more children had a much lower proportion of obese and about the same proportion of overweight members than those with one or two children. Adults without children demonstrated the highest proportion of obesity (30.3%).

Among employment groups, residents employed for wages and not self-employed had the highest obesity status at 30%, followed by retired persons at 28.8%. Students (9.6%) and persons out of work for less than a year (11.6%) demonstrated the lowest proportions of obesity among members. In Chautauqua County, the burden of obesity tended to rise as income levels decreased.

Unfortunately, there is not a lot of data available concerning obesity among Chautauqua County children. The NYSDOH County Health Assessment Indicator Data reported that from 2004-2006, 12.7% of children aged 2-4 years participating in the Women, Infants, and Children (WIC) program were obese, compared to 15.2% in New York State and 14.8% in the United States.

Table 38. Obesity Status of 2-4 Year Old Children

Indicator	US	NYS	Chautauqua County
% of obese children by grade level: (BMI for age>95th percentile)			
2-4 Years (WIC)11 (pre-school)	14.80% (2004)	15.20% (2004-2006)	12.70% (2004-2006)

Source: NYSDOH County Health Assessment Indicators

Underweight children

While obesity is a major issue across the board in the country, it is also important to note the proportion of children who are underweight, as this condition is associated with malnutrition and future health complications. The New York State Department of Health Division of Nutrition reported that from 2004 to 2006, of children aged 0 to 4 participating in the Women, Infants and Children (WIC) program who were tested, 2.2% of children were underweight. Of children tested participating all over Western New York, 4.3% of children were underweight, compared to 4.8% in New York State. Chautauqua County's percentage of underweight children therefore is less than both the region and the state and is similar to neighboring Cattaraugus and Allegany Counties.

Diabetes

As stated in the Healthy People 2010 Initiative,

Diabetes is a chronic disease that usually manifests itself as one of two major types: type 1, mainly occurring in children and adolescents 18 years and younger, in which the body does not produce insulin and thus insulin administrations are required to sustain life; or type 2, occurring usually in adults over 30 years of age, in which the body's tissues become unable to use its own limited amount of insulin effectively.

The occurrence of diabetes, especially type 2 diabetes, as well as associated diabetes complications, is increasing in the U.S. The number of persons with diabetes has increased steadily over the past decade; presently, 10.5 million persons have been diagnosed with diabetes, while 5.5 million persons are estimated to have the disease but are undiagnosed. This increase in the number of cases of diabetes has occurred particularly within certain racial and ethnic groups.

Diabetes is most common in persons over age 60 years. As the population in the U.S. ages, especially as the number of persons aged 60 years and older grows, an increase in the number of people with diabetes is expected. While studies indicate that aging itself may not be a major factor in the substantial increase in the number of persons with

diabetes, present and future prevention strategies for diabetes will be associated with a greater lifespan for persons with diabetes.

Steps to a Healthier Chautauqua County BRFSS data from 2006-2007 estimate that 7.7% of Chautauqua County residents have diabetes, including 9.0% of males and 6.5% of females. Another 810 females, 1.5% of all females, were told only during pregnancy that they had gestational diabetes. Six hundred and sixty three County residents claimed not to have diabetes, but were pre-diabetic or borderline diabetes.

Table 39. 2006-2007 Diabetes Prevalence by Gender

		Gender				Total Count	Total Percent
		Male		Female			
		Count	Percent	Count	Percent		
Have diabetes	Yes	4635	9.00%	3578	6.50%	8214	7.70%
	Yes, but female told only during pregnancy			810	1.50%	810	0.80%
	No	46178	89.70%	49254	90.00%	95433	89.90%
	No, pre-diabetes or borderline diabetes	663	1.30%	1072	2.00%	1735	1.60%
TOTAL		51477	100.00%	54715	100.00%	106192	100.00%

Source: Steps to a Healthier Chautauqua County BRFSS

The BRFSS reported that black, non-Hispanics had the greatest proportion of population that was diabetic. White, non-Hispanics came in second with 7.7% of the population having diabetes and 0.8% having gestational diabetes. Hispanics reported the highest proportion of population being pre-diabetic or borderline diabetic.

Table 40. 2006-2007 Diabetes Prevalence by Race

		Race								Total Count	Total Percent
		White, non-Hispanic		Black, non-Hispanic		Other, non-Hispanic		Hispanic			
		Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Have diabetes	Yes	7648	7.70%	139	23.90%	197	7.20%	69	2.20%	8053	7.70%
	Yes, but female told only during pregnancy	749	0.80%					61	2.00%	810	0.80%
	No	88924	90.10%	442	76.10%	2501	91.10%	2812	90.20%	94679	90.00%
	No, pre-diabetes or borderline diabetes	1411	1.40%			48	1.80%	175	5.60%	1633	1.60%
TOTAL		98732	100.00%	582	100.00%	2746	100.00%	3116	100.00%	105175	100.00%

Source: Steps to a Healthier Chautauqua County BRFSS

Matching trends seen across the country and state, diabetes prevalence increases with age group in Chautauqua County. There were no Type 2 diabetics among residents aged 18-34. However, 223 women in this age group (0.70%) were told that they had gestational diabetes during pregnancy. Eighty-seven residents were pre-diabetic or borderline diabetic. The

prevalence of diabetes increased for the next age group 35-64 years to 8.1% of the population, to 1.0% for gestational diabetes and 1.5% for pre-diabetes or borderline diabetes. For residents aged 65 or greater, diabetes was prevalent among 16.7% of the population and gestational diabetes was seen across 0.4% of the population. Additionally, pre-diabetes and borderline diabetes was at a maximum of 3.9% of the population for this age group.

Table 41. 2006-2007 Diabetes Prevalence by Age Group

		Age group						Total Count	Total Percent
		18-34		35-64		65+			
		Count	Percent	Count	Percent	Count	Percent		
Have diabetes	Yes			4225	8.10%	3627	16.70%	7852	7.50%
	Yes, but female told only during pregnancy	223	0.70%	508	1.00%	79	0.40%	810	0.80%
	No	31302	99.00%	46345	89.30%	17127	79.00%	94775	90.10%
	No, pre-diabetes or borderline diabetes	87	0.30%	796	1.50%	852	3.90%	1735	1.60%
TOTAL		31613	100.00%	51874	100.00%	21685	100.00%	105172	100.00%

Source: Steps to a Healthier Chautauqua County BRFSS

Diabetes is one of the most problematic chronic diseases in Chautauqua County. For both 'primary' diagnosis and 'any' diagnosis diabetes hospital admissions, NYSDOH County Health Assessment Indicator Data reported that Chautauqua County rates were significantly lower than the state. However, due to Chautauqua County's lack of tertiary care facilities and close proximity to Pennsylvania hospitals in Erie and Corry, PA, many county residents travel across the state border for care. Because Pennsylvania hospitals are not required to report admissions to New York State, we are missing data for the southwestern portion of the County.

Table 42. Diabetes Hospitalizations for Chautauqua County 2004-2006

Indicator	3 Year Total	County Rate	NYS Rate	Sig. Dif.	NYS Rate excl. NYC	Sig. Dif.	Ranking Quartile
Hospitalization rate per 10,000 (Primary dx ICD9 250)							
Crude	612	15	20.7	Yes	14.9	No	3rd
Age-adjusted	612	13.7	19.7	Yes	14	No	2nd
Hospitalization rate per 10,000 (Any dx ICD9 250)							
Crude	8,787	214.7	235.6	Yes	213.7	No	2nd
Age-adjusted	8,787	179	220.6	Yes	192.1	Yes	2nd

Source: NYSDOH County Health Assessment Indicator Data

That being said, PQI data indicate that Irving, Cherry Creek, Stockton, and Dunkirk of the North County, and Kennedy of the South County demonstrated the highest rates of hospital diabetes hospital admissions in the County.

Table 43. All Diabetes Admissions to Chautauqua County Hospitals

Zip	Name	Area Population	Admissions	Area Rate	Admissions as % Expected	Area rate Adj. Age/Sex
14081	Irving	2,686	21	782	263	743

14723	Cherry Creek	991	5	505	177	501
14784	Stockton	720	2	278	95	267
14048	Dunkirk	11,938	35	293	91	258
14747	Kennedy	1,883	5	266	89	251
14701	Jamestown	31,146	85	275	88	250
14716	Brocton	2,775	5	198	80	226
14062	Forestville	2,605	6	250	76	215
14750	Lakewood	3,459	5	159	43	122
14063	Fredonia	12,395	11	93	38	106
14136	Silver Creek	4,087	5	135	38	106
14782	Sinclairville	1,868	2	134	34	97
14710	Ashville	2,962	3	101	33	94
14733	Falconer	2,867	3	105	32	90
14757	Mayville	2,985	3	117	31	89
14775	Ripley	2,218	2	90	30	85
14712	Bemus Point	2,696	2	93	22	61
14787	Westfield	4,212	3	71	22	62
14740	Gerry	1,320	1	114	20	58
14718	Cassadaga	1,837	1	54	18	52
14724	Clymer	1,798	0	0	0	0
14728	Dewittville	1,023	0	49*	0	0
14736	Findley Lake	297	0	0	0	0
14738	Frewsburg	2,959	0	17*	0	0
14767	Panama	1,527	0	33*	0	0
14769	Portland	893	0	56*	0	0
14781	Sherman	1,588	0	31*	0	0
	State	19,306,183		283		

*Rate results from 0.5 Admissions (Admissions rounded to whole number)

Rates are per 100,000 adult population in area

Bold zip codes rank among top five in two of the three disease categories

Oral Health

The NYSDOH County Health Assessment Indicator data indicate that from 2005 to 2007, there were 257 outpatient visits due to dental caries among children aged 3 to 5 years. The corresponding caries outpatient visit rate was 292.3 per 10,000 visits, which is significantly higher than both the New York State rate of 87.7 and the New York State excluding New York City rate of 99.8. Among New York State children aged 3 to 5, those of lower socioeconomic status were more likely to have caries overall and untreated, and were less likely to have dental insurance, sealants, take fluoride, or visit the dentist annually.

Lead Poisoning

In 2008, initial lead screenings were performed for 2,321 children in the County. Of those who were screened, 2,302 were below 10µg/dL, which the CDC considers the level below which children are not considered lead poisoned. The remaining children demonstrated blood lead levels (BLL) that are indicate lead poisoning. Ten children exhibited levels of 10 to less than 15 µg/dL, five were between 15 and less than 20 µg/dL, and 4 children had blood levels of 20

µg/dL or greater. Historic BLL data suggest that the burden of lead poisoning has decreased since the 1990s and the early 2000s.

Mortality

In 2007, there were 1,394 deaths in Chautauqua County resulting in a rate of 762.4 deaths per 100,000 residents, compared to 668.6 deaths per 100,000 residents in New York State. Table 1 provides the number of deaths and death rates per 100,000 residents by cause of death for Chautauqua and neighboring counties as well as New York State. The leading causes of death in the County and state were diseases of the heart, malignant neoplasms, chronic lower respiratory disease (CLRD), and cerebrovascular disease, respectively. Chautauqua County experienced greater death rates for CLRD (55.5), diabetes (28.1) and cerebrovascular disease (39.1) than New York State (29.7, 17.1, and 26.5, respectively). AIDS and pneumonia deaths were lower for the County than for the state. When compared to similar counties Allegany and Cattaraugus, it is apparent that Chautauqua County experiences a lower rate of deaths by suicide, total accidents, and pneumonia. Cattaraugus County had a greater rate of heart disease deaths (243.2) than Chautauqua County (209.2).

Table 44. 2007 Deaths and Age-Sex Adjusted Death Rates (per 100,000 residents) by Selected Causes of Death

Cause of Death	Geographic Region									
	New York State		NYS Excl. NYC		Chautauqua		Cattaraugus		Allegany	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Total	146,266	668.6	93,395	707.9	1,394	762.4	779	779	477	798.6
Diseases of the Heart	49,313	219.6	28,140	206.8	402	209.8	257	243.2	133	214
Malignant Neoplasms	35,183	163.8	22,733	175.4	296	166.7	161	162.3	99	170.8
Cerebrovascular Disease	5,881	26.5	4,280	31.7	74	39.1	39	37.5	25	38.9
AIDS	1,327	6.5	250	2.2	1	0.6	0	0	0	0
Pneumonia	4,502	19.8	2,156	15.6	27	13.2	12	12	16	23.9
CLRD	6,465	29.7	5,062	38.5	102	55.5	57	57.9	24	39.7
Total Accidents	4,905	24	3,247	27.2	46	29	33	38.6	23	41.1
Diabetes Mellitus	3,690	17.1	2,127	16.2	52	28.1	32	31.6	13	20.9
Homicide/Legal Intervention	842	4.5	329	3.1	2	1.8	1	1.5	1	2.8
Cirrhosis of the Liver	1,285	6.1	867	6.8	18	10.9	7	8.1	2	4
Suicide	1,368	6.9	912	7.9	12	9.2	12	15.4	7	16.8

* Age-Sex adjusted rates are directly standardized using the age-sex distribution for the United States 2000 Census
Source: Vital Statistics of New York State 2007

Infant Mortality

In 2007, there were 11 infant deaths in Chautauqua County, resulting in an infant death rate of 7.3 deaths per 1,000 live births. Infant deaths include all deaths of residents under the age of one year (excluding spontaneous fetal deaths) and are the addition of neonatal and post neonatal deaths. The County rate is lower than that of neighboring Cattaraugus County (9.0)

but greater than the rates of Allegany County, New York State excluding New York City and New York State as a whole. The number of infant deaths is split almost evenly between neonatal (babies less than 28 days old) and post neonatal (babies between 28 days old and one year) deaths. Perinatal deaths include spontaneous fetal deaths of gestations exceeding 20 weeks and neonatal deaths. The perinatal death rate in Chautauqua County is 13.2 deaths per 1000 spontaneous fetal deaths of greater than 20 weeks gestation and live births. The County rate is greater than the rates of Allegany County (7.6), New York State Excluding New York City (8.7) and New York State (10.2). Cattaraugus County had a higher rate of perinatal deaths at 16.9.

Table 45. Infant Deaths, Neonatal Deaths, Post Neonatal Deaths and Perinatal Mortality By Resident County New York State, 2007

County	# Infant Deaths ¹	Infant Death Rate	# Neonatal Deaths ²	Neonatal Death Rate	# Post Neonatal Deaths ³	Post Neonatal Death Rate	Perinatal Mortality ⁴	Perinatal Death Rate ⁵
Allegany	3	5.7	1	1.9	2	3.8	4	7.6
Cattaraugus	9	9.0	5	5.0	4	4.0	17	16.9
Chautauqua	11	7.3	6	4.0	5	3.3	20	13.2
NYS	1,382	5.5	910	3.6	472	1.9	2,583	10.2
NYS excl. NYC	760	5.9	520	4.0	240	1.8	1,129	8.7

1 Infant Death Rate - deaths under 1 year of age per 1,000 live births

2 Neonatal Death Rate - deaths under 28 days of age per 1,000 live births

3 Post Neonatal Death Rate - deaths at age 28 days and older but less than 1 year per 1,000 live births

4 Perinatal Mortality = number of neonatal deaths + spontaneous fetal deaths of gestation 20+ weeks

5 Perinatal Mortality Rate = (number of neonatal deaths + spontaneous fetal deaths of gestation 20+ weeks)*1000/(spontaneous fetal deaths of gestation 20+ weeks + live births)

Source: New York State Vital Statistics

Heart Disease and Stroke Mortality

The New York State Department of Health Bureau of Chronic Disease Epidemiology and Surveillance and the Bureau of Health Risk Reduction report in "The Burden of Cardiovascular Disease of New York" that:

Cardiovascular Disease (CVD) is a general category of diseases that affect the heart and the circulatory system. Specific CVD categories included in this report are coronary heart disease (CHD), congestive heart failure (CHF) and, cerebrovascular disease (stroke). CHD refers to a reduction of blood flow due to thickening and hardening of the arteries that supply the heart muscle. A complete cut off of the blood supply results in the death of heart cells, and a heart attack occurs. CHF is a disorder where the heart loses its ability to pump blood efficiently. Finally stroke occurs when a blood vessel bringing oxygen and nutrients to the brain bursts or is clogged by a blood clot. CVD was the primary cause of death for New York's citizens, both men and women, as well as all races in 1999. CHD accounted for most of these deaths. New York State residents were 29% more likely to die of CHD than the next leading cause of death. CHD was the number one killer in New York State. CHF currently accounts for 2% of all deaths in NYS and 4% of all CVD deaths. However, it is one of the fastest growing subgroups of CVD and it has been increasing

over the last 20 years. Finally, stroke was the third leading cause of death in New York in 1999.

Cardiovascular disease is the leading cause of death in Chautauqua County. Stroke, or cerebrovascular disease is third leading cause of death. Data from the New York State Department of Health County Health Assessment Indicators Website reports that over the time period of 2004-2006, there were 1,616 deaths due to cardiovascular disease in the County. The resulting age-adjusted rate of 284 ranked in the third quartile among all of New York's 62 counties, meaning that the County experienced a higher rate than 50-75% of the counties. Additionally, the rate was significantly greater than that of New York State (320.8). Among the residents who died of cardiovascular disease from 2004 to 2006, 11.6 were between the ages of 35 and 64 and 53.5% died before transport to hospitals became available. New York State experienced proportionately less pretransport mortality and fewer premature deaths than the County.

From 2004 to 2006, there were 1,295 deaths caused by disease of the heart. The age-adjusted rate of heart disease in the County was 228.9, which is less than the state rate. Coronary heart disease caused 981 deaths in the same time period, resulting in an age-adjusted rate of 173.6 deaths per 100,000 residents, less than New York State. One hundred and eighteen deaths were attributed to congestive heart failure. The corresponding age-adjusted rate of 19.8 was greater than both the rates of New York State (12.7) and New York State excluding New York City (16.5). Six congestive heart failure deaths occurred among residents aged 35 to 64 years old and 70 occurred prior to transport. Both premature deaths and pretransport deaths were proportionately greater in the County than in the state and ranked in the fourth quartile, indicating that the proportions are greater than 75% or more of the remaining New York State counties.

Cerebrovascular disease, or stroke, accounted for 215 deaths from 2004 to 2006 or 36.7 deaths per 100,000 residents, age-adjusted to the 2000 population. That rate is similar to but slightly higher than the New York State rate (30.5), and slightly lower than the rate of New York State excluding New York City (37). Fifteen stroke deaths occurred among residents aged 35 to 64 years old and 108 died prior to the availability of emergency transport. The premature death rate was similar to the state rate, but the pretransport mortality rate was higher in the County.

Table 46. Chautauqua County Heart Disease and Stroke Mortality 2004-2006

Indicator	3 Year Total	County Rate	NYS Rate	Sig. Dif.	NYS Rate excl. NYC	Sig. Dif.	Ranking Quartile
CARDIOVASCULAR DISEASE							
Mortality rates per 100,000 (ICD10 I00-I99)							
Crude	1,616	394.9	320.8	Yes	328.1	Yes	4th
Age-adjusted	1,616	284	285.2	No	278.5	No	3rd
Premature death (ages 35-64)	188	118.5	108.2	No	99.6	Yes	3rd
Pretransport mortality	865	211.4	144.4	Yes	154.8	Yes	4th
DISEASE OF THE HEART							
Mortality rates per 100,000 (ICD10 I00-I09, I11, I13, I20-I51)							
Crude	1,295	316.5	267.2	Yes	263.2	Yes	4th
Age-adjusted	1,295	228.9	237.3	No	223.3	No	3rd
Premature death (ages 35-64)	163	102.7	89	No	81.7	Yes	3rd
Pretransport mortality	700	171.1	126.2	Yes	128.2	Yes	4th
CORONARY HEART DISEASE							
Mortality rates per 100,000 (ICD10 I11, I20-I25)							
Crude	981	239.7	223.3	Yes	202.5	Yes	3rd
Age-adjusted	981	173.6	198.3	Yes	171.7	No	3rd
Premature death (ages 35-64)	127	80	73.9	No	63	Yes	3rd
Pretransport mortality	525	128.3	108.5	Yes	102	Yes	4th
CONGESTIVE HEART FAILURE							
Mortality rates per 100,000 (ICD10 I50)							
Crude	118	28.8	14.6	Yes	19.8	Yes	4th
Age-adjusted	118	19.8	12.7	Yes	16.5	No	4th
Premature death (ages 35-64)	6	3.8*	1.8	No	2.1	No	4th
Pretransport mortality	70	17.1	6.5	Yes	9.5	Yes	4th
CEREBROVASCULAR DISEASE (STROKE)							
Mortality rates per 100,000 (ICD10 I60-I69)							
Crude	215	52.5	34.2	Yes	43.6	Yes	4th
Age-adjusted	215	36.7	30.5	No	37	No	2nd
Premature death (ages 35-64)	15	9.5*	11.4	No	11.4	No	2nd
Pretransport mortality	108	26.4	11.1	Yes	17	Yes	4th

*: Fewer than 20 events in the numerator; therefore the rate is unstable

Source: NYSDOH County Health Assessment Indicators

From 2004 to 2006, the number of cerebrovascular deaths decreased from 77 to 63. The rate of stroke deaths in the County (36.7) was lower than the Western New York Regional rate of 43.4 and the rates of both Allegany (44.5) and Cattaraugus (39.6) Counties. However, the rate was greater than that of New York State (30.5). These statistics, provided by New York State Vital Statistics, show that stroke mortality is a greater problem in Western New York than New York State as a whole. However, the burden of stroke in the County is less than that for diseases of the heart.

Table 47. 2004-2006 Cerebrovascular Mortality Rates per 100,000 residents

Region/County	Deaths				Population 2005	Crude Rate	Adjusted Rate
	2004	2005	2006	Total			
Allegany	26	25	29	80	50,602	52.7	44.5
Cattaraugus	41	41	36	118	82,502	47.7	39.6
Chautauqua	77	75	63	215	136,409	52.5	36.7
Region Total	908	950	836	2,694	1,562,561	57.5	43.4
NYS Total	6,855	6,566	6,310	19,731	19,254,630	34.2	30.5

Adjusted Rates Are Age Adjusted to the 2000 United States Population
 Source: 2004-2006 Vital Statistics Data as of March, 2008

Cancer Mortality

Malignant neoplasms, or cancers, are the second leading causes of death in Chautauqua County. The following table provides average annual cancer deaths and rates for specified types of cancers for men and women 2002-2006. For males, the overall cancer death rate is much higher than the state (242.8 compared to 210.2 deaths per 100,000 male residents). The rate is also greater for County females than state females, but the difference is not as great (155.2 compared to 152.5 deaths per 100,000 females).

The greatest average annual number of male cancer deaths from 2002 to 2006 was caused by lung & bronchus cancer (50.8 deaths), prostate cancer (19.2 deaths), and colorectal cancer (13.4 deaths). Of those three types of cancer, lung & bronchus and prostate cancer rates were greater in Chautauqua County than in New York State. The rate of colorectal cancer in the County was lower than that of the state. The oral cavity & pharynx (6.1) and esophagus (11.8) cancer rates were slightly higher in the County for than the state for males (3.5 and 7.6, respectively). Melanoma of the skin rates were slightly higher in the County than in the state.

The greatest average annual number of female cancer deaths from 2002 to 2006 was caused by lung & bronchus cancer (40.2 deaths), breast cancer (24.6 deaths), and colorectal cancer (15.4 deaths). Of those three types of cancer, lung & bronchus and breast cancer rates were slightly higher than the state. The rate of colorectal cancer in the County was slightly lower than that of the state. The rate of cervical cancer was slightly lower in the County than in the state, while melanoma of the skin was slightly higher.

Table 48. Cancer Mortality 2002-2006

Cancer	Mortality							
	Males				Females			
	Chautauqua County		New York State		Chautauqua County		New York State	
	Average Annual Deaths	Rate per 100,000 Males	Average Annual Deaths	Rate per 100,000 Males	Average Annual Deaths	Rate per 100,000 Females	Average Annual Deaths	Rate per 100,000 Females
All Invasive Malignant Tumors	172.8	242.8	17509	210.2	155.2	159.9	18162.8	152.5
Oral cavity and pharynx	4.4	6.1	312.2	3.5	1.4	1.3	154.4	1.3
Esophagus	8.6	11.8	652.2	7.6	2.4	2.2	235.2	1.9
Stomach	3	4.2	555	6.7	2.6	2.6	435.4	3.6
Colorectal	13.4	18.9	1813	22	15.4	14.8	1939.6	15.6
Colon excluding rectum	10.4	14.8	1506.2	18.4	13.6	12.9	1671.4	13.4
Rectum & rectosigmoid	3	4.1	306.8	3.6	1.8	1.9	268.2	2.2
Liver / intrahepatic bile duct	5.4	7.6	685.6	7.8	2.6	2.7	372.2	3.1
Pancreas	8.4	12	1044.4	12.3	10.6	10.9	1169.8	9.6
Larynx	1.4	1.9	213.6	2.5	0.4	0.5	59.2	0.5
Lung and bronchus	50.8	70.2	5018.4	59.4	40.2	42	4348.2	37.1
Melanoma of the skin	3.8	5.2	256.8	3	2.2	2.6	182.4	1.6
Female breast					24.6	26	2875	24.5
Cervix uteri					0.6	0.6	283.2	2.6
Corpus uterus and NOS					5.2	5.6	583.4	5
Ovary					11	11.9	1023	8.7
Prostate	19.2	28.4	1867.2	24.4				
Testis	0.4	0.6	23.4	0.2				
Urinary bladder (incl. in situ)	7.8	11	591.2	7.5	1.8	1.7	298	2.4
Kidney and renal pelvis	4.6	6.5	426.8	5	1.8	1.9	274	2.3
Brain and other nervous system	3.8	5	416.4	4.7	2.6	2.9	328.6	2.9
Thyroid	0.4	0.6	38	0.5	0.6	0.7	59.4	0.5
Hodgkin lymphoma	0.6	0.9	48.4	0.5	0.2	0.2	40.8	0.4
Non-Hodgkin lymphomas	7.2	10.1	686.6	8.2	4.2	4.1	643.4	5.3
Multiple myeloma	4.8	6.7	334.6	4	2.4	2.5	313	2.6
Leukemias	4.8	6.9	759.6	9.2	4.8	4.6	620.2	5.2

Source: New York State Vital Statistics

Data from the New York State Vital Statistics show that lung & bronchus cancer deaths have decreased over time. In 2002, there were 102 deaths which gradually decreased to 86 in 2006. The age-adjusted rate for the years 2002-2006 was 53.7 deaths per 100,000 residents in the County, which is slightly lower than the Western New York Region (58.3) and Allegany County (60.1), but still greater than the Cattaraugus County rate of 47.4 and the New York State rate of 46.1. The data suggest that our county is doing well in preventing more lung & bronchus cancer deaths than in years past.

Table 49. Lung & Bronchus Cancer Mortality 2002-2006

Region/County	Deaths						Population 2004	Crude Rate	Adjusted Rate
	2002	2003	2004	2005	2006	Total			
Allegany	40	29	37	35	27	168	50,575	66.4	60.1
Cattaraugus	45	42	44	55	45	231	83,179	55.5	47.4
Chautauqua	102	94	89	84	86	455	137,267	66.3	53.7
Region Total	1,171	1,104	1,115	1,058	1,072	5,520	1,572,212	70.2	58.3
NYS Total	9,625	9,467	9,364	9,279	9,176	46,911	19,227,088	48.8	46.1

Adjusted Rates Are Age Adjusted to the 2000 United States Population

Source: 2002-2006 Vital Statistics Data as Of April, 2008

Data from New York State Vital Statistics indicates that female breast cancer deaths have also decreased in the County over time. In 2002, there were 33 deaths which gradually decreased to 15 deaths in 2006. The 2002-2006 death rate in Chautauqua County of 25.7 was comparable to the Western New York region (25.9) and the Cattaraugus County rate (26.7) and slightly higher than the rates of Allegany County (19.8) and New York State (24.5). These data also suggest that Chautauqua County is taking a step in the right direction to aid in the prevention of breast cancer deaths.

Table 50. Female Breast Cancer Mortality 2002-2006

Region/County	Deaths						Population 2004	Crude Rate	Adjusted Rate
	2002	2003	2004	2005	2006	Total			
Allegany	9	7	3	6	4	29	25,223	23	19.8
Cattaraugus	13	18	15	14	12	72	42,313	34	26.7
Chautauqua	33	31	25	18	15	122	70,085	34.8	25.7
Region Total	289	331	268	247	255	1,390	809,399	34.3	25.9
NYS Total	2,976	2,990	2,884	2,842	2,713	14,405	9,922,507	29	24.5

Adjusted Rates Are Age Adjusted to the 2000 United States Population

Source: 2002-2006 Vital Statistics Data as Of April, 2008

Diabetes

Diabetes is a growing problem in the County. New York State Vital Statistics data shows that from 2004 to 2006, the number of diabetes deaths have gradually increased. The Chautauqua County age-adjusted diabetes mortality rate of 23.2 is greater than the region (21.2) and New York State as a whole (18.7). It is similar to nearby Cattaraugus (23.1) and Allegany (24.1).

Table 51. Diabetes Mortality 2004-2006

Region/County	Deaths				Population 2005	Crude Rate	Adjusted Rate
	2004	2005	2006	Total			
Allegany	10	17	14	41	50,602	27	24.1
Cattaraugus	22	19	27	68	82,502	27.5	23.1
Chautauqua	37	44	47	128	136,409	31.3	23.2
Region Total	423	422	404	1,249	1,562,561	26.6	21.2
NYS Total	3,916	4,058	3,835	11,809	19,254,630	20.4	18.7

Adjusted Rates Are Age Adjusted to the 2000 United States Population

Source: 2004-2006 Vital Statistics Data as of March, 2008

Chronic Lower Respiratory Disease and Asthma Mortality

Chronic Lower Respiratory Disease (CLRD) is a disease classification that includes asthma, chronic bronchitis, and emphysema. Data from New York State Vital Statistics report that CLRD deaths increased gradually from 93 deaths in 2004 to 105 deaths in 2006 in Chautauqua County. The corresponding age-adjusted death rate of 54.8 deaths per 100,000 residents is greater than the region (43.3) and New York State as a whole (31.3). Allegany (61.3) and Cattaraugus (67.5) rates were slightly higher than the rate for Chautauqua County. It is apparent that CLRD is an issue of greater proportions for Southwestern New York than for other counties in the state.

Table 52. Chronic Lower Respiratory Disease Mortality

Region/County	Deaths				Population 2005	Crude Rate	Adjusted Rate
	2004	2005	2006	Total			
Allegany	29	41	37	107	50,602	70.5	61.3
Cattaraugus	63	79	58	200	82,502	80.8	67.5
Chautauqua	93	101	105	299	136,409	73.1	54.8
Region Total	844	900	854	2,598	1,562,561	55.4	43.3
NYS Total	6,742	6,805	6,263	19,810	19,254,630	34.3	31.3

Adjusted Rates Are Age Adjusted to the 2000 United States Population (per 100,000 population)
Source: 2004-2006 Vital Statistics Data as of March, 2008

From 2005 to 2007 there were 5 deaths in the County attributable to asthma. The corresponding age-adjusted rate of 8.8 deaths per 100,000 residents is greater than the region rate (7.6) and the Allegany County rate (6). The County rate is less than the Cattaraugus County rate (12.6) and the New York State rate (12.5). However, since there were less than 10 deaths in each of the counties, these rates are probably not very stable. Also, the New York State would be much lower if New York City had been excluded.

Table 53. Asthma - Deaths and Death Rates Per 100,000 Residents

Region/County	Deaths				Population 2006	Crude Rate	Adjusted Rate
	2005	2006	2007	Total			
Allegany	0	1	0	1	50,267	6.6	6
Cattaraugus	2	1	1	4	81,534	16.4	12.6
Chautauqua	0	2	3	5	135,357	12.3	8.8
Region Total	15	13	13	41	1,549,334	8.8	7.6
NYS Total	293	241	232	766	19,306,183	13.2	12.5

Adjusted Rates Are Age Adjusted to the 2000 United States Population
Source: 2005-2007 Vital Statistics Data as of March, 2009

Infectious Diseases

AIDS

From 2004 to 2006, there were four AIDS deaths in Chautauqua County, resulting in a mortality rate of 1.2 deaths per 100,000 residents. AIDS mortality in the County is lower than that of the state and of New York State excluding New York City. (County Indicator data)

Pneumonia

According to New York State Vital Statistics, the rate of pneumonia deaths in Chautauqua County (13.2) is relatively low compared to that of New York State, both including (19.8) and excluding (15.6) New York City, and Allegany County (23.9). The mortality rate is approximately equal to that of Cattaraugus County, 12 deaths per 100,000 county residents.

Injuries and Accidents

In 2007, forty-six deaths in Chautauqua County were attributed to total accidents, resulting in a rate of 29 deaths per 100,000 residents. Deaths due to accidents are more common in Western New York than in the rest of the state. Both Allegany (41.1) and Cattaraugus (38.6) Counties had proportionately high rates of death due to this cause. Data from the NYSDOH Vital Statistics indicates that deaths due to accidents are not as great of a burden for New York State as a whole (24) and New York State excluding New York City (27.2).

Suicide and Homicide

According to the New York State Department of Health, counties in Southwestern New York State demonstrated greater death rates due to suicide in 2007 than New York State as a whole. The suicide death rate of Chautauqua County residents is low (9.2) when compared to neighboring and comparable counties of Cattaraugus (15.4) and Allegany (16.8). However, the suicide death rate for the County is higher than New York State (6.9) and New York State excluding New York City (7.9). There were two deaths by homicide or legal intervention in Chautauqua County during 2007. The homicide rate in Chautauqua County (1.2) was lower than New York State (4.5) and New York State excluding New York City (3.1)

B. Behavioral Risk Factors

A Behavioral Risk Factor Surveillance Survey (BRFSS) conducted three times over a four-year period (2004-2007) in the County provides a great deal of information about residents' health behaviors. The BRFSS was funded by a Steps to a Healthier Chautauqua County grant that aimed to promote health and prevention in the County. It is important to point out that the BRFSS study design can result in biased data due to self-reporting and selection through randomized phone interviews. With increased use of cellular phones in all areas of the nation, important subgroups may be excluded from this type of survey because they do not use traditional telephones.

Additionally, a planning grant was obtained by CCHN to evaluate data to determine if Chautauqua County would qualify for a Federally Qualified Health Center. The data was analyzed and presented to CCHN by John Snow Incorporated.

Regarding overall health, the BRFSS data indicate that the majority of residents in the County rate their health status as very good (34.1%) or good (33.0%). Many also consider their health to be excellent (18.2%) and fewer consider it to be fair (11.2%). Fortunately, only 3.2% of the population believed themselves to be in poor health. However, it is important to point out that the perception of poor health is disproportionately greater among the black, non-Hispanic populations. Compared to 3.1% among the white population, 23.9% of black non-Hispanics considered themselves to be in poor health. Hispanics rated their health statuses higher than other racial and ethnic groups (35.3% excellent, 34.1% very good). While only 3.2% of County residents believe they are in poor health, high percentages of adults with diabetes (7.5%) or are obese (27.7%), along with high rates of cardiovascular disease, cancer, an asthma indicate that a much greater percentage are actually experiencing poor health.

Table 54. Health Status 2006-2007

		Race								TOTAL	
		White, non-Hispanic		Black, non-Hispanic		Other, non-Hispanic		Hispanic		Count	Percent
		Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Health Status	Excellent	17455	17.70%	92	15.80%	453	16.50%	1101	35.30%	19101	18.20%
	Very good	34349	34.80%	214	36.70%	418	15.20%	1063	34.10%	36044	34.30%
	Good	32881	33.30%	111	19.10%	1179	42.90%	650	20.90%	34821	33.10%
	Fair	10832	11.00%	26	4.50%	583	21.20%	193	6.20%	11634	11.10%
	Poor	3017	3.10%	139	23.90%	113	4.10%	87	2.80%	3357	3.20%
	Don't know or not sure	198	0.20%					21	0.70%	219	0.20%
TOTAL		98732	100.00%	582	100.00%	2746	100.00%	3116	100.00%	105175	100.00%

Source: Steps to a Healthier Chautauqua County BRFSS 2006-2007

Priority Area: Healthy Mothers, Healthy Babies

There are 35,416 women of child bearing age (15-54) residing in Chautauqua County. In 2007 there were one thousand five hundred and four live births in Chautauqua County. Mothers of 984 (65.4%) babies, the majority, born in 2007 began receiving prenatal care in the first trimester. During the second trimester, 332 (22.1%) birth mothers began prenatal care, while 76 (5.1%) sought care during the third trimester and 12 (0.8%) did not seek any prenatal care. The percentage of mothers who did not begin prenatal care was comparable to the proportion for the state (0.5%).

Table 55. Live Births by Month Prenatal Care Began and Resident County New York State - 2007

County	Month Prenatal Care Began						PNC Start Unknown	PNC Unknown
	Total	1st-3rd	4th-6th	7th-9th	None			
Allegany	525	393	82	20	1	26	3	
Cattaraugus	996	664	175	45	12	24	76	
Chautauqua	1,504	984	332	76	12	65	35	
NYS	252,662	174,949	49,770	10,815	1,369	6,128	9,631	
NYS exc. NYC	129,730	89,010	24,433	4,391	731	5,968	5,197	

Source: Vital Statistics New York State 2007

The total number of teenage pregnancies for Chautauqua County in 2007 was 222 (rate of 39.4 teenage pregnancies per 1,000 female population 15-19) resulting in 163 live births, 47 spontaneous fetal deaths and 12 induced abortions. Approximately 58% of teenage mothers aged 15 to 19 with known prenatal care start date received early prenatal care. New York State Vital Statistics reports that 0% of 15 to 17 year olds reported that they received late or no prenatal care, compared to 10.2% for 18 to 19 year olds. The proportion of teenage mothers who received early prenatal care was lower in Chautauqua County than in Allegany or Cattaraugus Counties and higher than that of New York State.

A woman's health prior to pregnancy and early prenatal care is critical to the health of the infant and impacts the infant's health and wellness for a lifetime. The health of a newborn directly correlates to the trimester the women began receiving prenatal care, if any. One of the Healthy People 2010 objectives is to ensure that 90% of women begin prenatal care in the first trimester. New York State Vital statistic data (2007) indicate that only 65% of pregnant women in Chautauqua County began prenatal care within the first trimester. The total number of pregnancies in 2007 was 1,850 (rate of 68.5 total pregnancies per 1,000 female population aged 15-44) resulting in 1,504 live births, 114 spontaneous fetal deaths and 232 induced abortions.

Of all age groups of women of child-bearing age in Chautauqua County, those 35 years old and greater were the most likely to receive early prenatal care (80.7%). For all other age groups, Chautauqua County's proportion of women who reported that they received early prenatal care was quite a bit lower than that of comparable counties and approximately equal to the state proportions.

Table 56. Percent[^] Early and Late or No Prenatal Care, Age and Resident County New York State, 2007

County	% [^] Early Prenatal Care*					% [^] Late/No Prenatal Care+				
	15-17	18-19	20-24	25-34	35+	15-17	18-19	20-24	25-34	35+
Allegany	70	60.5	79.4	81.8	82.6	10	2.6	3.9	4.5	4.3
Cattaraugus	64.5	61.5	73.1	78.4	71.8	6.5	2.6	7.6	5	12.9
Chautauqua	58.1	58.3	62	76.8	80.7	0	10.2	8	4.9	3.7
NYS	50.3	57.5	65.2	77.1	80.6	12.2	9.1	7.2	4.3	3.5
NYS exc. NYC	48.8	56	64.1	79.2	82.6	11.4	8	6.7	3.4	2.7

[^] Percent of those women with known prenatal care start date.

* Early prenatal care is care that began in the 1st-3rd month of pregnancy.

+ Late/No prenatal care is care that began in the 7th-9th month of pregnancy or a pregnancy with no prenatal care.

Source: Vital Statistics New York State 2007

Of women in the County of known prenatal care start date, white women were the most likely to receive early prenatal care (70.2%). Black, other, and Hispanic women were slightly less likely to receive early prenatal care, each demonstrating a percentage around 67%. In 2007, black women were the most likely to receive late or no prenatal care (20.0%). Women classified as 'other' in Chautauqua County were more likely to receive early prenatal care than in neighboring counties and white women were less likely than neighboring counties and New York State as a whole.

Table 57. Percent[^] Early and Late or No Prenatal Care, by Race and Resident County New York State - 200

County	% Early Prenatal Care*				% Late/No Prenatal Care+			
	White	Black	Other	Hispanic@	White	Black	Other	Hispanic@
Allegany	79.3	100.0	66.7	75.0	4.3	0.0	0.0	0.0
Cattaraugus	76.0	61.5	54.9	71.4	6.0	0.0	11.3	7.1
Chautauqua	70.2	66.7	67.2	67.0	6.2	20.0	3.4	5.5
NYS	77.6	65.6	68.4	66.8	3.9	8.7	5.7	6.6
NYS excl. NYC	78.3	61.4	65.9	60.5	3.5	8.7	6.0	6.7

[^] Percent of those women with known prenatal care start date.

* Early prenatal care is care that began in the 1st-3rd month of pregnancy.

+ Late/No prenatal care is care that began in the 7th-9th month of pregnancy or a pregnancy with no prenatal care.

Source: Vital Statistics New York State 2007

Women who eat too little or lack nutritious foods in their diet are at increased risk of giving birth to a baby who will be born too soon or too small, have birth defects, or have breathing and blood chemistry problems at birth. Poor prenatal nutrition increases the risk of problems ranging from stillbirth, developmental delays, and/or increased infant hospitalization frequency during the first year of life.

Priority Area: Physical Activity & Nutrition

Previous sections of this document highlight the fact that heart disease and diabetes present great disease burdens for the County population and are major contributors to the County death rate. Overweight and obesity rates that exceed those of the state and the nation, along with the incidence and prevalence of related diseases emphasize the need for County residents to cut calorie intakes, eat healthier foods, and increase physical activity. Data from the 2006-2007 Steps to a Healthier Chautauqua County BRFSS provide physical activity and nutrition patterns for randomly selected County residents. These data demonstrate the magnitude of the obesity epidemic in Chautauqua County.

Physical Activity

Working adults usually spend eight hours a day five days a week in their respective work environments. Working for the better part of the day takes away from opportunities to get a sufficient amount of exercise. The working population faces greater risks of becoming overweight or obese when individuals are required to sit at a desk all day. Steps to a Healthier Chautauqua County BRFSS data estimates that in Chautauqua County 35.8% of adults 18 years old or greater are usually sitting or standing at work, 19.7% are usually walking and 17.6% are usually doing heavy labor or physically demanding work. Of respondents who were more sedentary at work, the majority (44.8%) were between the ages of 35 and 64. Additionally, most Hispanics who were surveyed (56.3%) reported usually sitting or standing at work.

The U.S. Centers for Disease Control and Prevention (CDC) recommends that for important health benefits, normal adults need muscle-strengthening activities on two or more days and either two and a half hours of moderate-intensity aerobic activity, one hour and fifteen minutes of vigorous-intensity aerobic activity, or an equivalent mix of moderate- and vigorous-intensity activity every week. The CDC adds that activity times do not have to be completed all at once, but can be broken up into ten minute intervals.

Of 2006-2007 BRFSS respondents, 88.3% reported that in a usual week they spend ten minutes at a time undertaking moderate physical activity such as walking, biking, vacuuming, or gardening; at 89.7%, females had a slightly higher proportion that reported 'yes' than men (86.9%). The majority of respondents claimed that they spend at least ten minutes doing moderate physical activity seven days a week (36.3%). Many also claimed to have participated in moderate activity for five days (18.6%), three days (16.9%) and four days (11.8%). When asked about weekly vigorous activity (running, aerobics, heavy yard work, etc.), only 49.7% of respondents claimed to spend ten minutes at a time. Those who reported partaking in vigorous activities did so fewer days per week than those who reported doing moderate activities. The majority of respondents did vigorous activities for one, two, or three days per week.

Overall, the 2006-2007 Steps to a Healthier Chautauqua County BRFSS estimates that only 19.6% of County residents meet the weekly moderate and vigorous physical activity guidelines of the CDC. This means that approximately 80.4% of County residents are not getting as much

physical activity as is recommended for good health. Respondents in the youngest age group (18-34 years) were the most likely to meet the CDC's physical activity requirements. Of races listed, Hispanics (20.9%) and white, non-Hispanics (20.0%) had the highest proportions of respondents who met CDC's physical activity guidelines. Black, non-Hispanics had a slightly lower percentage that met CDC guidelines at 18.2%, while other, non-Hispanics saw the lowest proportion at 9.5%.

Table 58. Physical Activity By Race for Chautauqua County Residents 2006-2007

		Race								TOTAL	
		White, non-Hispanic		Black, non-Hispanic		Other, non-Hispanic		Hispanic		Count	Percent
		Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Moderate PA, 5 or more days per week, for at least 30 minutes	Yes	46536	47.50%	302	52.00%	539	20.40%	952	30.80%	48329	46.30%
	No	51519	52.50%	279	48.00%	2105	79.60%	2143	69.20%	56046	53.70%
TOTAL		98055	100.00%	582	100.00%	2644	100.00%	3095	100.00%	104375	100.00%
Vigorous PA, 3 or more days per week for at least 20 minutes	Yes	27939	28.50%	158	27.20%	279	10.20%	984	31.60%	29360	28.10%
	No	69989	71.50%	423	72.80%	2467	89.80%	2132	68.40%	75011	71.90%
TOTAL		97928	100.00%	582	100.00%	2746	100.00%	3116	100.00%	104372	100.00%
Meets both moderate and vigorous recommendations	Yes	19475	20.00%	106	18.20%	251	9.50%	646	20.90%	20478	19.80%
	No	77818	80.00%	476	81.80%	2393	90.50%	2449	79.10%	83136	80.20%
TOTAL		97294	100.00%	582	100.00%	2644	100.00%	3095	100.00%	103614	100.00%

Source: 2006-2007 Steps to a Healthier New York BRFSS data

Nutrition

Fruit and Vegetable Consumption

Fruits and vegetables contain essential nutrients and dietary fiber that promote good health. The modern mobile American lifestyle does not leave a lot of time for home-cooked meals and fruit and vegetable preparation. Therefore, most Americans are not consuming the recommended amount of fruits and vegetables. Fruits and vegetables are naturally low in calories and are thought to play a role in preventing chronic diseases. Individuals who consume large amounts of fruits and vegetables face less of a risk of chronic disease (Type 2 Diabetes, stroke, some cancers, cardiovascular disease, hypertension, etc.) than those who eat only small amounts.

When surveyed for the Steps to a Healthier Chautauqua County BRFSS, respondents (18 years or older) revealed that approximately 22.7% of County residents consume the recommended 5 or more servings of fruits and vegetables per day. The County percentage is slightly lower than the 27.4% estimated for New York State residents in the statewide BRFSS conducted by the NYSDOH in 2007. Most County residents claimed to have consumed between three and four servings per day and an additional 32.0% claimed to have consumed one to two servings. Of respondents, 4.2% had less than one serving, which is slightly lower than the state (4.9%).

Females were more likely than males to claim that they had consumed five or more servings of fruits and vegetables (28.1% compared to 22.7%), which is consistent with statewide trends.

Adults aged 65 and older were more likely than other age groups to consume at least five servings of vegetables. While residents aged 18 to 34 years (26.3%) were more likely than those aged 35 to 64 (23.5%) to consume at least five servings of vegetables, they were also the most likely to consume less than one serving per day (6.8%). Black, non-Hispanics were the most likely of all racial groups classified to get the recommended amount (36.9%). White residents demonstrated the next highest percentage at 26.0%, followed by Hispanics (23.9%) and then those classified as other, non-Hispanic (11.8%). Hispanics were the most likely to eat less than one serving at 18.9%, compared to 10.6% of black, non-Hispanics and 3.8% of white, non-Hispanics surveyed. The proportion of residents who consumed five or more fruits and vegetables directly increased with educational level and the proportion of residents who ate less than one serving decreased with educational level. Individuals with two or more children were more likely than those without children to eat the recommended amount of fruits and vegetables daily.

Table 59. Chautauqua County Fruit and Vegetable Consumption for 2006-2007

		Gender				TOTAL	
		Male		Female		Count	Percent
		Count	Percent	Count	Percent		
Fruit and vegetable servings	Less than 1 serving	2717	5.30%	1706	3.10%	4423	4.20%
	1-2 servings	17452	33.90%	16485	30.10%	33937	32.00%
	3-4 servings	19584	38.10%	21170	38.70%	40755	38.40%
	5 or more servings	11655	22.70%	15353	28.10%	27008	25.40%
TOTAL		51408	100.00%	54715	100.00%	106123	100.00%

Source: 2006-2007 Steps to a Healthier New York BRFSS data

Milk Consumption

Because it is a significant source of calcium, drinking milk can help prevent certain bone diseases, such as osteoporosis, and reduce hypertension. However, milk is also the third largest source of saturated fat in adults' diets. The NYSDOH BRFSS indicates that switching from whole to skim or non-fat milk, the average New Yorker would reduce their saturated fat intake from 12% to 10% of total daily calorie intake.

Estimates from the Steps to a Healthier Chautauqua County BRFSS data indicate that the majority (44.2%) of adult County residents drink 2% milk. Skim milk is the next popular at 16.8%, followed by 1% (14.3%) and whole milk (14.0%). Still others do not drink milk (7.0%) or drink soy or other milk-like substitute (3.3%). Whole milk consumption was more popular among males, individuals aged 18-34, Hispanics, individuals with less than a high school education, and those who were never married than among other groups. Skim milk consumption was most popular among females, adults aged 65 or greater, white non-Hispanics, individuals with more than a high school education, and those who were married.

Breastfeeding

Breast milk is an important source of nutrition and antibodies for newborn babies and infants. For optimal health of the baby, exclusive breastfeeding is recommended for the first six months and continued breast feeding in the following six months. The NYSDOH reported in 2009 that

70-80% of mothers breastfeed, but that only 26% exclusively breastfeed at three months and 8% at six months. CDC's Pediatric Nutrition Surveillance reported in 2005 that 55.5% (ranked 39) of children under the age of five were ever breastfed, 14.5% (ranked 45) had been breastfed for at least six months, and 9.0% (ranked 47) had been breast fed for at least 12 months. With the exception of children having been breastfed for at least 12 months, Cattaraugus and Allegany Counties had higher statistics for each of the above classifications. The listed rankings are among all New York State Counties. These data indicate that mothers in Chautauqua County are not as well educated regarding the benefits of breastfeeding as mothers in other counties.

Priority Area: Unintentional Injury

Two behaviors that are highly correlated with motor vehicle accidents are driving drunk and driving while drowsy. Given the high rate of total accidents in Chautauqua County, it would be convenient to have these statistics. However, reliable data are difficult to obtain for these behaviors.

For the elderly, unintentional falls can be very dangerous. Fortunately, the rates for unintentional falls in the elderly for both residents aged 65-74 and residents aged 75-84, the rates of falls in Chautauqua County (76.8 and 184.9 per 10,000 residents of that age group, respectively) are lower than the state, region, and comparable counties.

Table 60. Unintentional Falls Among Elderly- 2004-2006 Discharge Rate per 10,000 residents

County	Age 65-74			Age 75-84		
	Total Discharges	2005 Population	Crude Rate	Total Discharges	2005 Population	Crude Rate
Allegany	88	3,525	83.2	195	2,482	261.9
Cattaraugus	148	5,938	83.1	284	4,420	214.2
Chautauqua	229	9,942	76.8	463	8,347	184.9
WNY	2,622	109,593	79.7	6,189	92,928	222
NYS	28,753	1,224,089	78.3	60,155	921,253	217.7

Source: 2004-2006 SPARCS Data as of March, 2008

Priority Area: Chronic Disease

Chronic diseases are a major burden for Chautauqua County residents. To ultimately prevent chronic disease, it is important to eat healthy and to get a sufficient amount of physical activity. Those topics were covered under the Prevention Agenda Physical Activity and Nutrition Priority, so behaviors related to secondary and tertiary prevention will be addressed for this priority area. More specifically, actions taken by community members to detect disease early, through screenings for example, or to reduce the complications of disease by disease management techniques will be the focus of this priority area.

The New York State Department of Health (NYSDOH) Expanded Behavioral Risk Factor Surveillance Survey (BRFSS) provides health behavior responses from a telephone survey at a

localized level. The last Expanded BRFSS conducted in 2003 combined Chautauqua and Cattaraugus Counties for analysis. The Expanded BRFSS provides a great deal of health behavior information that pertains to chronic disease in the County. Specifically, breast, colorectal, and prostate cancer screening information, as well as information regarding frequency of doctor's visits are provided in this document.

Doctor Visits

The 2006-2007 Steps to a Healthier Chautauqua County BRFSS reports that 69.4% of County respondents visited a doctor in the past twelve months. Women (78.9%) were more likely to have visited the doctor than males (59.4%). The proportion of respondents who had seen a doctor increased with age group; respondents aged 65 years and older demonstrated the highest proportion at 83.4%. Among races, other, non-Hispanic respondents demonstrated the highest proportion of persons who had visited the doctor in the past twelve months (73.9%), closely followed by white, non-Hispanics at 70.7%. Black, non-Hispanics (55.8%) and Hispanics (34.9%) experienced a lower percentage of respondents who visited the doctor in the twelve months prior to the BRFSS.

Routine Diabetes Management

In order to properly manage their disease, persons who have been told by a medical professional that they have diabetes should visit their doctor at least twice per year to have their blood pressure, weight, A1C, and feet checked. According to the CDC, diabetics should have a complete foot exam, dilated eye exam, dental exam, a cholesterol check, triglyceride check, flu shot, and urine test at least once per year. Additionally, diabetics should check their own feet and blood glucose daily. The Steps to a Healthier Chautauqua County BRFSS asked County residents who had diabetes about the frequency of having their feet checked, the frequency of having blood glucose and A1C levels checked, the frequency of seeing a doctor regarding their diabetes, and about the last time they had a dilated eye exam.

In the 2006-2007 Steps BRFSS, 7.7% of respondents claimed to be diabetic, 0.8% claimed to be females that were told that they had gestational diabetes during pregnancy, 89.9% did not have diabetes, and 1.6% claimed to be pre-diabetic or borderline-diabetic. Of those who claimed to have diabetes, the majority (35.5%) had their A1C checked 4 times in the year prior to the survey. An additional 23.0% had their A1C checked twice in the past year. Approximately twenty-two percent of diabetics in the County had their feet checked once in the past year by a health professional, while 18.2% had their feet checked twice, 13.8% had their feet checked three times, and 18.0% had their feet checked four times in the past year. Many diabetics had a dilated eye exam in the past month (21.6%), while most had the exam between a month and a year ago (54.0%). Nine percent of diabetics had a dilated eye exam two or more years prior to the survey.

It was most common for diabetics in the County to have seen their provider for diabetes four times in the past year (46.7%), while 8.3% did not see their provider at all in the past year. Most diabetic respondents checked their blood glucose (63.4%) and feet (73.3%) daily, while 13.0% never check their blood glucose and 4.3% never check their feet. Diabetics aged 65 years and

older were more likely than 35-64 year olds to check their feet daily, have had a dilated eye exam within the past year, and had their feet checked more frequently by a health professional. Among races, whites and other, non-Hispanics were more likely than blacks and Hispanics to have their A1C checked more frequently, have seen a health professional for diabetes and had them check their feet more frequently, and to have had a dilated eye exam within the past year. Black diabetics were more likely than whites and other, non-Hispanics to check their glucose and feet daily. These trends seem to insinuate that while black, non-Hispanics have difficulty in accessing doctors for diabetes treatment, they have received education about diabetes disease management from some source. It is also possible that the BRFSS contains biased data due to self-reporting and selection through phone interviews.

Cancer Screenings

Colorectal Cancer

Several tests are available that are indicators or diagnostic tools used to determine the presence of colorectal cancer. The Expanded BRFSS asked respondents about their usage of blood stool tests at home, whether they have ever had or how often they have had a colonoscopy, sigmoidoscopy, or lower endoscopy.

In 2003, 40.6% of New York State respondents aged 50 years and greater had ever used a blood stool test at home. The distribution of use among genders was approximately equal, around 40% for both males and females. Use of a blood stool test was more common among persons aged 65 years and older and among respondents whose race was classified as white. Respondents with more education and higher income levels were more likely to have used a blood stool test. Among Chautauqua and Cattaraugus County residents combined, 44.7% had ever used a blood stool test at home, while 55.3% had not. This proportion was higher than comparable Allegany and Wyoming Counties combined (38.1%).

Fewer respondents had used the blood stool test in the past year, 18.7% in New York State, than had ever used the test. The prevalence was slightly lower in Chautauqua and Cattaraugus Counties combined (18.1%) and in Allegany and Wyoming Counties combined (14.8%). When the time period was altered to the two years prior to the survey, the proportions of respondents who used a blood stool test at home increased slightly; the NYS proportion was 26.9%, Cattaraugus and Chautauqua Counties was 18.3%, and Allegany and Wyoming Counties combined were 22.4%.

In 2003, 52.4% of New York State BRFSS respondents aged 50 and older had ever been screened for colon cancer through a sigmoidoscopy or colonoscopy. The distribution of past sigmoidoscopy or colonoscopy among genders was approximately equal, around 52% for both males and females. Ever having endured a sigmoidoscopy or colonoscopy was more common among persons aged 65 years and older and among respondents whose race was classified as white. Respondents with more education and higher income levels were more likely to have ever experienced a colonoscopy or sigmoidoscopy. The proportion of respondents who had ever experienced one of the tests done was slightly lower among respondents residing in

Chautauqua and Cattaraugus Counties combined (46.3%) and Allegany and Wyoming Counties combined (44.7%).

Proportions of respondents decreased when the time period for having a colonoscopy or sigmoidoscopy was limited to the past ten years. The proportions decreased to 49.6% in New York State, 42.5% in Chautauqua and Cattaraugus Counties combined, and to 41.6% in Allegany and Wyoming Counties combined.

Overall, 55.5% of respondents in New York State aged 50 years and older had ever used a blood stool test or ever had a lower endoscopy (sigmoidoscopy or colonoscopy) in the past ten years. The statistic was slightly lower in Chautauqua and Cattaraugus Counties combined at 49.3% and in Allegany and Wyoming Counties combined at 46.9%.

Breast Cancer

Mammography is the golden standard screening that is used to detect breast cancer. Women aged 40 years or older are recommended to have the test done one time per year. The 2003 NYSDOH Expanded BRFSS asked women in that age group about ever having experienced a mammogram and the frequency of having undergone the test.

In New York State, 90.9% of female respondents aged forty years and older had ever experienced a mammogram. Women in the age group of 50 to 64 years were more likely to have experienced the test. Among races, black women demonstrated the highest percentage of respondents who had ever completed a mammogram. Respondents with more than a high school education and higher income levels were more likely to have had a mammogram. Among respondents from Chautauqua and Cattaraugus Counties combined, 82.5% of women had a mammogram, compared to 89.2% in Allegany and Wyoming Counties combined. The proportion for Chautauqua and Cattaraugus Counties was more than 8% less than the state.

When the time period was restricted to the past two years, the proportions of women who had completed mammograms decreased. In New York State, the proportion dropped to 77.6%, compared to 72.1% in Chautauqua and Cattaraugus Counties and 74.3% in Allegany and Wyoming Counties combined. The most common reason that female respondents received mammograms was for a routine check-up. In Chautauqua and Cattaraugus County, 93.1% of women had a mammogram as a routine check-up, 2.9% had one done due to breast problems, and 4.0% had a mammogram because of having breast cancer.

Prostate Cancer

The 2003 NYSDOH Expanded BRFSS asked male respondents aged 40 years and older about ever having had a prostate specific antigen test, ever having had a digital rectum exam, and ever having been told by a doctor that they had prostate cancer.

Of all New York State respondents, 62.9% had ever had a prostate specific antigen test. Of male respondents, those aged 65 and older, those that were white, had more than a high school education and had a higher income level were more likely to have ever had the specific antigen

test. There was a slightly higher proportion of Chautauqua and Cattaraugus County respondents who responded to the question positively at 65.8%, compared to 64.3% for Allegany and Wyoming County respondents. When the time period was restricted to the past two years, the proportions slightly decreased to 56.0% in New York State as a whole, 57.8% in Chautauqua and Cattaraugus Counties, and 53.3% in Allegany and Wyoming Counties.

Slightly more male respondents aged 40 years or older in the state (78.5) had ever had a digital rectum exam according to the Expanded BRFSS. The demographic trends among respondents were similar for the digital rectum exam as for the prostate specific antigen test. In Chautauqua and Cattaraugus Counties, 78.8% of respondents had ever had a digital rectum exam, compared to 79.1% in Allegany and Wyoming Counties.

Among male respondents aged 40 years and older in New York State, 3.2% had ever been told by a medical professional that they had prostate cancer. The proportions were highest for men aged 65 years old or greater, who were white, who had less than a high school education, and who had a household income between ten and twenty-five thousand dollars. There was a higher proportion of male respondents within Chautauqua and Cattaraugus Counties who had ever been told they had prostate cancer (5.8%) than in the state and in Allegany and Wyoming Counties (2.9%).

Cervical Cancer

Pap smears are used for the early detection of cervical cancer. New York State BRFSS data indicate that from 1996 to 2008, the proportions of women aged 18 years and older who have had a pap smear in the past three years have remained about the same. The highest proportion during that time period was 87.0% in 1997 and the lowest was 82.0% in 1996. The most recent figure indicates that 83.3 percent of women surveyed in New York State had a pap smear some time during the three years prior to the BRFSS.

http://www.health.state.ny.us/statistics/chac/general/pap_smear.htm

Priority Area: Tobacco Use

Tobacco use is the leading preventable cause of death and disease in the United States. Each year, in New York State and throughout the country, thousands of people die from smoking-related diseases and thousands more suffer from exposure to secondhand smoke.

Estimates from 2007 indicate that 18.9% of New York State adult residents 18+ years old and 19.8% of U.S. residents of the same demographic smoke. Among Chautauqua County residents aged 18 years or greater in 2007, 22.9% were current smokers, 26.0% were former smokers and 51.1% were never smokers. Data from the 2004-2005 Steps to a Healthier Chautauqua County BRFSS suggest that the proportion of the population that currently smoke has decreased over the past two years from 28.8%. The proportion of people who smoke in the County is greater than that for the state (18.9%). Of current and former smokers, 38.2% smoke every day and 8.6% smoke only some days. More than half (54.7%) of current smokers have attempted to quit smoking for at least one day.

While New York State statistics indicate that more males than females are smokers, the percentages of county residents who smoke is about even for males (23.1%) and females (22.7%). Approximately 55% of both males and females attempted to quit for at least one day.

Table 61. Tobacco Use for Chautauqua County Residents Ages 18+ 2006-2007

2006-2007 RESPONDENTS		106192	100.00%
TOTAL		106151	100.00%
Smoking status	Current	24308	22.90%
	Former	27637	26.00%
	Never	54206	51.10%
Smoking status	Current smoker	24308	22.90%
	Not current smoker	81843	77.10%
TOTAL		106151	100.00%
Smoked 100 cigarettes	Yes	51945	48.90%
	No	54206	51.00%
	Don't know or not sure	41	0.00%
TOTAL		106192	100.00%
Smoke every day, some, or none	Everyday	19833	38.20%
	Some days	4475	8.60%
	Not at all	27637	53.20%
TOTAL		51945	100.00%
Stopped smoking for at least 1 day	Yes	13294	54.70%
	No	10981	45.20%
	Don't know or not sure	34	0.10%
TOTAL		24308	100.00%

Source: Steps to a Healthier Chautauqua County BRFSS 2006-2007

Residents aged 18 to 34 years were more likely to smoke (29.7%) and more likely to do so everyday (58.8%) than other age groups surveyed. That age group also had the lowest percentage of residents who had attempted to quit for at least one day (35.7%). The prevalence of current smokers is drastically lower for residents aged 65 or older (9.7%), many of whom are former smokers (41.5%).

Smokers in the County are most likely to be white, non-Hispanics (94.0% of all smokers). While black, non-Hispanics make up only 1.5% of the current smoking population, smoking is exceedingly prevalent among the racial group at 63.4%. Black non-Hispanics are also much more likely to smoke every day (57.6%). The racial group classified as 'other, non-Hispanic' demonstrates the lowest proportion of smokers (14.4%) and the highest proportion of former smokers (51.9%) than all other racial groups in the County.

There is a distinct correlation between smoking status and highest level of education. Among residents with less than a high school education, 39.6% are current smokers, compared to 26.1% for those with a high school education and 16.9% of those with more than a high school education. Respondents with less than a high school education were also more likely to smoke

every day. No trend was observed between education level and proportion of smokers who stopped smoking for at least one day.

Separated individuals (51.4%) and members of unmarried couples (45.5%) were more likely to be current smokers than any residents of any other relationship status. People with children were more likely to smoke than those with no children (19.6%). Parents with three (33.9%) or four (34.2%) or more children were more likely to be smokers than parents with one or two children.

Pregnant mothers who smoke pose real threats to the child(ren) they are carrying. Despite recommendations by doctors and stigmatization, 10.7% of pregnant women continue to smoke in the United States. The New York rate of 8.1% ranks as the 9th lowest among all 50 states.

Smoking in the home

Tobacco use is a major issue among adolescents in the United States (20%), New York State (13.8%), and in Chautauqua County. The Campaign for Tobacco Free Kids reports that there are 23,900 new youth smokers per year in New York State. The 2005 Chautauqua County Youth Survey reported that 12.5% of respondents aged 12-18 and older (high school) have ever smoked daily and 16.2% have smoked at least once in the last 30 days. Of all youth surveyed, 46.2% have smoked at least once. The majority of students who smoked in the last 30 days (6.6% overall) smoked 2 to 5 cigarettes per day. Of students who smoked in the twelve months before the survey was taken, 54.1% tried to quit smoking during that time period.

Table 62. Chautauqua County Youth Tobacco Use Survey 2005

		Age										Total	
		12-14 years old		15 years old		16 years old		17 years old		18 years old +		N	Col %
		N	Col %	N	Col %	N	Col %	N	Col %	N	Col %		
Ever smoked	Yes	42	37.5%	88	33.5%	128	50.4%	124	50.8%	88	61.1%	470	46.2%
	No	70	62.5%	175	66.5%	126	49.6%	120	49.2%	56	38.9%	547	53.8%
TOTAL		112	100.0%	263	100.0%	254	100.0%	244	100.0%	144	100.0%	1017	100.0%
How many days smoked 30 days	0	98	86.7%	231	88.8%	208	84.6%	202	84.5%	101	70.1%	840	83.8%
	1 to 9	7	6.2%	14	5.4%	17	6.9%	15	6.3%	13	9.1%	66	6.6%
	10 to 19	2	1.8%	2	0.8%	7	2.8%	4	1.7%	1	0.7%	16	1.6%
	20 to 29	2	1.8%	3	1.2%	1	0.4%	7	2.9%	4	2.8%	17	1.7%
	30	4	3.5%	10	3.8%	13	5.3%	11	4.6%	25	17.4%	63	6.3%
TOTAL		113	100.0%	260	100.0%	246	100.0%	239	100.0%	144	100.0%	1002	100.0%
How many cigarettes per day 30 days	0	98	88.3%	229	88.8%	209	84.6%	203	84.6%	101	70.1%	840	84.0%
	< 1	2	1.8%	5	1.9%	4	1.6%	4	1.7%	3	2.1%	18	1.8%
	1	1	0.9%	5	1.9%	7	2.8%	6	2.5%	6	4.2%	25	2.5%
	2 to 5	5	4.5%	11	4.3%	16	6.5%	17	7.1%	17	11.8%	66	6.6%
	6 to 10	3	2.7%	4	1.6%	7	2.8%	9	3.8%	3	2.1%	26	2.6%
	11 to 20			2	0.8%	3	1.2%	1	0.4%	7	4.9%	13	1.3%
>20	2	1.8%	2	0.8%	1	0.4%			7	4.9%	12	1.2%	
TOTAL		111	100.0%	258	100.0%	247	100.0%	240	100.0%	144	100.0%	1000	100.0%

Source: Steps to a Healthier Chautauqua County BRFS 2005

Priority Area: Healthy Environment

The Prevention Agenda Priority Area 'Healthy Environment' does not lend itself well to behavioral risk factor interpretation. Environmental exposures can be difficult to measure and control. Poor ambient air quality is linked to several respiratory and systemic conditions. For example, high levels of ozone have been correlated with asthma complications. The New York State designation recommendations for the ozone National Air Quality Standard required New York State counties to maintain an ambient ozone level at or below 0.075 parts per million (PPM). Monitors in Dunkirk, NY indicated that the design value of ozone in the County from 2006-2008 was 0.084 PPM. This non-attainment value was lower only than that of the New York City metropolitan area which maintained an ozone value of 0.089 PPM. However, living in an area with poor air quality is not considered a behavioral risk factor. It is also not possible to accurately measure the actual exposure of County residents to air toxics.

The most controllable environmental exposure is environmental tobacco smoke (ETS). The NYSDOH Expanded BRFSS for Chautauqua and Cattaraugus Counties provides estimates for smoking policies within the homes of County residents. In 2003, 58.7% of respondents lived in a home where smoking was not allowed, 15.1% lived where smoking was allowed in some places, and 26.2% lived where smoking was allowed everywhere. These estimates are comparable to those in Allegany and Wyoming Counties. Of New York State respondents, 68.4% of respondents lived in a home where smoking was not allowed anywhere.

Another environmental behavioral risk factor which can endanger individuals is the improper handling of potentially rabid animals. Despite information published regarding the risk of rabies exposure, County residents continue to approach, touch and adopt wild animals, as well as stray cats and dogs. As indicated in CCHD records, 168 animal specimens were sent to the New York State laboratory to be tested for rabies in 2007. Eleven animals tested positive for the virus including 7 raccoons, 2 bats, and 2 foxes. In the case where specimens were determined positive or where vectors could not be recovered for testing (following a bite, for example), exposed persons undergo post-exposure prophylaxis. In 2008, thirty-six County residents were given post-exposure prophylaxis. These statistics demonstrate the need for enhanced educational activities regarding the dangers of improper handling of rabies vectors.

The risk of childhood lead poisoning greatly increases when children live in houses containing lead paint. While lead paint was banned in 1978, it was rarely used in houses built after 1950. Therefore, houses built prior to 1950 are generally considered suspect in cases of childhood lead poisoning. Housing structures in the County are relatively old with 45.9% built in 1939 or earlier, compared to 34.8% in New York State. In Chautauqua County, 53.0% of homes were built prior to 1950, compared to 44.1% in New York State. As a result, many children in the County are considered at risk for lead poisoning.

Fluoride delivered through the water supply protects teeth of all customers, during the tooth forming years and throughout life, directly interacting with teeth. Although other fluoride-containing products are available, water fluoridation remains the most equitable and cost-

effective method of delivering fluoride to all members of most communities, regardless of age, educational attainment, or income level. Three water providers in the County offer fluoridation to their clients: the Jamestown Board of Public Utilities, the Village of Westfield Water Department, and the Erie County Water Authority. The Jamestown BPU service area covers the City of Jamestown, the Villages of Lakewood, Falconer, Celoron and portions of the Towns of Ellicott and Kiantone (~48,000 customers). The Village of Westfield Water Department serves the Village of Westfield (~4,000 residents). The Erie County Water Authority sells drinking water to the Village of Silver Creek and portions of the Town of Hanover (~3,000 residents). Overall, approximately 55,000 of the County's 2009 population of 133,503 people (41.2%) receive fluoridated drinking water. The remaining County residents obtain their drinking water from unfluoridated small municipal water systems or private wells.

Priority Area: Mental Health & Substance Abuse

The burden of poor mental health is less in Chautauqua County than in the rest of the state. Of BRFSS survey takers, 9.5% of people in the County reported 14 or more days of poor mental health in the past month, compared to 10.4% at the state level. Drug-related hospitalization rates were much lower in Chautauqua County than in the state.

Age and sex adjusted suicide rates are slightly higher in Chautauqua County (7.6 per 100,000 residents) than those of New York State (6.4) but much lower than neighboring Allegany (13.9) and Cattaraugus (11.3) Counties.

The New York State Department of Health Youth Risk Behavior Survey states that 28.2% of high school students in New York State excluding New York City participated in binge drinking in the month before the survey was taken. This statistic was higher than that for New York City, which was only 14.8%, and New York State as a whole (24.9%).

Among adults 18 years and older, 15.2% of New York State residents participated in binge drinking at least once during the month before the state BRFSS. The 2003 BRFSS conducted by the state indicated that Chautauqua County experienced slightly more binge drinking at a rate of 17.2% of residents in the month prior to the survey.

Priority Area: Infectious Disease

Sexually Transmitted Diseases

The NYSDOH Expanded BRFSS provides data about preventive sexual behaviors for various geographic areas. Adult respondents aged 18 to 64 were asked about being counseled by health professionals about the prevention of STD transmission through condom use, whether or not they were sexually active, if they were active with multiple partners, whether a condom was used during their last sexual encounter, and whether birth control was used.

Of all New York State respondents aged 18 to 64, only 20% were ever counseled by a medical professional on the prevention of STDs through condom use. Females and respondents aged 18

to 24 were more likely to have been educated. Among races, Hispanics and blacks were more likely to have been educated about condom use in New York State. Respondents with less than a high school education and lower income were also more likely to have been counseled. These statistics may suggest that high school students in the state and those who have graduated from high school recently are the most likely to have received counseling about condom use. County-specific demographics may vary from the state. In Chautauqua and Cattaraugus County (12.2%) had even fewer respondents than the state who were counseled in condom use. The proportion in Allegany and Wyoming Counties was slightly greater at 14.7%.

The discrepancy in condom use education between southwestern New York counties and the rest of the state may be due to high school sexual education policies. Many schools in these rural counties employ abstinence-only education, which may result in lack of instruction in condom use. It is likely that inner city schools, which tend to include a greater proportion of racial minorities than schools in rural areas, are more apt to educate students about the relevance of condom use. This may be the reason there are greater proportions of racial minorities who have been educated about condom use in the state than the white majority.

When asked about whether they were currently sexually active or not, 82% of New York State residents responded positively. Sexually active respondents were more likely to be males, between the ages of 25 and 34, white, to have less than a high school education, and a higher household income. A slightly lower proportion of Chautauqua and Cattaraugus County respondents were sexually active at 80.3%, compared to 81.8% of Allegany and Wyoming County respondents.

Among all New York State Expanded BRFSS respondents, 10.1% claimed to have multiple sexual partners. These respondents were most likely to be male, aged 18 to 24 years, black, having less than a high school education, and a household income of less than \$10,000. The proportion of respondents with multiple sexual partners was lower in Chautauqua and Cattaraugus Counties (6.3%) and Allegany and Wyoming Counties (5.6%) than the state.

Of all New York State respondents aged 18 to 64 years who were sexually active, 28.9% claimed to have used a condom the last time they had sexual intercourse. Those who used condoms were more likely to be male, aged 18 to 24 years, black, have less than a high school education, and have a household income of \$10,000 to \$25,000. Condom use was lower in Cattaraugus and Chautauqua Counties at 16.5% and in Allegany and Wyoming Counties at 14.9% when compared to the state.

Sexually active BRFSS respondents were also asked about use of birth control used to prevent pregnancy among reproductive aged men (18-59) and women (18-44). Among all New York State respondents, 61.4% claimed to use birth control, 15.1% claimed to be at risk for pregnancy but do not use birth control, and 23.4% did not use birth control but were not at risk of becoming pregnant. Females were more likely to use birth control and all age groups 18-54 years demonstrated birth control use by more than 50% of respondents. Additionally, respondents in all racial groups had more than 50% using birth control. Not many differences

were seen across education levels and respondents with higher incomes used birth control more than those with lower incomes. Slightly more respondents from Chautauqua and Cattaraugus Counties (63.0%) and Allegany and Wyoming Counties (65.6%) used birth control than the state. A lower proportion of Chautauqua and Cattaraugus County respondents who were at risk of becoming pregnant did not use birth control (11.2%) than the state.

Several studies available on the CDC's website indicate that condom use education is an effective intervention in reducing the burden of HIV and sexually transmitted diseases. Data from the Expanded BRFSS provide evidence that Chautauqua County has a disproportionate number of residents who have not been educated in the effectiveness of condoms in preventing sexually transmitted diseases. Therefore, it is apparent that condom use education efforts need to be enhanced in the County.

Immunizations

The NYSDOH County Health Assessment Indicator data reports that in Chautauqua County during 2003, 71.8% of adults aged 65 and older received a flu shot over the past year. The County's proportion is greater than those of the state (64.7% in 2006) and the nation (69.6% in 2006), indicating that Chautauqua County residents realize the importance of flu shots for the elderly populations. Additionally, 71.6% of County residents aged 65 years or older had ever had a pneumonia immunization, which again exceeds those of the state (61.0% in 2006) and the nation (66.9% in 2006).

The 2008-2009 New York State School Immunization Survey provides percentages of students in County schools that have received several immunizations, including: diphtheria, polio, measles, rubella, mumps, Hepatitis B, and varicella. Of all students in grades pre-kindergarten to 12 in the County, 97% were immunized for diphtheria, 96% for polio, 94% for measles, 95% for rubella, 95% for mumps, 96% for Hepatitis B, and 94% for varicella (includes grades pre-k through 9). Overall, 93% of students were completely immunized. Percentages of students who were immunized in the County were very similar to percentages in Cattaraugus (94%) and Allegany (94%) Counties, New York State as a whole (93%), and New York State excluding New York City (93%). When pre-k students were excluded from the survey, changes were only very slight.

Overall, the data that we have for immunizations suggests that Chautauqua County residents are aware of the benefits of immunization.

Dental Health

The NYSDOH 2008-2009 Expanded Behavioral Risk Factor Surveillance System (eBRFSS) provides *self-reported* age-adjusted behavior statistics regarding dental health for Chautauqua County residents. Compared to New York State, Chautauqua County residents are less likely to have had a dentist visit within the past year. Overall, 68.1% of adults (18 years and older) in Chautauqua County had seen a dentist, compared to 71.1% for NYS. While the study shows that males in Chautauqua County were more likely to have seen a dentist in the past year than

females (70.1% compared to 66.2%), the opposite effect was seen in NYS as a whole (68.3% compared to 73.6%). Residents with higher educational attainment and incomes were more likely to have seen a dentist in the past year. The statistical gender difference clash anecdotal evidence. These differences may be a result of self-reporting bias.

Similar trends were observed when survey takers were asked if they had their teeth professionally cleaned within the past year. Overall, 70.5% (adjusted for age) of adults (18 years and older) in Chautauqua County had a cleaning, compared to 71.7% for NYS. While the study shows that males in Chautauqua County were more likely to respond positively than females (71.0% compared to 69.2%), the opposite effect was seen in NYS as a whole (69.9% compared to 73.9%). For both NYS and Chautauqua County, residents with higher educational attainment and higher incomes were more likely to have had a teeth cleaning within the past year.

When 2008-2009 eBRFSS statistics were adjusted for age, a greater proportion of Chautauqua County adults (54.5%) had permanent teeth extracted due to decay or gum disease than adults in New York State (49.4%). Proportions of males and females who had ever had an extraction were comparable. While the eBRFSS data does not provide a great deal of racial and ethnic data for Chautauqua County, statistics for NYS indicate that extraction prevalence was more common among Black Non-Hispanics (57.7%) and Hispanics (53.8%) than White Non-Hispanics (46.5%). The percentage of residents who had ever had a tooth extraction was inversely proportional to income and education.

Among adults aged 65 years and older, 27.2% of Chautauqua County residents had all permanent teeth extracted due to decay or gum disease, compared to 19.4% in New York State. For both entities, the statistic was greater for females than males. In Chautauqua County, 35.4% of females and 18.8% of males aged 65 and older had all teeth extracted. In NYS, 22.1% of females and 16.5% of males had all permanent teeth extracted. For NYS, complete tooth extraction prevalence was indirectly proportional to educational attainment and income level.

While specific data regarding the dental health of children is limited for Chautauqua County, statistics provided by the NYSDOH *Oral Health Status of Third Grade Children* report provides state-specific data focusing on dental caries, sealants, untreated tooth decay, visits to the dentist, use of fluoride tablets, and dental insurance. In New York State from 2002-2004, about 54.1% of third-grade children had treated caries, compared to 33.1% who had untreated caries. Consistently, both treated caries (59.6% vs. 48%) and untreated caries (40.8% vs. 23.1%) were more common among low-income students. Approximately 27.0% of all students examined had at least one dental sealant on a permanent molar. Fewer low-income children had dental sealants than high-income children (17.8% vs. 41.1%). Approximately 80.1% of participants reported having dental insurance coverage, which was about even among low- and high-income students. However, a lower proportion of low-income children had visited a dentist in the past year than high-income children (60.9% vs. 86.9%). About 30.5% of high-income children and 17.7% of low-income children reported regular use of fluoride tablets.

C. The Local Health Care Environment

The data above demonstrate the poor fiscal state of Chautauqua County. While income and educational levels remain relatively low and unemployment rates are growing, the population is becoming more obese and cancer and diabetes incidence and mortality rates are rising. The economic situation of the County has a direct impact on the public's attitude and concerns about health care. Manufacturing jobs that make up a large percentage of the employment in the County have an uncertain future. In today's economy, small businesses, which employ the vast majority of employees in Chautauqua County, struggle to offer affordable and comprehensive insurance benefits, with an increasing number of employees either dropping coverage due to premium cost or facing high co-pays and deductibles. As a result, even among the employed residents of Chautauqua County, there are likely many who struggle to pay their out-of-pocket health care costs.

Despite the financial hardships Chautauqua County residents face in paying for health care, the attitude of County residents toward improving health behaviors has become more favorable over the past several years. While obesity and disease rates remain high, substantial headway has been made in improving the mind-set of many residents. CHA focus group and BRFSS data provide evidence that more individuals are beginning to acknowledge their role in preventing chronic disease such as diabetes, cancer and heart disease through better wellness.

Between September 2003 and September 2008, funded by a five-year cooperative agreement with the Centers for Disease Control and Prevention (CDC), the Steps to a Healthier NY program was initiated in Chautauqua County. Dubbed "Steps to a Healthier Chautauqua County," the program was charged with building healthier communities through policy, systems and environmental changes. Staff worked with schools, healthcare providers, worksites, and community leaders to encourage physical activity, healthy eating, and tobacco-free choices in order to reduce the burden of diabetes, obesity and asthma. The Chautauqua County Health Department, with the assistance of its subcontractors, routinely engaged community partners including the YMCA, Cornell Cooperative Extension, local hospital systems, BOCES, several school districts and the Office for Aging to work collaboratively to improve health habits in local communities. Although the Steps grant has ended, several interventions have left a lasting change on the community. A few Steps milestones include the introduction of smoke free play spaces, healthy vending options, walking paths, bicycle racks, and comprehensive plans for walkable communities.

Institutional Level

At the institutional level, Steps made several long-standing health related changes in schools, at work sites, in health care facilities, and in private organizations. Steps influenced nineteen school buildings in the County to incorporate inclusive wellness programs, thereby affecting 24,000 total staff and students. Over 150 school sports coaches have been trained on asthma management and Pine Valley Central School now offers daily physical education classes for elementary students.

Work Sites

Work sites have recently been designated as important locations for wellness interventions. A major component of the Steps program focused on the development of wellness programs at work sites. As a result of their initiative, twenty-three work sites collaborated with Steps to administer employee wellness programs and initiatives. Consequently, almost 6,000 Chautauqua County employees have been reached by work site wellness interventions.

Private Organizations

Steps to a Healthier Chautauqua County also reached out to private organizations to help with their healthy community initiatives. The Jamestown Area YMCA donated 260 two-month memberships to Mission Meltaway (Steps weight loss program) participants, resulting in an in-kind donation of over \$37,000.

Health Care Providers

Within the health care provider setting, Steps has made several impacts. Specifically, fifty-three pharmacists in the County attended a half-day continuing education seminar on asthma management. Pharmacists were surveyed fourteen months later, and reported that the asthma training program improved their levels of comfort with customer education for asthma management. In addition, 60% reported telling customers about the importance of asthma action plans and 60% referred patients to the local Asthma Management Helpline. Over 550 health professionals have been trained to use the 2-Minute Tobacco Intervention. As a result, referrals to the New York State Smokers' Quitline from health care providers have quadrupled from 2005 to 2006. From a patient standpoint, the percentage of diabetic adults who have had a healthcare provider check their feet in the past year increased from 70% in year one to 88% in year three of the program.

Physical Environment

In regard to the physical environment, the Steps program led the way to promote changes in the built environment that would encourage healthier lifestyles. For example, the Steps program provided support and guidance to the Friends of Roseland Park in Jamestown which received a \$5,000 grant to refurbish the park and playground and add a walking track. Overall, \$42,000 was awarded to communities across the County to complete permanent environmental changes, which makes it safer and easier for residents to be physically active.

Geography

Chautauqua County is geographically and somewhat socially and economically, divided into two regions. The "North County" region includes the City of Dunkirk while the "South County" region encompasses the City of Jamestown. Each region features separate hospitals, health care providers and health care centers, Jamestown Community College campuses, branches of The Resource Center, and various other entities. In several ways, the divisions between these two areas prevent access to services, effective use of financial resources, and are a barrier to progress.

Chautauqua County lacks a sufficient public transportation system. Residents who do not have personal vehicles or cannot drive face several transportation issues. Chautauqua County also receives an average of 211 inches of snow per year. The ever-changing weather conditions dictated by Lake Erie make for very treacherous winter travel. These factors contribute to a major access to care issue. An innovative solution is required to produce transportation that is cost effective yet can efficiently cover the large geographic area of Chautauqua County.

Media Messages

Media messages can be very effective tools to educate the public about services and healthy living. The Steps to a Healthier Chautauqua County BRFSS from 2007 reported that 22.8% of adults use television messages to help make nutrition decisions, while 22.1% use them to help make physical activity decisions. For both categories, females were more likely to respond positively.

The Chautauqua County Health Department understands the importance of the media in translating health messages to County residents. Consequently, the Department has created a Media Specialist position that is responsible for all paid media. By the end of 2009, the CCHD will have commercials promoting their Family Planning, Lead Primary Prevention, and Cancer Services programs. All advertisements are developed to be culturally appropriate and relevant; they incorporate ethnically sensitive messaging while implementing social marketing strategies to promote services and healthy lifestyle choices. For all of the grants the CCHD receives, an amount of money is specifically budgeted for media messages. Additionally, the department participates in interviews and public service announcements featured in the newspaper or on the radio or television to explain opportunities for the public and important messages about health conditions.

Laws and Regulations

The Steps to a Healthier Chautauqua County program has also been active in encouraging work sites to enact smoking policies. Three hospitals and one medical practice in the County have implemented policies requiring all physicians and nurses to advise all smoking patients to quit and refer them to the NYS Smokers' Quitline. In addition, the Clean Indoor Air Act made smoking illegal in all work places including restaurants and bars in 2003. Additionally, it influenced community stakeholders to decrease tobacco advertisement at community events and retail stores; for example, Wegman's no longer sells tobacco products. This law has undoubtedly reduced environmental tobacco smoke (ETS) exposure for County residents, particularly those who work in the restaurant industry. In general, the County attitude toward the new law is favorable. Additionally, Chautauqua County law enforcement is strict regarding the seatbelt law, the Child Safety Seat Program, and bicycle helmet laws.

The Health Department diligently enforces Public Health Law and the State Sanitary code to ensure the health and safety of County residents.

Personal Level

At the personal level, the Steps program helped many people to take their health into their own hands. Through the Mission Meltaway weight management program, 1,004 residents lost 2,679 pounds. The Steps program also helped to influence a reduction in the proportion of residents who smoke cigarettes. The percentage of adults who currently smoke cigarettes significantly decreased from 29% in year one, to 24% in year two, and continued to decrease to 23% in year three of the Steps program. Given that obesity and smoking are risk factors for many diseases, these are incredibly important health behaviors to influence in order to reduce the burden of chronic disease in Chautauqua County.

Established Regulatory Environmental Programs

The CCHD also participates in several environmental programs that assist in promoting health among County residents. Mandated by the NYSDOH, the department helps to enforce the Clean Indoor Air Act (CIAA), which in 2003 made smoking illegal at all worksites, including restaurants and bars. The CCHD's Environmental Health division does several inspections at local establishments to ensure that this law is being upheld. Where establishments are found to be in violation of the law's stipulations, the owner or operator is notified. Formal enforcement is issued against the facility owner or operator by confirmed delivery of Notice of Violation within seven days of the violation. By illegalizing smoking in public places, the CCHD in conjunction with state law is reducing public exposure to a known health hazard. The Environmental Health division is also responsible for performing compliance checks mandated by the Adolescent Tobacco Use Prevention Act (ATUPA). In order to assess compliance of tobacco vendors in the County, the Environmental Health unit takes underage youth (ages 15, 16, or 17) without legal IDs to tobacco vendors where they attempt to purchase cigarettes. If vendors agree to sell tobacco to the youths, the violations are reported to the state. The Department is also responsible for verifying that all tobacco dealers and vendors are registered with the NYS Department of Taxation and Finance (DTF) to sell tobacco, post required signage, display tobacco and herbal cigarettes behind the counter or in a locked container, and verify that vending machine locations are acceptable and supervised.

Distribution of the Community Health Assessment

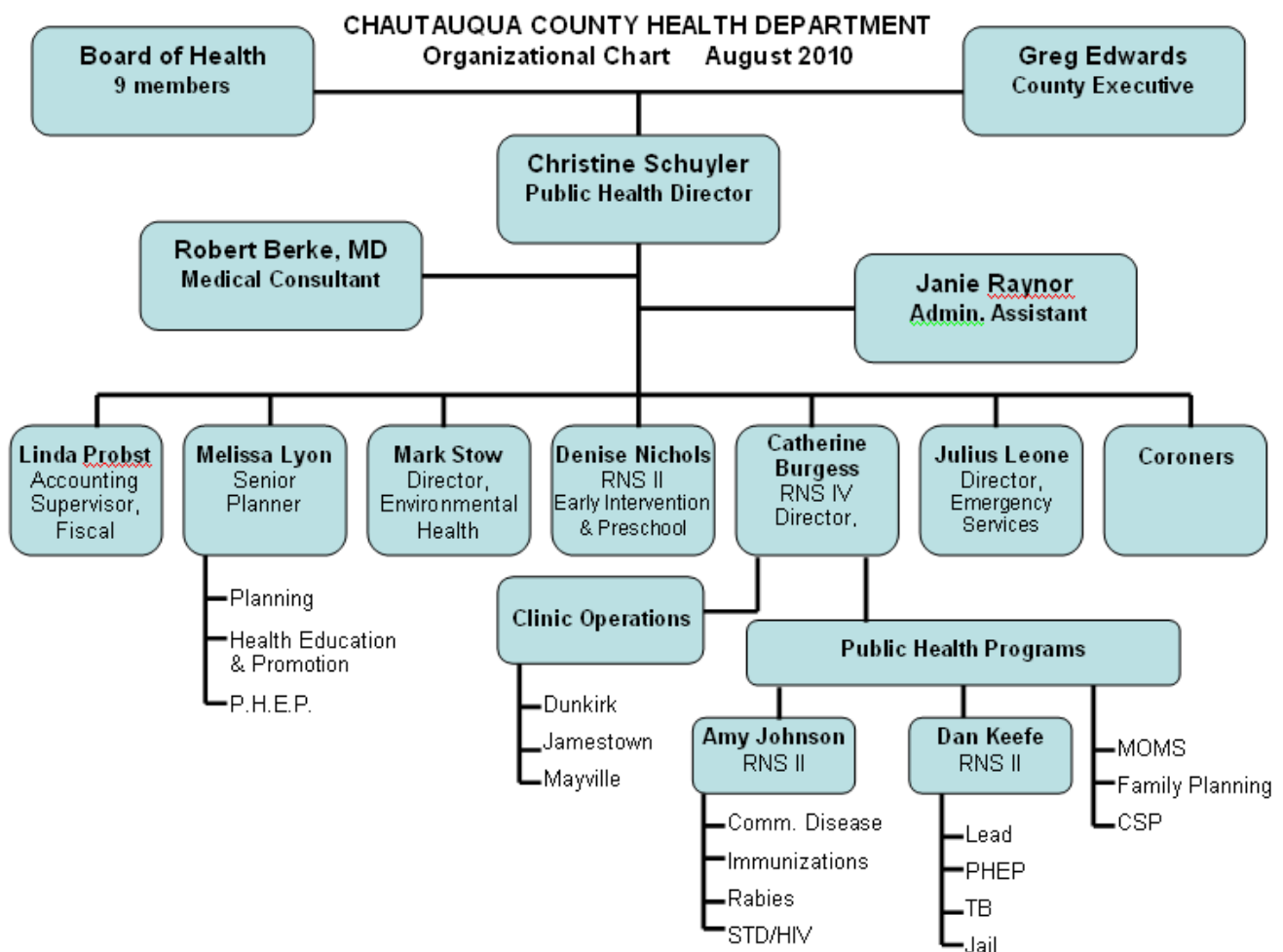
The completed community health assessment will be available for access by community members. The document will be posted on the Health Department website and, if affordable, on the SUNY Fredonia Steps to a Healthier Chautauqua County website. County employees will be notified of this posting through a mass agency fax. Additionally, a press release will be published to inform the public of their right and ability to access the data in the CHA.

Section 2

Local Health Unit Capacity Profile

The Chautauqua County Health Department is a community of public health professionals whose main purpose is to protect and promote the health of families in the County. The Health Department accomplishes this mission by preventing disease, prolonging meaningful life, protecting the environment, and providing leadership during health crises. Services include Communicable Disease Control Programs, Family Health Services, Health Education and Promotion, and Environmental Health Services. Services are offered to the community through three main service sites: Mayville, Jamestown, and Dunkirk.

Figure 1. Administrative Organization of the Chautauqua County Health Department



Supervisory Staffing

As reflected in the above organizational chart, the Chautauqua County Health Department is headed by the Public Health Director, a position appointed by the County Executive and which serves under the general direction of the Board of Health. Responsibilities include initiation, planning and directing public health programs in the County, in addition to oversight of Environmental Health, Fiscal, Nursing Services, Laboratory Services, and Early Intervention and Educationally Related Services. The director maintains liaison and represents the agency when meeting with other local agencies, state departments and the federal government. The Medical Consultant is a practicing physician who provides medical-related advice to the Public Health Director as needed.

The Secretary to County Officer performs complex clerical operations and relieves Public Health Director of administrative details by arranging conferences and referring contacts which should properly be made with subordinate officials. Good judgment is used to give out information regarding department policies and practices. The secretary is in charge of correspondence and works independently until new problems arise.

The Director of Environmental Health Services is responsible for overseeing technical work involving the application of engineering principles and the physical and biological sciences, and for implementing applicable federal, state, and county environmental and public health laws, rules, codes, and policies. The work is performed under the general supervision of the Public Health Director with leeway allowed for the exercise of independent judgment.

The Laboratory Supervisor is responsible for technical laboratory work involving the supervision of laboratory activities and performing testing and analytic services in a microbiological laboratory. The work is performed under the general direction of the Director of Environmental Health. Supervision may be exercised over the work of technicians and aides.

The position of Water Resource Specialist involves specialized scientific and technical work and responsibility for the development of both information and programs to understand and protect the water resources of the County in the Department of Public Health. When assigned to the Solid Waste Division of the Department of Public Facilities the work involves providing expertise and assignments involving ground water monitoring, remediation, regulatory compliance, and landfill gas management. Incumbents work under general supervision with wide leeway allowed for the exercise of independent judgment. Supervision may be exercised over a small group of technical and clerical employees.

The Principal Account Clerk performs important account-keeping work involving responsibility for the frequent exercise of independent judgment in planning and managing complex account-keeping, checking and clerical activities and independently performing the more responsible and complex functions. The work is performed under general supervision in accordance with outlined objectives, policies and detailed procedures. Difficult technical or policy problems are referred to a supervisor for a decision, or review of judgment if recommendations are made. Regular contacts with persons in other departments and occasional contacts with persons

outside of the organization are required to obtain or furnish important information. Supervision is exercised over a small number of account-keeping and clerical assistants.

The two directors of nursing plan, organize, direct, coordinate and evaluate the Health Department's community health programs. Activities are performed under the general direction of the Public Health Director and involve responsibility for policy formulation, employee hiring and discipline, and budget control. These professional administrative nursing positions involve responsibility for the administrative and programmatic operation of services which include those in the Municipal Plan categories of Family Health and Disease Control. An incumbent in this position also takes part in departmental administrative planning as it pertains to these program areas, particularly the allocation of staff and fiscal resources.

Supervisory Nurses for the various District Offices and the Early Intervention Program have responsibility for the provision of nursing services and supervision of nursing practice to assure safe, effective and efficient comprehensive nursing care in homes, clinics, schools and other community facilities. The nurses supervise the work of assigned public health professional or auxiliary nursing staff in a public health nursing program in an assigned functional or geographic area.

The Senior Planner is responsible for planning, initiating and coordinating community-wide strategic health programs. Work involves performing higher level research and analyses connected with health services planning and coordination of community-wide health-related coalitions. Work is performed under the general direction of the Public Health Director with wide latitude for the exercise of independent judgment. Supervision is exercised over subordinate staff assigned to health education projects and activities.

The Director of Bioterrorism and Emergency Services performs administrative tasks involving planning programs and daily direction of all emergency management and fire coordinator related activities for the County. The Director is responsible for the planning and supervision of the Chautauqua County Emergency Management programs and functions including fire training and mutual aid to cope with fires, emergency medical services and other public emergencies requiring the services of firefighters and other emergency services personnel. The director has complete charge of the County emergency management program including direction of natural disaster and emergency operations and is responsible for the mitigation, response and recovery from all natural and man made disasters or major emergencies. The Director is appointed by and serves at the pleasure of the County Executive. The Director receives administrative directives from the County Legislature, County Fire Advisory Board, Office of Fire Prevention and Control and State Emergency Management Office.

Working under the supervision of the above mentioned staff are several sanitarians, technicians, nurses, clerical staff, and seasonal employees.

Skill Level

Of supervisory positions in the Health Department, all positions with the exception of the Secretary of County Officer require the attainment of a Bachelors degree. The Public Health Director is required to have a Masters degree and the Medical Consultant must have a medical degree (MD or DO). All positions require prior experience. Several supervisors who are not specifically required to obtain a Masters degree have already acquired this level of education.

Functions and Programs of the Health Department

Disease control is one of the main functions of a public health department. Through implementation of preventive health measures and responding promptly to incidence and disease outbreaks, community health can be maintained. The Health Department provides clinics, disease surveillance, education, and consultation pertaining to communicable and chronic diseases. Program areas include sexually transmitted diseases and HIV, tuberculosis, communicable diseases, immunization, chronic diseases (such as cardiovascular disease, asthma and diabetes).

Services are available to the public in the forms of Department-sponsored clinics, school-based clinics, travel clinics and other specialty clinics at three rural sites. Clinics are offered for tuberculosis, immunization, and HIV and STD testing. Services are available at low-cost or no cost to members of the public. In general, the CCHD accepts all patients regardless of their ability to pay but accepts Medicaid, Medicaid Managed Care, and private insurance plans as well. A separate sliding fee schedule exists for general clinic services, which is available in the Chautauqua County Municipal Public Health Services Plan. The CCHD clinics operate from 9:00AM to 5:00PM daily with select evening hours monthly to provide services to those who are unable to access the clinics during normal business hours. The need for additional evening and weekend hours are recognized by management and funding has been applied for to enable the LHD to staff additional hours.

Family Health Programs include evaluations, clinical and therapeutic services, education, case management and consultation to individuals and groups at home, at work, at school, and in public health centers. Program areas include child health, early intervention, lead poisoning prevention, maternal and prenatal care, family planning, nutrition, injury prevention and control. Clinics are offered for family planning services, including pregnancy testing, prenatal support services and breast, cervical and colorectal cancer screening.

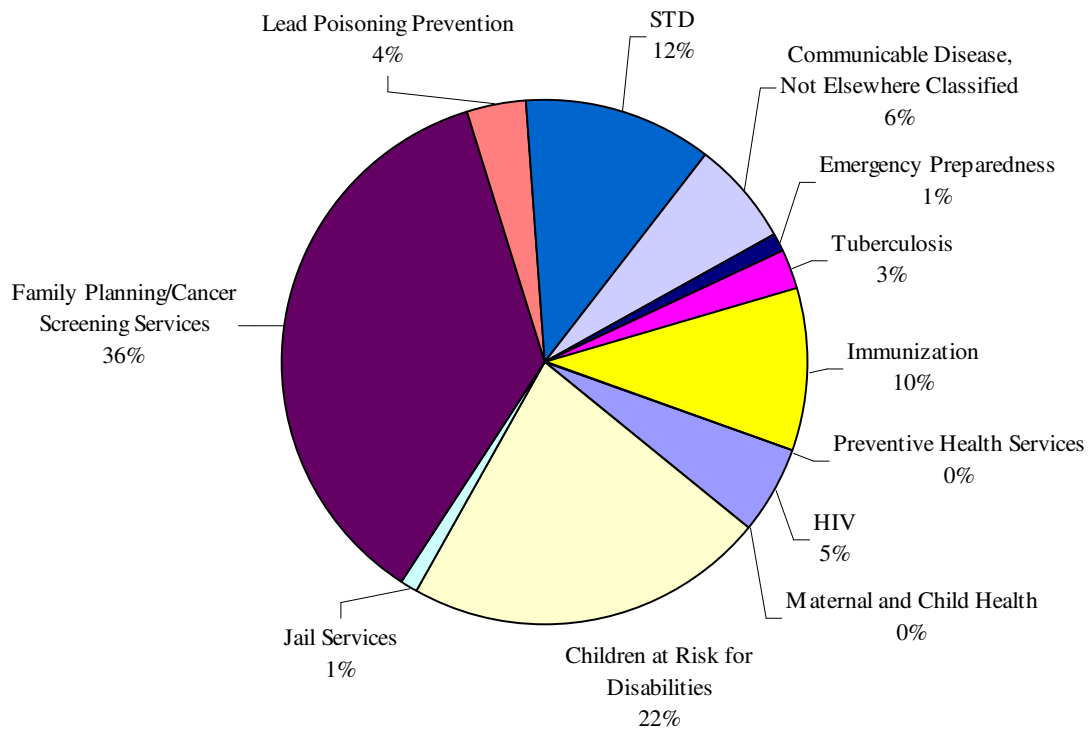
The Early Intervention program serves children from birth up to the age of three years who are at risk for developmental delay. Services available to eligible children include occupational therapy, physical therapy, speech therapy, vision services, special education, audiology, nursing, and social work. The Preschool Special Education program provides services for the three to five year-old population. Services are provided in a variety of settings. The Chautauqua County Health Department provides assistance through the Physically Handicapped Children's Program for eligible children.

Family Health services are generally available at low-cost or no cost to members of the public. Third party reimbursement is sought from Commercial and Medicaid insurance companies for some health services.

The following chart reflects the distribution of nursing time and effort attributed to the various disease control and family health programs implemented by the Division of Nursing Services.

Figure 2. Distribution of Nursing Division's Effort in 2008

Distribution of Nursing Division's Efforts in 2008



Health Education is an integral part of all health department programming. The focus of this division is to identify health issues of local importance, develop and implement strategies to address these issues, and strengthen the community's long-term ability to manage and improve its health and well-being. Health education and promotion presentations and information are available to the public. Program areas include all health and wellness issues, in addition to youth development, community health assessment, coordination of countywide resources, and data collection.

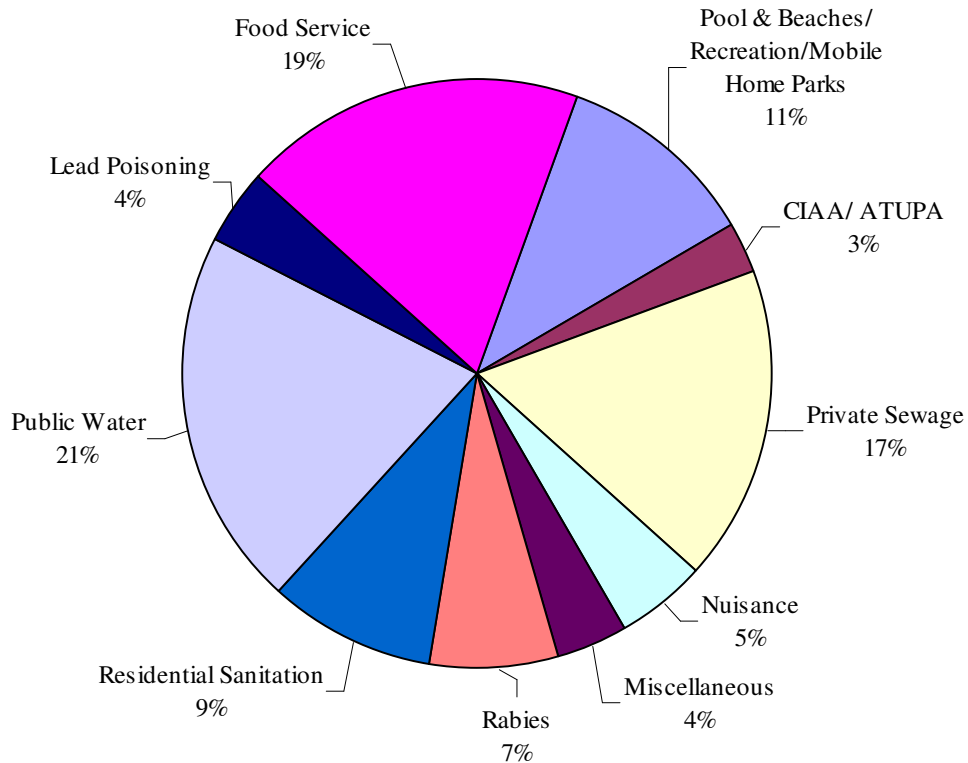
The Environmental Health Division assures the residents of Chautauqua County a healthful environment through its various programs of inspections, surveillance, and enforcement. Its focus is to prevent disease by responding to emergencies and nuisance complaints, monitoring public water supplies, assisting homeowners with private water and sewage systems,

inspection of food service establishments and recreational facilities, while preserving a safe and healthy environment for all County residents and visitors.

The following chart reflects the distribution of manpower attributed to the various programs implemented by the Division of Environmental Health Services.

Figure 3. Distribution of Environmental Health's Effort in 2008

Distribution of Environmental Health's Effort in 2008



Communicable Disease Control Programs

Communicable disease control is one of the main functions of a public health department.

Communicable Diseases are infectious diseases which can be transmitted from one individual to another either directly or indirectly. New York State requires over 70 diseases be reported to the local health department, requiring staff to investigate and provide education to prevent further spread of illness and to contact exposed individuals if treatment or monitoring for symptoms is needed. Phone calls are placed with each county emergency room to monitor for any increase in illness or unusual diseases. Implementing public health surveillance can help detect outbreaks and enable prompt public health intervention. Many hours are dedicated to this program to maintain the community's health.

Immunization Program:

The Immunization Program provides vaccination for children and adults against vaccine preventable disease by the administration of CDC recommended immunizations. International travel vaccinations are also available for community residents travelling to developing countries in order to prevent illness and to reduce communicable disease importation upon return.

Rabies Control:

Animal Rabies Clinics are conducted by the Health Department and by towns/villages and cities in cooperation with the Health Department. Ongoing rabies vaccination is also conducted by the Humane Society in cooperation with the Health Department. On average, rabies vaccinations are administered to over 5,000 animals in a given year. Individuals receive authorization for rabies post exposure prophylaxis due to bites/exposure from at risk animals. Individuals can also receive pre-exposure rabies vaccine due to high risk occupation. On average, investigations are conducted on over 600 animal bite/incident reports annually. Animals that are determined at risk for rabies are submitted for testing to the NYSDOH laboratory. Terrestrial rabies has spread to all but the one southwestern township of Mina. To reduce the incidence of raccoon and other wildlife rabies incidence, a wildlife oral rabies vaccination programs are usually conducted annually.

Tuberculosis Program:

The local health department has the primary responsibility for preventing and controlling Tuberculosis (TB). Prevention and control efforts include identifying and treating all persons who have TB disease, finding and evaluating persons who have been in contact with TB patients to determine whether they have TB infection or disease, and treating them appropriately, and testing high-risk groups for TB infection to identify candidates for treatment of latent infection and to ensure the completion of treatment.

STD Program:

STD program public health nurses provide contact and disease follow up for cases of gonorrhea, Chlamydia, and syphilis. The greatest proportion of sexually transmitted infections is in the 15 to 29 year age group.

Through regularly scheduled community presentations and meetings, the Health Department provided STD/HIV educational information to schools, human service providers, and community organizations

HIV Program:

HIV Confidential Testing Clinics are held at two locations in the County. HIV testing is conducted during 1,400 visits annually. The majority of the testing is performed with a HIV rapid testing method where most results are available in 20-40 minutes.

In addition, health care management for HIV positive individuals is provided in collaboration with the Erie County Medical Center. These patients are able to access medical services at the Jamestown and Dunkirk clinic sites.

Jail Screening:

The Chautauqua County Department of Health provides the following services at the County jail:

- HIV education, counseling and testing; partner notification, referral services for Syphilis, Gonorrhea, and Chlamydia testing with education, treatment, and contact investigation
- Hepatitis A, Hepatitis B, and Tetanus/diphtheria vaccination

Public Health Emergency Preparedness:

The Health Department and the Office of Emergency Services continue to partner with and share *Public Health Preparedness and Response to Bioterrorism (BT)* funds through CDC and NYSDOH. The outcomes or deliverables of this grant focus on public health emergency preparedness planning, training, education, and communication. Additionally, these deliverables help build infrastructure within the Department and externally with other agencies to be able to respond to public health emergencies in a timely, efficient and professional manner.

Other activities included extensive staff preparedness training, communication systems coordination and continued efforts to develop and document Public Health Emergency Response policy and procedures.

Family Health Programs

Family Health Service programming involves the provision of nursing services to individuals and groups at home, at work, at school, and in public health centers. Public health nursing integrates its services with those of other health and allied workers in the planning and implementation of community health programs.

Family Planning Clinic Program:

Family planning reproductive health services are offered at the Health Department's two main office sites, Jamestown and Dunkirk. These services are directed to individuals of reproductive age desiring comprehensive family planning health care services aimed at avoiding unintended pregnancy. Funding for clinic services is achieved through a Title X grant and through public and private health insurance billing.

The CCHD Family Planning Clinics also assist uninsured patients in enrollment to public health insurance programs. Clerical staff at the Clinics are facilitated enrollers for the Department of Social Services (DSS) for the Family Planning Benefit Program (FPBP), a NYS Medicaid program. Intake forms are completed for clients and forwarded to DSS. Uninsured clients who are seeking more insurance coverage than FPBP are referred to DSS to prescreen for Medicaid and Managed Care eligibility. They also provide information about Child Health Plus, Family Health Plus and Healthy New York through the NYSDOH website. If internet access is unavailable, Access New York health care applications are printed for patients, 800 numbers are provided and referrals to the Get Covered Helpline are made. Pregnant clients, and families when

relevant, are enrolled in Medicaid and/or Managed Care presumptively through the MOMS program

The Cancer Services Program:

The Cancer Services Program (CSP) of Chautauqua County, is funded through NYSDOH to provide breast and cervical screening for uninsured women and colorectal screening for uninsured men and women. The program provides outreach and education about the importance of timely cancer screening, as well as case management during the screening process. Patients receive services through private physician's office or through the Health Department Clinics in Jamestown or Dunkirk.

The Cancer Services Program also provides health insurance outreach. During the intake process, the CSP refers individuals that appear to be income eligible to facilitated enrollers and/or the Department of Social Services. Federal poverty guidelines and income requirements for the insurance programs are used to determine potential eligibility. CSP staff also provide Get Covered Helpline materials and contact information for uninsured clients contacting the program.

Maternal and Child Health:

The Health Department continues to administer the Medical Obstetrical and Maternal Services (MOMS) program. The MOMS program has two components: the prenatal medical care provided by the private obstetrical provider and a supportive services package which includes case management, outreach, presumptive Medicaid eligibility, prenatal education, psycho-social assessment and counseling, nutritional education and counseling.

Lead Poisoning Prevention Program:

The Chautauqua County Lead Poisoning Prevention Program (CCLPPP) is an important public health program aimed at reducing the incidence of childhood lead poisoning and associated health consequences. Lead poisoning prevention education, case management, environmental investigation, lead hazard assessment, and abatement follow up are activities conducted in the lead program. Monitoring of children with elevated blood lead levels is an important component. The CCLPPP operates under grant funding through multiple sources.

Since 2007, "Primary Prevention" of childhood lead poisoning has been the focus of the CCLPPP. Primary prevention reduces or eliminates exposure to risk factors before a child's blood lead levels become elevated. By building partnerships with other public and private agencies, conducting assessments of local needs and resources, and developing and implementing local policies and programs, the CCLPPP will reduce lead hazards in the environment thus reducing the number of children being poisoned.

In October 2008, the CCHD was awarded a three-year Primary Prevention Lead grant from the NYSDOH to identify and correct lead based paint hazards. The City of Jamestown within the 14701 ZIP Code was designated as the high-risk area for this project, with more 15,000 eligible

housing units, 91.5% of homes built prior to 1970, 49% of homes designated as rental properties, and a poverty rate of 19.5%. Parts of the Towns of Ellicott, Kiantone, and Busti are also in the 14701 zip code, but are excluded from the target area as they have more post-1978 houses and a lower percentage of rental units. The project targets housing units that meet certain criteria in the designated high-risk area where at least one child six years of age or younger spends at least six hours per week.

In November 2009, Chautauqua County was awarded a fourth Department of Housing & Urban Development (HUD) Lead-Based Paint Hazard Control Grant for 2.6 million dollars. The Lead Safe County IV Grant has allowed continued lead hazard control activities in low-income housing occupied by children under age six throughout Chautauqua County (especially rental housing) and to undertake extensive training, education, and outreach to parents, educators, human service workers, property owners, and contractors. The program is administered through the County Health Department, with implementation facilitated by a subcontract with Chautauqua Home Rehabilitation and Improvement Corporation (CHRIC).

As part of the Chautauqua County Lead Task Force, the Health Department assists in the coordination of a lead poisoning awareness campaign, which promotes lead poisoning prevention information and safe work practices and stresses the importance of having children tested for lead poisoning. Education is provided through public service announcements, cable television ads, and numerous on-site demonstrations.

Additionally, the CCHD works with health care providers in the County to remind them of the importance of testing children for lead. The Supervisory Nurse assigned to the Lead Program visits providers who serve patients aged 2 through 15, including Pediatricians and Family practices, to review charts through the Assess Feedback Incentive eXchange (AFIX) program. Records of blood lead testing and immunizations are checked in patient charts. Areas for improvement are identified and suggestions are shared with corresponding providers. Additionally, our Public Health Educator meets with office staff at Pediatric, Family, and Obstetrics/Gynecology practices to share new literature and current best practices related to testing children for lead.

Children at Risk for Disabilities Program:

The Early Intervention component of the program serves children from birth up to the age of three years who have been diagnosed with a developmental delay. Services available to eligible children include assistive technology service, audiology, family training, counseling, parent support groups, occupational therapy, physical therapy, speech therapy, vision services, special education, nursing, medical services for diagnostic or evaluation purposes, nutrition, psychological services, health services and transportation and related costs. Services are provided in a variety of settings which include the home, baby sitter, day care and center-based programming. On average, over 400 children are enrolled into the Early Intervention/Child Find program, and over 300 children receive services through the Early Intervention Program annually.

The Preschool Special Education component of the program provides services for the three to five year-old population. Authorization for services is made by Committees on Preschool Special Education representing the County's 18 school districts. Services are provided within three Chautauqua County center based special education programs and in least restrictive settings including Head Start, regular nursery schools, and the home by certified professionals. Enrollment remains at four hundred children qualified to receive related or center based services through the Preschool Education Program during the. The challenges for the Preschool program are increased costs related to rates designated by the State Education Department and new restrictions in the services that can be billed for Medicaid reimbursement.

Through both the Early Intervention and Preschool Special Education Programs, the CCHD assists uninsured families in obtaining health insurance. Each family who enrolls in the program receives an informational packet containing literature about Medicaid, Child Health Plus, and WIC. Additionally, when working with families, service coordinators identify families who need insurance and refer them to the Chautauqua County Department of Social Services to learn about their health care options.

Children With Special Health Care Needs Program

The CCHD operated the Children With Special Health Care Needs Program through September 30, 2010. The goal of the program was to improve the system of care for children with special health care needs (CSHCN) and their families. CHSCN includes children from birth through age 21 who have or are suspected of having a serious chronic physical, developmental, behavioral or emotional condition and who also require health and related services of a type or amount beyond that typically required by children. The CSHCN Program provided information and referral services for health and related areas for families of CSHCN. Families without health insurance eligible for Medicaid or Child Health Plus were referred to the Get Covered Helpline or the Department of Social Services to sign up for these programs. Due to administrative and financial constraints, this program has ended.

Physically Handicapped Children's Program:

The Physically Handicapped Children's Program is the financial component of the CSHCN Program, but continues to operate. The PHCP assists families in paying medical bills for children with severe chronic illnesses and/or physical disabilities, between birth and 21 years of age, who live in Chautauqua County and meet county medical and financial eligibility criteria. Recently, there has been a decline in participants which is directly related to the decreased funding available to the program and elimination of orthodontic treatment.

The PHCP has two components: the Diagnosis and Evaluation Program (D&E) and the Treatment Program. The D&E Program will reimburse specialty providers for the diagnosis and development of a treatment plan for eligible children. The Treatment Program will reimburse specialty providers for the ongoing health and related services for children who are medically and financially eligible. The county standards are designed to assist families with low incomes or inadequate private health insurance to obtain medical services for their children. When financially feasible, the CCHD may purchase health insurance for families through COBRA rather than reimburse all financial expenses for uninsured families.

Health Education and Promotion Programs

Family Planning and Teen Pregnancy Prevention:

The Chautauqua County Department of Health has continued to provide high quality reproductive health services for the community through clinical services and the promotion of public health education. Data shows the continuing success of the program in reaching the adolescent target group.

Community information and public education to improve the community's health remains a vital component in the Comprehensive Family Planning and Reproductive Health Care Services Program. The greatest strength in our outreach and education component is collaboration with community agencies and organizations.

Education is provided in a variety of settings providing individuals and agencies with information about contraception, healthy decision making, women's health issues, and STD/HIV prevention. Awareness promotional visits are made to school nurses in all 18 districts and the two BOCES facilities. Information about family planning services is distributed to various agencies and coalitions who in turn provide informal referrals to patients seeking care.

Tobacco Use Prevention:

The Tri-County Tobacco Control program, coordinated through a subcontract, provides education and advocacy to generate grassroots support for changes in the policies that govern tobacco advertising, sponsorship, and promotion. Reality Check is a New York State youth movement that encourages 13-18 year olds to stand up, speak out, and seize control in the fight against Big Tobacco. Through community and peer education, the Reality Check teens expose the lies and manipulations that the tobacco industry uses to recruit nearly 25,000 new teen smokers every year in New York State.

In addition to tobacco control programs, the Environmental Health division is responsible for performing compliance checks mandated by the Adolescent Tobacco Use Prevention Act (ATUPA). In order to assess compliance of tobacco vendors in the County, the Environmental Health unit takes underage youth (ages 15, 16, or 17) without legal IDs to tobacco vendors where they attempt to purchase cigarettes. If vendors agree to sell tobacco to the youths, the violations are reported to the state. The Department is also responsible for verifying that all tobacco dealers and vendors are registered with the NYS Department of Taxation and Finance (DTF) to sell tobacco, post required signage, display tobacco and herbal cigarettes behind the counter or in a locked container, and verify that vending machine locations are acceptable and supervised.

Chronic Disease:

Steps to a Healthier NY is an initiative that completed its fifth and final grant year in 2008. However, strong community partnerships continue to thrive. The Chautauqua County Health Department also coordinates regional and local efforts for chronic disease prevention through

the Western New York Asthma Coalition, the Western New York Diabetes Coalition, and the Southern Tier wellness initiatives.

Environmental Health Promotion:

Household Hazardous Waste Days are held annually in Chautauqua County. The Health Department conducts mass mailings to various farms, businesses, schools, golf courses and green houses. Posters and fliers are created by Health Department staff and distributed by environmental personnel during routine inspections countywide. Over 589 households are served annually. More than 6,000 pounds of hazardous waste is properly disposed of, rendering the environment healthier.

Dental Health:

The CCHD assists Chautauqua County children in accessing dental care by providing referrals to the Mobile Dental Van operated by the University at Buffalo School of Dental Medicine, Pediatric and Community Dentistry. The van is equipped with two dental operatories, including state-of-the-art diagnostics, sterilization, and radiography. Dentists, dental hygienists, and dental students provide screenings, cleanings, fillings, and sealants to children from birth to age 18. The van operates with Article 28 status accepting Medicaid, Child Health Plus, private insurance or fees given on a sliding scale. UB staff continues to apply for grant funding to replace the aging 39-foot mobile dental unit. The CCHD was integral in locating initial funding sources to create the dental van.

In an effort to prevent dental health problems in children, the CCHD has recently created a *Healthy Smiles, Healthy Kids* educational program will be provided free of charge to all schools that request it. The program teaches students the importance of good oral health and preventing cavities. It encourages children to use fluoridated toothpaste, brush and floss teeth regularly, and consume sugary foods in moderation. Free toothbrushes and toothpaste are offered when supplies are available.

The CCHD recognizes the need for a comprehensive dental health program and is currently researching best practices for a Local Health Department (LHD) dental health presence in the community. A Master's of Public Health Student Intern from the University at Buffalo School of Public Health and Health Professions is currently canvassing LHDs throughout the country to determine effective, cost-efficient means to promote good dental health. The CCHD once convened a Dental Health Advisory Board that has since diminished. The Department plans to reconvene the Board when a plan for action has been established.

Linkages and Coalition Building:

Currently, the Division Health Education is in the process of being redeveloped following several years of non-existence. A health educator has been hired and several contracted employees assist in outreach and education for a variety of health programs. However, the Health Education Division continues to build and participate in existing coalitions throughout the County and the state.

Public Relations:

A comprehensive marketing campaign has been implemented by the new sub-contracted media specialist. This position was created to promote all grant programs and Article 6 programs through effective multi-media campaigns. This approach allows resources to be utilized to their fullest capacity while keeping Health Department programs in the forefront of our local media venues.

Environmental Health Services Programs

The Division of Environmental Health Services strives to prevent disease and preserve a safe and healthy environment for all county residents and visitors. The services provided by this division include:

- Inspection and permitting of food service and recreational facilities, such as motels, hotels, camps, pools and beaches.
- Permitting and inspecting all private sewage systems being installed in the County.
- Protecting public water supplies through inspection, monitoring and water analysis.
- Responding to public health emergencies, chemical releases and public health nuisance conditions.
- Performing property transfer surveys of on-site water and sewage systems
- Providing consultation with homeowners on their water and sewage systems and performing bacteriological analysis of drinking water.

Environmental Health's greatest success story each year is the absence of any environmental, food or water- borne illness outbreaks at facilities regulated by the Health Department.

Comprehensive Drinking Water Needs Assessment (Water Study):

In response to drinking water emergencies that have recently occurred, environment health staff under County Executive guidance, initiated a comprehensive water system evaluation of all municipal drinking water systems. This project will identify each system's strengths, weaknesses and improvements needed to provide safe and reliable public water to county customers for the next several generations (50 to 100 years). The County's municipal water systems are over 100 years old and are in need of significant upgrades to their sources, treatment plants, storage tanks and water mains to ensure public health and economic development. The project also identifies areas where extension of public water is needed to solve private water drinking water problems. Because this is a regional problem, creative solutions including municipal partnerships, interconnections and shared services must be explored to economically resolve the problem.

Water/Sewer Mapping Project:

The Environmental Health Division began a multi-year data management and mapping project to improve the efficiency of the department and help preserve the rural drinking water resources. This project will computerize all of the septic system files, link the files to the County GIS system, utilize PDAs to capture and transfer septic system and private well inspection data

and improve other water and sewer databases. Many Chautauqua County departments will be able to access the data through the County GIS system. Funding for this project is from a \$248,000 grant to the county. The project is scheduled to be completed in 2010.

Findley Lake Sewer Project:

Environmental Health staff completed a study to address septic system contamination around Findley Lake. The Department is now working closely with the Town of Mina in planning a central sewage collection and treatment system to address the problem.

Dunkirk Beaches Study:

Environmental Health partnered with SUNY Fredonia Biology Department in an effort to identify sources of contamination that has resulted in public bathing beach closures. This is being accomplished by studying the DNA of E. coli bacteria to identify its origin (human, domestic pets, birds, cattle, etc.). Once the source is identified, contamination will be addressed by implementing best practices to decrease the effects of contaminated surface water.

Adequacy and Deployment of Resources

Distribution of financial resources for Health Department activities are described above in the CCHD's 2007 Annual Report. Fiscal needs and resources are met by local share, state aid, and grant funding. The community needs that are within the Health Department's scope of responsibility are met as reflected by the programs and staffing patterns listed above.

Technical Capacity to Perform Community Health Assessment

The Community Health Assessment is a huge undertaking for the Chautauqua County Health Department. While the employees have the skills to create such an assessment, a limited number of staff continuously works on mandated and optional projects and programs to promote the health of the public on top of daily assigned duties. The addition of a Community Health Assessment puts additional strain on the staff that are also responsible for Public Health Emergency Preparedness, grant applications and management, and multiple programmatic and administrative responsibilities. Health Department administration recognizes the importance of the Community Health Assessment to strategic planning, outreach and clinical activities to ensure the health care needs of the County are met. In the past, the Department has contracted out the assessment. Due to the interactive and collaborative nature of this year's assessment and to budget cuts, the Department is obligated to complete it on their own.

Section 3

Problems and Issues in the Community

A. Profile of Community Resources

Several organizations throughout Chautauqua County provide health resources to the community. The Chautauqua County Health Department has identified some of these agencies as "key players" in collaboration with the goals of the Health Department. Many of those organizations are participants in the Human Needs Task Force, a subgroup of the Local Emergency Planning Committee, which is a major component of Public Health Emergency Preparedness in the County. The Human Needs Task Force was a structure created to begin addressing the health needs of County residents during public health emergencies. However, the network also serves to coordinate local efforts to address gaps in the health care needs of the population. Quarterly, the group meets to converse about where additional services are needed by the community. As unmet needs are identified other agencies are invited to participate to help with planning efforts. The Human Needs Task Force is an intimate network of agencies that work well together and are true players at the table when it comes to the health of County residents.

Members of the Human Needs Task Force:

- Chautauqua County Health Department
- Chautauqua County Office for the Aging
- Chautauqua County Office of Mental Health
- Chautauqua County Department of Social Services
- Chautauqua County Sheriff's Department
- Chautauqua County Health Network
- Chautauqua Opportunities Incorporated
- Homecare Association
- Cornell Cooperative Extension
- Salvation Army
- Red Cross
- Hospital Preparedness Coordinators

Listed below are additional health programs and coalitions that are not directly involved in the local planning efforts. However, these organizations are available to assist with gaps and unmet needs as warranted.

- Alzheimer's Association of WNY
- Baby and Me Tobacco Free (Tobacco Control Coalition)
- Breastfeeding/lactation consultants (COI, WCA and Westfield Hospitals)
- Chautauqua County AIDS Advisory Board
- Chautauqua County Coalition Against Domestic Violence and Sexual Assault
- Chautauqua County Health Association
- Chautauqua County Health Department Advisory Board
- Chautauqua County Home

- Chautauqua County Outreach Network
- Chautauqua County Teen Pregnancy Prevention Coalition
- Chautauqua County Veterans Services
- Childbirth Education (COI, WCA, Westfield and Brooks Hospitals)
- Children and Community Health Initiative
- Community Health Network of Western New York
- Coordinated Children's Services Initiative
- Dental Advisory Committee
- Expectant Parent Classes (COI, WCA, Westfield and Brooks Hospitals)
- Faith Based Initiative
- Family Planning Advisory Committee
- Health Education Network
- Hispanic Outreach Network
- Lead Task Force
- NYS Partner Notification Program
- P2 Collaborative of Western New York
- Planned Parenthood of Western New York
- TEAM/Growing Together (COI, YWCA)
- Teen Pregnancy Prevention Coalition
- Western New York Family Planning Educators
- Western New York HIV/AIDS Public Health
- Western New York 50+ Consortia
- Western New York Asthma Coalition
- Western New York Diabetes Coalition

Availability, Accessibility, Affordability, Acceptability and Quality of Community Resources

These aspects of services available to the community are addressed in the previous section, Local Health Unit Capacity Profile.

Medicaid Providers

Medicaid providers in Chautauqua County include the Chautauqua County Department of Health, WCA Hospital, Lake Erie Regional Health System (Brooks Memorial Hospital and TLC Health Network), Westfield Memorial Hospital, and various private physicians. Tri-County Medical Center, part of the LERHS and located in Cattaraugus County, also serves low income Chautauqua County residents. Tragically, the flood of August 2009 has incapacitated this facility which provided primary medical and dental care as well as hospital and long-term care services. The Resource Center, located in Jamestown and Dunkirk, is an Article 28, multi-service agency that provides a comprehensive range of health and social services, including primary care medical, dental and behavioral health services predominantly to children and adults who are disabled or who are developmentally delayed.

The City of Jamestown and neighboring areas (including Ellicott, Poland, Carroll, Kiantone, and Busti townships) have recently been classified as Low-Income Health Provider Shortage Areas

(HPSA). The population living at or below 200% of the Federal Poverty Level was 20,071 persons. Full-time Entity Providers (FTE) serving low income persons in the area (based on Medicaid claims data) was 1.4. The ratio of persons in poverty to low-income accepting FTE was 14,336 to 1. In order to be designated a low-income HPSA, the ratio must be greater than 3,000 to 1. Areas with a designation of low income HPSA are eligible to receive access to National Health Service Corp (NHSC) physician candidates, scholarships and loan repayment, as well as access to physicians with J-1 visas (medical interns or residents from other countries). Based on the low-income HPSA designation, the area is also qualified to receive assistance for the establishment of a Federally Qualified Health Center (FQHC), however the feasibility of its establishment is unknown at this time.

B. Access to Quality Health Care

Availability of Healthcare Providers

Chautauqua County was disproportionately affected by the recommendations and subsequent mandates of the Commission on Health Care Facilities in the 21st Century. Of the four county hospitals, two were mandated to consolidate and a third was mandated to reconfigure to a Diagnostic and Treatment Center. Brooks Memorial Hospital and TLC Health Network have consolidated into the Lake Erie Regional Health System of New York. Westfield Memorial Hospital is targeted for conversion to a D&TC as of June 30, 2010. This conversion will eliminate the facility's emergency department and four inpatient beds. This could potentially adversely affect the all-volunteer emergency medical service and subsequent ability to provide emergency services in the Westfield service area. Of special note is the large Amish population served by Westfield Hospital. The mandated closure of Westfield Hospital's maternity unit resulted in six family practice physicians relinquishing their obstetric privileges in the County.

Chautauqua County is experiencing a major restructuring of health care services prompted by these mandates of the Commission on Health Care Facilities in the 21st Century, a prospective community health center designation, and rebalancing of long term care services delivery. As previously noted, the large geographic area, lack of public transportation, and severity of weather also affect access to health care services.

WCA Hospital is also no longer operating Article 28 Diagnostic and Treatment Center primary care clinics in Jamestown and four surrounding areas. These clinics were purchased by an independent physician practice and the future of previous practice sites is uncertain. While this practice realizes the importance of public health and accepts Medicaid, Medicare, underinsured, and uninsured patients as well as private pay patients, it is not obligated to continue to operate as a provider of last resort for these populations as WCA functioned.

Chautauqua County lacks a tertiary care facility and adequate primary and specialty care services. County residents must be transferred to facilities that offer higher levels of care such as those in Buffalo or Erie, Pennsylvania. Many County residents travel to these areas for medical specialty and oral health services as well.

There are 89 private providers in Chautauqua County, including family, internal medicine, OB/GYN, and pediatric practices. These practices are mainly concentrated in Jamestown and Dunkirk. Since the majority of providers are located in the northern and eastern portions of the County, many residents living in Southwestern Chautauqua County have to travel long distances to receive medical care. Some of these individuals opt to travel to hospitals in Erie and Corry, Pennsylvania because they are geographically closer than those in the County.

In Chautauqua County, there are approximately 60 dentists, most of whom practice in or around the cities of Jamestown and Dunkirk. While there are a few dentists scattered in the rural areas (such as Clymer, Mayville, Westfield, Bemus Point, Cassadaga, Forestville, and Silver Creek), it is difficult for many rural residents to conveniently access dental care. According to the Chautauqua Opportunities 2008 Needs Assessment, only 12% of dental providers in the County accepted Medicaid payment in 2004.

Primary Care and Preventive Health Services Utilization

The utilization of the available primary care and preventive health services in the County is very high. Offices are booked with no shortage of patients to serve. This, however, is likely due to the fact that our County has a shortage of physicians (specifically specialists), with additional losses forecasted over the next ten years. Therefore, the physicians who do practice in this area are overwhelmed by the patient load. Additionally, a high proportion of Medicaid users and uninsured coupled with the fact that there are very few Medicaid providers in the County are indicators of unmet health care needs for residents.

Due to difficulty in accessing primary care and the lack of urgent care facilities in the County, the Emergency Departments are inundated with non-emergent cases. The use of emergency department services in the Western New York Region is higher than in any other part of New York State with the exception of New York City. Emergency department utilization is high regardless of type or existence of insurance which further substantiates the lack of medical homes and urgent care clinics.

Since only 12% of the 60 dental providers in the County accepted Medicaid payment in 2004, the waiting lists for these dentists were very long. A Federally Qualified Health Center feasibility study done by John Snow, Inc. found that of the 32,819 Medicaid enrollees in 2006, only 8,239 (12%) had a preventive dental care visit. Of enrollees aged 4 through 20, 22% had a preventive visit. The study also indicated that the two largest contributors to lack of dental care beyond cost were providers within a reasonable distance that accept Medicaid and patient education.

The dental health access issues are ameliorated in part by the services offered by UB's dental van. Despite the increased capacity of the Mobile Dental Van, it is not able to fully meet the demand for dental care among uninsured and publicly insured residents. In addition, due to limited time and resources, the van travels only to schools that have demonstrated good attendance in the past.

The Resource Center operates two Article 28 Dental Clinics, one in Jamestown and the other in Dunkirk. These clinics accept Medicaid and offer services regardless of a patient's ability to pay. However, high demand for services and heavy patient loads for the clinics result in long waiting lists for patients.

Barriers to Healthcare

There are significant barriers to health access in Chautauqua County. The most pervasive barrier is the lack of geographically proximate providers that accept publicly insured patients and offer affordable care to uninsured patients. In addition to the lack of insurance, many people are challenged to retain continuous coverage over time. Difficult economic times and high jobless rates contribute to this ever-increasing challenge. While only 8% of children in Western New York are uninsured, 17% of children had a time when they did not have coverage in the last year. Insurance barriers limit access to primary and preventive care and contribute to high emergency department utilization.

Financial Barriers

Coverage

Many Chautauqua County residents are unable to access comprehensive, accessible, and timely primary care services. The proportion of adults without access to a regular source of care in Chautauqua County is 5.6% compared to 5% for the Western New York Region. The US Healthy People 2010 goal is 4%. A survey conducted by the Community Health Foundation of Western and Central New York (CHFWCNY) found that families at 200% and below of the federal poverty level have lower rates of having a primary care visit in the last year than people above 200% FPL. Furthermore, of those people who did not have a primary care visit in the last year, 70% are in poverty. The Steps to a Healthier Chautauqua County BRFSS indicates that in 2006-2007, eight percent (8%) of adults could not get care because of cost and only 79.3 % reported having a personal doctor.

Unemployment contributes to the problem of uninsured individuals in Western New York. However, for a large number of Chautauqua County residents, the bigger challenge is finding affordable coverage as a working adult. Sixty-two (62%) of the uninsured adults in Western New York are employed. The largest proportion of uninsured, 71%, are individuals 18-44 years of age. The 2006-2007 BRFSS data from Steps estimated that 12.7% of County residents greater than 18 years of age lacked health coverage. Of those, 63.4% were males. The majority of residents with health coverage had it provided to them by their employer or someone else's employer (57.3%). Medicare provided health care to 19.3% of covered residents, while Medicaid covered 6.5%, Family Health Plus covered 1.6%, and the military, TRICARE (military benefits) or VA covered 1.8% of residents.

In the County, females greater than 18 years old are more likely to be covered and to have a personal doctor or health care provider than males. Females were also more likely to have had a routine check-up in the past year (82.8% compared to 70.3%). In the year prior to BRFSS data

collection, 9.6% of male respondents were unable to see a doctor because of cost, compared to 7.0% of females. The greatest proportion of residents lacking health coverage was seen in the age group of 18 to 34.

Other races, non-Hispanic (30.8%) and black, non-Hispanic (19.4%), demonstrated the highest proportions of residents lacking health coverage. However, the total burden of the lack of health insurance coverage was greater among white non-Hispanics lacking coverage. Hispanics (54.4%) and other race non-Hispanics (24.1%) in the County demonstrated the highest proportions of Medicaid users within their racial/ethnic groups and were less likely than white and black non-Hispanics to have a personal doctor. While only 4.6% of white non-Hispanics used Medicaid, they made up the majority (67.0%) of users. Of the racial groups, the greatest proportion of black non-Hispanics (19.4%) were unable to see a doctor because of cost the year before BRFSS data collection; other race non-Hispanics were less likely to have had a routine check-up in the past year.

The BRFSS data indicates that the proportion of the population that has health coverage increases with level of education and income. Of residents with less than a high school education, 22.6% did not have health coverage, compared to 15.3% of those with a high school education and 8.6% with more than a high school education. Residents with less than a high school education or with an income of less than \$20,000 per year were also more likely to be on Medicaid and to have been unable to see a doctor because of cost in the past year.

While many County residents have insurance, approximately 15,000 (based on national estimates) are expected to be underinsured. Even with insurance medical care is not affordable because the out-of-pocket costs are perceived to be financially straining to the individual or family.

Structural Barriers

Transportation

As a rural county, for those residents that do not live in the two largest cities of Jamestown and Dunkirk, access to healthcare is dependent on having a car and travel time can be as long as an hour to the nearest primary care physician or dentist from many parts of the County. The County has a high proportion of elderly residents (16%) who face challenges in transportation and mobility. The main mode of transportation for the Amish is horse and buggy.

Transportation is a persistent barrier to access to services in the rural areas of the County, and the heavy annual snow fall contributes to transportation difficulties from the months of November through April.

The United States Government Accountability Office (GAO) reported in June of 2003 classifies the elderly, disabled and those with low incomes as "transportation-disadvantaged" persons (COI Needs Assessment). Data from the U.S. Census Bureau American Community Survey from 2007 indicates that the Chautauqua County population consists of a greater percentage of disabled persons aged 16 and older, a greater percentage of elderly persons aged 65 years and

greater, and a much lower median household income than the New York State population as a whole.

Transportation-disadvantaged populations

	Chautauqua County		New York State	
	N	Percent	N	Percent
Population 16 years and older with a disability	20,622	19.80%	2,356,915	15.60%
Elderly (Aged 65+)	20,900	15.60%	2,543,787	13.18%
Median Household Income	\$ 38,942	(X)	\$ 53,514	(X)

Source: US Census Bureau American Community Survey 2007

As the following table indicates, Chautauqua County has a lower percentage of households without vehicles (10.30%, compared to 38.41%) than the state, but the proportion of workers who use public transportation is extremely low (0.30% compared to 26.50%). As a result, there is a greater fraction of county residents who lack adequate means of transportation.

Number and percent of households without a vehicle and workers who use public transportation

	Chautauqua County		New York State	
	N	Percent	N	Percent
Number of households with no vehicle available	5,636	10.30%	2,017,040	28.41%
Number of workers who use public transportation	169	0.30%	2,332,289	26.50%

Source: US Census Bureau American Community Survey 2007

Public transportation in the County is provided by the Chautauqua Area Rural Transit System (CARTS). While the system is inexpensive and provides service to every town, the coverage is inadequate, the system operates only during weekdays from 7:30 am to 5:30 pm, and arrangements for pick-up must be made in advance. If a request is made outside of a regular route, CARTS will offer services whenever requested; however, as inconvenience and cost of the pick-up increases for CARTS, fees for clients increase. For many families even the reduced fees of the CARTS van are prohibitive.

The Rural Chautauqua Service Area has recently been classified as a Geographic Health Provider Shortage Area (HPSA). The Rural Chautauqua Service area includes Arkwright, Charlotte, Chautauqua, Cherry Creek, Clymer, Dayton, Dunkirk, Ellery, Ellington, French Creek, Gerry, Hanover, Harmony, Leon, Mina, North Harmony, Otto, Perrysburg, Persia, Pomfret, Portland, Ripley, Sheridan, Sherman, Stockton, Villenova, and Westfield Townships (some located in Cattaraugus County). The population living within the service area was 86,101 persons. Full-time Entity Providers (FTE) serving the rural area was 22.8. The ratio of persons living in rural areas to local FTE was 3,776 to 1. In order to be designated a Geographic HPSA, the ratio must be greater than 3,500 to 1. Areas with a designation of Geographic HPSA are eligible to receive access to National Health Service Corp (NHSC) physician candidates, scholarships and loan

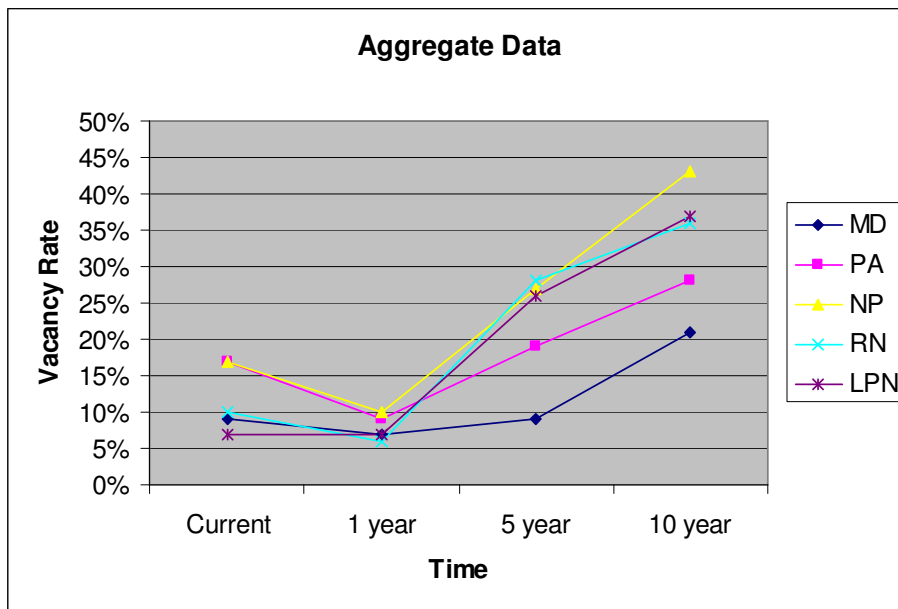
repayment, as well as access to physicians with J-1 visas (medical interns or residents from other countries) and Medicare incentive payments for physician's services.

Physician Shortages

Primary care is a serious issue in Chautauqua County. The County currently holds HPSA designations for primary care, dental, and behavioral health and remains in the lowest Medicare Wage Index classification in the nation. The current ratio of physicians to provider per 1000 population is 8 and this compares to 20 per 1000 in the nation and 26 per 1000 in New York State overall, according to Chautauqua Opportunities Needs Assessment (2008). There are particular challenges in finding pediatric, obstetrics and gynecology, and geriatric care in the County.

The following chart, provided by the Chautauqua County Health Network, depicts the current health care professional shortages and forecasted shortages over the next ten years. The vacancy rate for medical doctors is approximately ten percent and is expected to rise to twenty percent within the next ten years, based on physicians' ages, unless recruitment is successful.

Figure 4. Aggregate Data of Projected Health Care Professional Vacancy Rates



Source: Chautauqua County Health Network

As discussed above, the restructuring of health care providers in the County that is currently occurring is expected to have a negative impact on the ability of residents to receive quality health care. Specifically, residents whose health bills are paid for by government programs are expected to have limited care. A major Article 28 Diagnostic and Treatment Center clinic that provided care to persons paying with Medicaid has been sold to a private practice. The concern is greater for women on Medicaid who are pregnant, because of the importance of prenatal care and the deficiency of OB/GYN practices that accept Medicaid payment.

Challenges to accessing primary care contribute significantly to unnecessary utilization of the Emergency Department. Use of emergency departments in the Western New York Region is higher than in any other part of New York State with the exception of New York City. There is high use of these services regardless of the type or existence of insurance.

Youth are especially high users of the emergency department services. A study by HMS Associates of 2007 emergency department discharge data found that the use rate was ~375 discharges per 1,000 residents less than 18 years of age compared to ~325 discharges per 1,000 18 to 64 year olds, and ~300 discharges per adults 65 years and older in Chautauqua County. Further evidence of high youth utilization is from the Community Health Foundation of Western and Central New York Survey of low income parents in 2007. Forty percent (40%) of parents – more than twice the national rate – reported that their child had been to the emergency department one or more times in the last year. The rate of children going to the emergency department two or more times was also three times higher in western New York than nationally. Nationally, the survey found that the percent of children on Medicaid using the emergency department one or more times is 14.3%, which is well below the rate of Medicaid users in Western New York (45%). The HMS analysis of emergency department utilization identifies the southwestern part of the County as in the top decile of use as compared to Western New York as whole. Likely, some of the causes for high utilization are the limited providers in this area and high rates of poverty. Families at 200% and below of the federal poverty level had lower rates of accessing care, and of those that did not have a primary care visit in the last year, 70% were in poverty.

Additionally, several access to care issues exist for cancer patients. Two oncologists practice in the County, one in Jamestown and the other in Dunkirk. The Jamestown practice does not accept Medicaid as an insurance without managed care. This is particularly problematic with the County's Medicaid Cancer Treatment Program as these patients do not have the opportunity to enroll in a managed care plan as do other Medicaid Patients that access Medicaid through the Department of Social Services. This creates a significant barrier for these patients particularly if they reside in the South County; they must then obtain transportation to the North County. However, now that WCA Hospital has a collaborative relationship with Roswell Park, the potential may exist to serve patients at a local level without the burden of transporting the patients outside the county for treatment.

Personal Barriers

Due to the demographic composition of Chautauqua County, the likelihood of residents facing personal barriers to quality health care is greater than in some other counties. Personal barriers to health care include cultural, linguistic, educational, as well as unique factors that impede access to care.

As previously mentioned, there are several cultural groups within Chautauqua County with unique needs. Specifically, the migrant population, regional Amish, Native Americans, and the growing Hispanic populations are of particular concern. Most of the migrant population, largely

originating from Mexico, and the Hispanic population primarily speaks Spanish. Those who have not learned English well may have problems communicating with providers and office staff, and increased difficulty navigating the health care system, which could prevent them from seeing a doctor when they should. Among County residents, 6.5% of the population over five years old claims that a language other than English is the primary language spoken in the home.

Migrants in the community are served through the Migrant Health Program that provides vouchers. However this program is not set up to provide behavioral health services. While hospitals are required to provide translation services, there are no private providers in the community that focus on providing culturally competent or language services for the behavioral health needs of the migrant community. In addition, the only providers that accept the vouchers are located in Dunkirk and Jamestown which can be more than 30 miles away for some migrants who have limited transportation options due to their occupations that require them to work in remote farm locations.

Amish residents have a unique way of paying providers. Each community contributes money to a fund which is used to help families pay for members who require medical care. Due to the nature of this system, preventive care is not frequently accessed. The money is often used in cases of traumatic medical emergencies.

Native Americans are a cultural group that experiences a disproportionate number of adverse health outcomes when compared to the general population. The Seneca Nation governance is completely independent of the State and U.S. governments and the majority of health care for this population subgroup is provided by Indian Health Services. Even when referred to other doctors or specialists, Native Americans hesitate to go outside of their infrastructure to receive care. Whether out of pride or lack of navigational experience in the medical system outside of their organization, this group fails to access specialized care when it is needed. Additionally, poverty, mental health issues, and substance abuse which are common among Native Americans, lead to increased complications in seeking out preventive care.

Another characteristic of Chautauqua County residents that amplifies personal barriers to health care is the relatively high proportion of residents lacking higher education. While Chautauqua County has a higher percentage of residents aged 25 or greater who graduated from high school (85.2%) compared to New York State (84.1%), the percentage of people with a bachelors degree or higher is much lower (19.1% compared to 31.7%). Individuals with more education tend to understand their medical needs better and understand the importance of prevention. These individuals are also more likely to be active consumers of health care and participate in employer-sponsored health insurance plans and initiatives.

In addition to barriers related to cost, transportation, waiting lists, and convenience, there are personal barriers to Chautauqua County residents accessing preventive dental care visits. Many of our residents, even those who are educated, do not consider oral health a priority. It is considered more of an aesthetic, and not healthy, practice. The community, itself does not seem to value dental health and does not place a collective importance on good dental health.

C. Profile of Unmet Need for Services

Service Gaps and Potential Solutions

- There is a need for an expansion of coverage area by local public transportation agencies. There is also need for increased affordability of fees for public transportation. The introduction of a voucher system for the public transportation system in the County, the Chautauqua Area Regional Transportation System (CARTS) would assist this population in accessing the care they require.
- There is a need for the expansion of the County's STD and Family Planning Clinic hours. By reaching a larger portion of the at-risk populations for STDs and teen pregnancy who are unable to pay for care, the health of the community faces great potential for improvement.
- There is a need for primary care and prenatal care clinic services for uninsured and underinsured persons in Chautauqua County. The introduction of a Federally Qualified Health Center (FQHC) would help alleviate this issue.
- There is a need for the recruitment and retention of physicians and other health care professionals, especially to fill the vacancies in the obstetrics/gynecology, pediatric, and geriatric fields to serve all members of the community.
- There is a need for increased language capability and cultural awareness among health care and other providers in Chautauqua County on top of basic translation services. This should involve language and cultural training for current staff as well as the effort to recruit Spanish speaking staff.
- The Chautauqua County Health Department, along with its co-conveners, desire to address the underlying causes of chronic disease by re-instituting an initiative modeled after the Steps to a Healthier Chautauqua County health intervention work plan. The plan focuses on wellness in schools, worksites, and communities, and aims to reduce obesity, asthma and tobacco use.

Location of Service Gaps

- Inadequate public transportation largely impacts the populations of the rural towns and villages outside of the cities Jamestown and Dunkirk. This area spans the entire County.
- Primary and emergency care service gaps are present in the southwestern corner of the County. Due to the reduction of Westfield Memorial Hospital's services and far distances to other hospitals, residents in this area have limited access to health care. Some residents cross state lines to access more proximal health care facilities.

- The need for pediatricians is greatest in the Westfield area where restructuring has resulted in the loss of an obstetrics unit. There is also a shortage of pediatricians in the Dunkirk area, where those currently practicing are functioning beyond capacity.

- The need for obstetrics and gynecological services for Medicaid patients affects all areas of the County. Specific areas of need include Jamestown because of the lack of practitioners accepting Medicaid and Westfield because of the loss of their obstetric unit. This resulted in six primary care physicians relinquishing obstetric privileges in the County.

Potential Challenges in Eliminating Service Gaps

The major challenge in the expansion of services to eliminate the service gaps is locating funding sources to secure programs, services and staff to deliver these services.

CARTS reimbursement cards would help patients to afford transportation to health services. However, at this time it is unknown who will be able to take on the financial loss of this undertaking. Additionally, CARTS would need to hire additional staff and purchase additional vehicles in order to expand their coverage areas.

Recruitment of physicians (pediatricians, obstetricians/gynecologists, geriatricians, primary care physicians, etc.), Spanish-speaking and otherwise, to work in the area is challenging due to the lower salaries offered. Additionally, because there are not enough specialists in the area, those that practice in Chautauqua County have become overloaded with patients and are frequently required to be on-call. Expansion of County clinic hours will not be possible without the assistance of external funds, as the County budget is currently without additional means.

The introduction of an FQHC requires the interest of a local practice that is willing to restructure their agency to suit the needs of patients with and without the ability to pay. Due to the uncertainty of the outcome and fear of profit loss, there are no practices fully committed to pursuing the FQHC at this time.

The reinstatement of a program similar to Steps to a Healthier Chautauqua County program would greatly benefit the community. However, there is currently no funding or staff with the capacity to take on a project of the magnitude and scope of Steps.

Section 4

Local Health Priorities

Establishment of Prevention Agenda Priorities for Chautauqua County

During the early Community Health Assessment/Community Service Plan planning process, all partners (hospitals, select community agencies, and specific county government departments) agreed to conduct community focus groups with the purpose of collecting community input about health priorities of Chautauqua County. The CHA/CSP joint planning committee established themselves as the Chautauqua County Community Health Planning Team.

A list of target populations was compiled during the joint planning meetings. The list of identified populations included elderly, students, Hispanics, councilmen, employees, teachers, emergency responders, faith based church members, employers, charity organizations' staff and clients, parents, etc.

Each partner was assigned the task to conduct a minimum of three focus groups within a two month timeframe. Thirty-six focus group meetings were conducted from January 2009 to May 2009. The focus group meetings were designed to be conducted in a uniform fashion throughout the County. The purpose of the focus group forums was to collect community responses to one question, "What are the health needs of our community?" Each focus group forum was to be no longer than 60 minutes long. Participant's responses were captured by a recorder on a flip chart or index card and then submitted to the Health Department evaluator for categorization and tabulation. Five hundred and twenty-five individual responses were collected and tabulated from thirty-eight focus groups.

The community's perceived health priorities were identified as:

- Access to Quality Healthcare
- Chronic Disease
- Physical Activity and Nutrition

In July, 2009 the access to care and health data for all Prevention Agenda Priority areas were analyzed and discussed by the collaborators. Obesity, nutrition, and physical activity data from the BRFSS supported the community's concern regarding the Physical Activity and Nutrition Priority area. High rates of cancer, cardiovascular disease, diabetes, and chronic lower respiratory disease, in addition to a high prevalence of tobacco use backed up the community's claim of chronic disease as a major issue in the County. Relatively high rates of uninsured persons, a shortage of doctors and nurses, and outstanding geographic barriers to health care demonstrated the importance of approaching the Access to Quality Healthcare Priority. The Health Department and its co-conveners determined that the data provided sufficient evidence that there are unmet needs within the three priority areas determined by the community. Therefore, Access to Quality Healthcare, Chronic Disease, and Physical Activity and Nutrition were identified as the priority areas that will be addressed by the Health Department and collaborating hospitals in the coming five years. Additionally, a discussion of current programs common among the co-conveners and the recent issue of the Novel Influenza (H1N1) Swine Flu outbreak led the group to add Infectious disease as a priority area to be addressed.

Noteworthy Accomplishments

The past several years have seen great accomplishments in health care for Chautauqua County. Featuring collaboration between the Chautauqua County Health Department, the Chautauqua County Health Network, County hospitals, schools, businesses, and other agencies and coalitions, the Steps to a Healthier New York program initiated several efforts that resulted in major accomplishments for the health care industry in Chautauqua County. Many of these accomplishments are listed in the "Local Health Care Environment" section of this document.

The introduction and execution of the "Five A's" tobacco education intervention is a recent accomplishment for the County's hospitals. The "Five A's" intervention is an evidence-based practice that is presented at each patient visit by a nurse or doctor at the hospital. The process is to ask, advise, assess, assist, and arrange. At every visit, a patient is asked about their smoking status, are advised to stop, their readiness to quit is assessed, they are assisted despite their willingness to quit, and a follow-up appointment is arranged. Additionally, each of the hospitals have committed to becoming smoke-free campuses by 2010.

The Chautauqua County Health Department has made tremendous strides in education and outreach to underserved and high risk populations. The human sexuality health educator is actively collaborating with 16 out of 18 school districts, the County Jail, and multiple community organizations. These efforts will prove critical in the effort to reduce unplanned pregnancies and sexually transmitted diseases and HIV and improve responsible, healthy behavior. This also sets the stage for future collaborative education initiatives.

The P² (Pursuing Perfection) Collaborative of Western New York is a not-for-profit organization working to improving the health of people in Western New York. The CCHD, County hospitals, the CCHN and community agencies are partners in this Collaborative and look forward to working together to achieve healthy outcomes. "P2" is striving to reverse the trend of lifestyle changes that have caused unprecedented rates of obesity, obesity related diseases, and other chronic illnesses. The Collaborative focuses on:

- Educating and motivating people in Western New York to make lifestyle changes to prevent illness, and if ill, to help them become well again.
- Ensuring that the community understands that they are partners in their health care, that there are guidelines based on expert opinions that they and their physicians can use together to manage their care.
- Ensuring that the community has access to health care and, when members of the community become ill, they receive the most effective and up to date care.

Goals of the Collaborative include:

- Working with physicians and organizations to enhance access to care and improve efficiency of care.
- Empowering all in the Western New York community to take responsibility for and act on their own wellness.

- Facilitate the development of a community-wide standard for the promotion of wellness that will more clearly identify the results the community seeks to achieve.
- Initiate dialogue with government leadership to promote policy change if needed.

Section 5

Opportunities for Action

The priority areas identified by the CCHD and collaborating hospitals as focus areas are chronic disease, physical activity and nutrition, access to care, and infectious disease. Poor health outcomes identified as high morbidity and/or mortality rates of diabetes, heart disease, obesity and chronic lower respiratory disease are seen in the County due in part to the former three priorities and the fourth is expected to be of major concern in the coming months. Therefore, there are several collaborative ventures that can be pursued to address the health care needs of the community.

Prevention Agenda Priority Area #1: Chronic Disease

Currently the CCHD is charged with maintaining various programs that aid in the prevention of several chronic diseases for community members. During the joint planning meetings, it was determined that the CCHD along with the other members of the Chautauqua County Community Health Planning Team (CCCHPT) would collaborate to tackle diabetes and tobacco use in the County. The following goals and objectives were established.

Diabetes

Chautauqua County Community Health Planning Team Diabetes Action Plan #1

NYSDOH Prevention Agenda Goal 2013: reduce rate of hospitalizations for short-term complications of diabetes to no more than 3.9 per 10,000 adults ages 18+

CCCHPT Goal: Reduce diabetes complications in adults in Chautauqua County

Existing Collaborative Strategies/Initiatives

1. The Chautauqua County Health Department, along with several members of the CCCHPT, is a participating organization of the P2 Collaborative of Western New York. Among other activities, the P2 Collaborative trains Consumer Engagement Associates who go out into the community to empower consumers and advise on lifestyle changes that can prevent disease complications.

Measure of Success:

- Number of trained consumer engagement associates in County

2. The CCHD is a participating member of the Western New York Diabetes Coalition. The coalition incorporates the eight counties of Western New York to develop educational materials and advertisements that are evaluated for cultural competency and effectiveness. The group meets quarterly to discuss innovative initiatives to prevent diabetes and assist those that are managing chronic diabetic conditions. The coalition also awards mini-grants to individual counties to implement programs.

Measures of Success:

- Number of counties who participate
- Numbers of materials and advertisements produced by coalition that reach target population
- Number of diabetics who utilize disease management assistance

Other members of the CCCHPT conduct diabetes management and prevention activities individually at their own agencies. Several hospitals provide diabetes self-management education to diagnosed patients in addition to nutritional classes. WMH provides healthy cooking classes to patients and gives healthy eating tips to diabetics. WCA conducts a Wellness Cardiovascular Risk Assessment and Prevention Program that helps to identify individuals with diabetes and provide risk factor prevention and diabetes care.

New Strategies/Collaborations

1. The Chautauqua County Health Department will collaborate with the Chautauqua County Community Health Planning Team to develop a Chautauqua County Diabetes Prevention Task force to help increase the capacity to reduce the burden of diabetes in the County's targeted urban and rural regions. Networking and focus groups in the community will also be established with the Tri County Diabetes Coalition, the WNY Diabetes Coalition and P2 Collaborative.

Objectives:

- Recruit ten local agencies to participate in Diabetes Task Force
- Locate at least one evidence based program that has been proven to improve diabetes outcomes
- Locate one funding source that will assist in the implementation of the evidence based program

Measures of Success:

- Demonstration of self-management techniques and healthy lifestyle changes after education classes.
- Participation of identified pre-diabetics and diabetics of targeted populations (Hispanics and African Americans) in risk assessment programs.
- Referral of appropriate number of patients to physicians for follow-up after screening.
- Observation of positive changes in blood pressure, physical activity routine, and nutrition.

In addition to the collaborative efforts of the CCCHPT, individual agencies plan to continue their current efforts in diabetes prevention and disease management.

Tobacco

Chautauqua County Community Health Planning Team Tobacco Action Plan #1

NYSDOH Prevention Agenda Goal 2013: reduce prevalence of adult smoking to less than 12%, and reduce prevalence of youths who have smoked in the past month to less than 12%

CCCHPT Goal: Reduce the prevalence of smoking among Chautauqua County residents

Existing Collaborative Strategies/Initiatives

1. The CCHD currently collaborates with Cattaraugus and Allegany Counties on two tobacco programs: Reality Check, geared toward adolescents, and the Tri County Tobacco Free Program,

geared toward adults. Reality Check engages youth leaders to challenge and change community norms regarding tobacco use through civic action. These programs engage middle and high school aged youth in actions aimed at making tobacco use less glamorous and socially acceptable in their communities and exposing the manipulative and deceptive marketing practices of the tobacco industry. The Tri County Tobacco Free Program allocates community partnership funds to engage local stakeholders, educate community leaders and the public, and mobilize community members and organizations to strengthen tobacco-related policies to prevent and reduce tobacco use and limit opportunities for exposure to secondhand smoke.

Measure of Success:

- Tobacco Control Program contractors participate in or develop and implement program evaluation activities as directed by the Tobacco Surveillance, Evaluation and Research Team
- Tobacco Control Program contractors provide information as requested to the independent evaluation contractor.

2. The CCHD, along with CCCHPT, implements the "5A's" 2-minute intervention at all patient visits. This intervention is described in further detail in Section Four of this document.

Measure of Success:

- Increased number of referrals to the Smokers' Quitline, smoking status and willingness to quit of patients at following visits

The CCHD supplies Nicotine Replacement Therapy to hospitals and directly to County residents who desire to quit smoking. The CCHD will continue to supply NRT products until stocks are exhausted.

Measure of Success:

- Increased number of participants who successfully quit smoking.

The hospitals that participate in the CCCHPT all integrate the "5A's" 2-minute intervention strategy into patient visits. Additionally, each of the hospitals are either currently or working toward becoming smoke-free campuses. Westfield Memorial Hospital has taken an active role in tobacco cessation by training several staff members to become Cessation Certified, who then facilitate smoking cessation among other staff, patients, and community members. They are also active in tobacco prevention in schools and distribute posters and educational information throughout the hospital and in the community.

New Strategies/Collaborations

1. Whether in collaboration with the CCCHPT or by itself, the CCHD plans to expand its tobacco cessation efforts by including a media campaign that advertises County tobacco services. This media campaign may involve television programming, advertisement through local media, a billboard, or any combination of the previously mentioned methods.

Objectives:

- Locate one funding source to pay for media campaign.
- Decide upon one evidence-based media approach.

Measures of success:

- Increased number of individuals who access services following media campaign compared to those prior to the campaign.

Hospitals will continue to implement the "5A's" 2-minute smoking cessation intervention and continue to work toward becoming smoke-free campuses. Those who conduct additional programming will continue to do so.

Prevention Agenda Priority Area #2: Access to Care

The Access to Care portion of Section 3 discussed the dire need for improved access among County residents. Specifically, there are physician shortages, uninsured and underinsured persons, transportation barriers, service gaps, and too few physicians who accept Medicaid.

Chautauqua County Community Health Planning Team Access Action Plan #1

NYSDOH Prevention Agenda Goal 2013: 100% coverage among residents

CCCHPT Goal: Increase the number of County adult residents with health care coverage

Existing Collaborative Strategies/Initiatives

1. All members of the CCCHPT refer consumers to the Get Covered Helpline. The Get Covered Helpline is a program that was initiated by CCHN to provide a bridge between health care providers, insurance companies, community agencies, and the public. The program helps many people find affordable health care coverage and gives them access to needed health care services.

Measure of Success:

- Increase in the number of calls Get Covered Helpline receives compared to previous year data.

2. All members of the CCCHPT participate in the Community Health Initiative (CHI) which is a committee charged with providing direction and feedback on activities related to increasing community involvement in locally-generated and innovative solutions to issues related to the system of accessing health care and health care coverage.

Measure of Success:

- Consistent attendance and participation of members at meetings.
- Demonstration of consistent and active involvement of members in initiatives.

3. All members of the CCCHPT are involved and participate in the Chautauqua County Cancer Services Program which is funded through the NYSDOH to provide breast and cervical screening for uninsured women and colorectal screening for uninsured men and women. The program provides outreach and education about the importance of timely cancer screening as well as case management during the screening process. Patients receive services through private physicians' offices or through the Health Department Clinics in Jamestown and Dunkirk. Outreach and education are designed to reach specific target populations and encourage those individuals to complete recommended screening. The program can also assist with physician navigation for insured individuals on an as needed basis.

Measure of Success:

- Achievement of screening goals as outlined in the CSP workplan.

In addition to the above programs, the hospitals who participate in the CCCHPT provide charity care to patients. Both Westfield Memorial Hospital and WCA provide facilitated enrollment education during a patient's billing process. Brooks Memorial Hospital and TLC have initiated a Health Transaction Card program that allows uninsured patients access to a set fee scale.

New Strategies/Collaborations

1. While continuing to actively participate in the Community Health Initiative and the Health Care Workforce Advisory Committee, the CCCHPT will seek out additional systems that provide access to quality services and meet the needs of consumers.

Objective:

- Locate two systems that help individuals to access health care coverage.

Measure of success:

- Increased number of residents with health care coverage as a result of two additional systems.

Chautauqua County Community Health Planning Team Access Action Plan #2

NYSDOH Prevention Goal 2013: 96% with regular provider

CCCHPT Goal: Increase the numbers of primary healthcare providers through recruitment and retention in Chautauqua County.

Existing Collaborative Strategies/Initiatives

1. All members of the CCCHPT participate in the Health Care Workforce Advisory Committee (HCWAC), which collaborates locally and regionally with area hospitals, the health department, and physician offices to address issues in regard to the recruitment of specialists to the County.

Measure of Success:

- Additional primary care providers who are recruited into the community will be calculated.
- Additional specialty care providers who are recruited into the community will be calculated.
- Existing health care providers will be tracked to ensure that they have not left the County to practice elsewhere.

2. The CCHD provides many medical services to the County through Department-sponsored clinics, school-based clinics, travel clinics and other specialty clinics at three sites. Clinics are offered for family planning, tuberculosis, immunization, MOMS and HIV and STD testing. Services are available at low-cost or no cost to members of the public. Family Health Programs include evaluations, clinical and therapeutic services, education, case management and consultation to individuals and groups at work, at school, and in public health centers. Program areas include child health, early intervention, lead poisoning prevention, maternal and prenatal care, family planning, nutrition, injury prevention and control. Clinics are offered for family planning services, including pregnancy testing, prenatal support services and breast, cervical and colorectal cancer screening.

Measure of Success:

- Increased number of residents who employ County services.
- Decreased teen pregnancy rates.
- Increased rates of immunization.
- Decreased number children who demonstrate elevated blood lead levels.

3. The CCHD Early Intervention program serves children from birth up to the age of three years who are at risk for developmental delay. Services available to eligible children include: occupational therapy, physical therapy, speech therapy, vision services, special education, audiology, nursing, assistive technology service, family training, counseling, parent support groups, medical services for diagnostic or evaluation purposes, nutrition, psychological services, health services and transportation and related costs. The Preschool Special Education program provides services for the three to five year-old population. Services are provided in a variety of settings. The Chautauqua County Health Department provides assistance through the Physically Handicapped Children's Program for eligible children.

Measure of Success:

- All children in need of services receive most appropriate, least restrictive services.
- Seamless transition of participants from the Early Intervention Program to the Preschool Program.

New Strategies/Collaborations

1. In order to better serve the needs of uninsured and under-insured County residents, the CCHD hopes to expand the clinic hours at their Jamestown and Dunkirk locations.

Objective:

- Locate funding sources that can be used to expand clinic hours.

Measure of Success:

- Adequate funding secured to expand clinic hours.
- Increased number of patient visits.

2. The CCHD will continue to pursue providers who may be interested in incorporating their practices into Federally Qualified Health Centers.

Objective:

- To find one provider who is willing to operate an FQHC.

Measure of success:

- A provider makes an application for an FQHC.

3. The CCCHPT, with HCWAC, will work to develop a comprehensive physician recruitment plan. This plan will map out the process for conducting physician recruitment based on successful models from similar communities across the country.

Objectives:

- Establish a community support group to enhance recruiting visits.
- Locate one funding source that can be used for incentives, loan repayment, and recruitment costs.
- Arrange at least three meetings per year with local students and practitioners for recruitment back to the area.

Measure of Success:

- Process will be tracked to determine if there are increased numbers of physicians who are recruited into the County.

One of the main goals of the CCHN is to recruit and help to retain physicians into the area. The organization has begun an endowment with the Community Foundation that provides loan repayment and incentives for physicians to practice in Chautauqua County. WCA Hospital also works in partnership with its board, area healthcare providers and medical staff to ensure recruitment and retention of board certified physicians in the community. Westfield Memorial Hospital and Brooks Memorial Hospital have special needs for a new pediatrician in the area.

Prevention Agenda Priority Area #3: Physical Activity and Nutrition

Chautauqua County Community Health Planning Team PA and Nutrition Action Plan

NYSDOH Prevention Goal 2013: Reduce percentage of adults who are obese to less than 15%, reduce percentage of children who are obese to less than 5% for 6-19 year olds and to less than 11.6% for 2-4 year olds

CCCHPT Goal: Reduce the prevalence of childhood and adult obesity in Chautauqua County

Health behaviors such as limited physical activity, low fruit and vegetable intake and sedentary work environments, in addition to high proportions of obesity in the County, forecast a future of poor health outcomes for County residents if nothing is done to combat these behaviors. The CCHD will combine efforts with Westfield Memorial Hospital to promote preventive health behaviors in the County.

Existing Collaborative Strategies/Initiatives

1. The CCHD's Health Education program performs physical activity and nutrition education outreach to the community in schools, businesses, and at community health fairs.

Measure of success:

- Increased numbers of participants
- Adoption of healthier lifestyle behaviors by participants.

New Strategies/Collaborations

1. Westfield Memorial Hospital has plans in place to develop a High Level Wellness program that will involve the promotion of aerobic exercise and nutrition. To maximize aerobic exercise within local communities, the hospital will work to promote the expansion of walking paths. Educational cooking classes which are already offered by WMH will be expanded to other communities and schools to increase outreach. The CCHD will provide guidance and assist in promotion of the High Level Wellness Program.

Objectives:

- Expand walking paths to one additional village per year from 2010 to 2012 in the WMH service area. Potential villages include Mayville, Ripley, Brocton/Portland, and Sherman.
- Incorporate healthy cooking lessons (focusing on decreased fats, salts, and simple carbohydrates) into local school classes at the rate of one additional school per year from 2010 to 2012. Five potential school districts have been identified.

Measure of success:

- Participant evaluation at completion of each program and attendance at events.
- Establishment of one walking path per year.
- Participation of two schools per year in healthy cooking/eating program.

2. The CCHD will work collaboratively with Westfield Memorial Hospital and other interested hospital partners on a worksite wellness program.

Objectives:

- Locate one funding source that can be used to fund the development of a worksite wellness program.
- Decide on one evidence-based worksite wellness plan to initiate at CCHD and WMH.
- Locate two evidence-based community health intervention strategies to be implemented in the community.
- Achieve employee participation of 50% at each worksite involved in program.

Measure of success:

- Participation of employees will be tracked to determine if 50% is achieved.
- Surveys and progress reports will determine if participants increased fruit and vegetable intakes and whether they lost weight as appropriate.

3. The CCHD will provide a holistic health education program to County school districts which includes human sexuality education, nutrition and obesity prevention, injury prevention, rabies education, lead poisoning prevention, and communicable disease prevention. The focus of this program will be responsible, healthy choices to promote well-being, personal responsibility, and prevent disease and injury. Specifically, the CCHD hopes to effectively communicate age-appropriate health education to school students and to relay the importance of healthy behaviors.

Objectives:

- Recruit one school district per year to collaborate with the CCHD, beginning with Chautauqua Lake Central School.

Measure of success:

- School districts will be tracked as they become involved in the holistic health education program.
- Demonstration of positive impact of programs and comprehension of material through staff and student evaluations at schools.

4. The CCHD, along with interested hospitals and community partners, will be involved in the formation of a task force to address the issue of childhood obesity among County youth. Representatives from youth-serving agencies, schools, churches, chefs, government agencies, health care organizations, and concerned parents will convene to discuss the barriers to healthy lifestyles specific to Chautauqua County. The group will develop a strategic plan focusing on environmental changes and policy reform. Evidence-based programming (e.g. Way To Go Kids, Eat Well Play Hard, etc.) and existing movements (e.g. Let's Move) will be promoted throughout the community.

Objectives:

- Develop a strategic action plan to promote lifestyle changes in one specific community that can be tested, improved, and distributed to other communities.
- Involve and connect agencies and individuals that represent all sectors of society that influence all parts of a child's life (e.g. schools, farms, after-school activities, parents, restaurants, government officials).

Measures of success:

- Two schools will be involved in process and interested in making environmental or policy changes by 2012.
- One funding source will be located to jumpstart sustainable community changes.
- One environmental change will be implemented in the community of choice by 2012.

Prevention Agenda Priority Area #4: Infectious Diseases

Chautauqua County Community Health Planning Team Infectious Disease Action Plan

NYSDOH Prevention Goal 2013: Increase the percentage of adults aged 65+ who had a flu shot in the past year is at least 90%

CCCHPT Goal: Reduce incidence of flu through enhanced immunization and prevention education

Existing Collaborative Strategies/Initiatives

1. The CCHD's Immunization Program provides vaccinations for children and adults against vaccine preventable disease by the administration of CDC recommended immunizations. International travel vaccinations are also available for community residents travelling to developing countries in order to prevent illness and to reduce communicable disease importation upon return.

Measure of success:

- Increased number of residents who obtain vaccinations from the CCHD and community/hospital clinics

2. The CCHD receives information regarding the H1N1 emergency response action plans from the NYSDOH and the CDC and distributes the information to community partners involved in the CCCHPT.

Measure of success:

- CCCHPT partners receive and demonstrate understanding of information disseminated from CCHD.

The hospitals involved in the CCCHPT have taken further steps within their agencies to stop the spread of disease. All partners plan to provide flu vaccinations when they become available to health care workers. Specific plans include providing respirator masks to employees, implementing in-house contagious disease plans (signs posted throughout building, masks available for patients at all entrances, etc.) and promoting prevention education at staff meetings, health fairs, schools and businesses.

New Strategies/Collaborations

1. The CCCHPT will enhance its efforts to educate the public about the importance of immunizations and provide personal hygiene reminders that can help to prevent the spread of disease. Partnerships will be formed between community agencies and CCCHPT members to most effectively distribute disease prevention education.

Objectives:

- Develop at least one evidence based media campaign.
- Recruit 10 agencies to assist in the distribution of prevention education messages.
- To ensure that at least 60% of prioritized populations for H1N1 vaccine receive the immunization.

Measure of success:

- Public health messaging will be evident throughout the County, including health care facilities, schools, community agencies, and places for social and religious gathering.
- School and health care facility reporting to CCHD will demonstrate the avoidance of clusters of disease outbreaks.
- Vaccination reports will be tracked to determine whether the 60% immunization goal among prioritized populations has been achieved.

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