Perinatal Issues and Needs in the Mohawk Valley
Mohawk Valley Perinatal Network

Executive Summary

The Comprehensive Prenatal - Perinatal Services Networks of New York

The creation of the Perinatal Networks system in New York State dates to 1986 when Governor Mario Cuomo's "state of the state" message included a call to reduce the incidence of infant and mother mortality and the incidence of developmental disabilities in New York State. To address this goal, the Comprehensive Prenatal-Perinatal Services Networks program (CPPSN) was established under the authority of the State Department of Health. The initial system was launched with 5 networks: one in each of the boroughs of New York City and one in the city of Buffalo. It now funds16 networks, and the number of counties covered grew from 5 in 1986 to 40 in 2005. Each Perinatal Network fosters coordination of services through the means of consortia, other partnerships, and task forces. [1]

The Mohawk Valley Perinatal Network

The Mohawk Valley Perinatal Network is a not-for-profit, non-aligned, community-based organization. Established in 1996, it serves Oneida and Herkimer counties. Along with the other Perinatal Networks in New York State, it shares this purpose: to coordinate services needed by infants and women of childbearing age, to assure that appropriate services are available and to eliminate all barriers to accessing those services. Specifically, MVPN's mission is to improve birth outcomes and maternal, child and family health.

MVPN works toward this mission in a variety of ways. Its partnerships with local health and human services agencies and providers, and state and local government offices strengthen the region's ability to impact perinatal health. And its assessment of community needs offers guidance to agencies and providers as they develop capacity to serve the perinatal needs of their community.

The Network's education and outreach efforts for consumers support expectant families, teens, refugees and nursing students through such programs as Community Baby Showers and Boot Camp for Dads, targeted presentations, and the Annual Nursing Student Conference (provided in collaboration with local college and university nursing departments.)

The education and outreach efforts for its health and human services providers includes the annual Topics in Perinatal Health Conference, presentations on current health topics to community childcare workers and health related agencies, and meetings that offer opportunities for OB Nurse Managers, WIC staff and Lactation Consultants to network.

The Herkimer County Healthy Start Partnership and the Oneida County Community Health Assessment Advisory group are two other examples of the collaborations in which the MVPN takes part. In the course of its service to regional perinatal health, it makes use of collaboration at the community, regional and state levels. In addition, the MVPN Consortium provides participants (local agencies, health and human services providers, consumers and businesses) the opportunity to hear speakers on topics related to maternal, child and family health, and to share information, resources and best practices. [2]

For a full listing of programs and services, visit www.newfamily.org

The Mohawk Valley Perinatal Network Needs Assessment Report

This report makes use of data from county, state and federal agencies, as well as data collected through focus group sessions with clients and phone interviews of health and human services providers.

Key sources of data are listed below:

CNY and NY Regional Perinatal Data System
Healthy People 2010
NYS Department of Health: Vital Statistics, SPDS Data, STD Data, HIV/AIDS Surveillance Report
NY Statistical Information System Data, Program on Applied Demographics, Cornell University
US Census Bureau 1990 and 2000 Census

Other sources of data:

The Mohawk Valley Resource Center for Refugees
National Immunization Survey (NHS)
New York Department of Labor
New York Office of Temporary and Disability Assistance
YWCA of Utica, NY

Existing reports and documents, such as the 2004 MVPN needs assessment, were also used as references and resources.

As well, MVPN researched barriers to health care and support services for women, children and families by means of a telephone survey and focus group discussions. The survey drew information from twenty health care and human services agencies and organizations. They range from a single site organization that serves primarily local clients, to multiple site organizations that serve clients across the region or country. They include state, county, private, and church-based organizations that offer services ranging from education programs to surgical procedures to help in filling out forms. The numbers of clients served by each ranged from well under 100 to over 10,000. The health issues represented by these agencies also has a broad range and, besides pregnancy, include birth control, nutrition, domestic violence, mental health, food insecurity, financial insecurity, drug abuse, developmental delays, and sexually transmitted disease.

The eight focus group discussions were the result of a collaboration between the Mohawk Valley Perinatal Network and a team of students and faculty from Colgate University. Held in various community locations, these research discussions focused specifically on issues of access to pre and postnatal health care in the region. They provided a venue for thirty-three pregnant women, new mothers, and partners/fathers to share their experiences with health and human services within the community served by MVPN.

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Key Findings

Population Loss
Both Herkimer and Oneida Counties are classified as Population Loss counties by the US Department of Agriculture's Economic Research Service, meaning they lost population in both the 1980s and 1990s.[3] According to population projections, this loss is expected to continue through 2035, while the NYS projections estimate growth in population. Both counties are also classified as metro counties. Since only 6% of metro counties experienced this sort of entrenched population loss, health services and care providers will have few models to look to in addressing problems related to population loss.

Poverty
The NYS poverty rate, according to the 2000 census, is 14.6%. For urban area/clusters in the two-county region, the poverty rate ranges between 14 and 16.7%. Outside these areas/clusters, the poverty rate is 8.7%. This rural/urban difference in poverty rates is meaningful for the two counties MVPN serves. While each has two urban clusters/areas, Herkimer's population is more than 50% rural and Oneida's is just over 35% rural. Although Herkimer's median income is lower and its unemployment rate higher, its overall poverty rate is slightly lower.

Transportation
Trouble with transportation was the barrier to accessing services most frequently cited by the survey respondents and was often brought up by the focus group participants.

Insurance
The survey of health service and health care providers includes a question about differences between un- or underinsured and insured patients regarding scheduling, treatment, compliance, and financial activities. The responses could reflect a two-tiered system that offers separate services to the insured and the uninsured.

Agencies did not indicate that women reported to them about difficulties with insurance. However, this was a frequent topic in the focus groups.

Screening and Referrals
Among the agencies surveyed, ready knowledge of demographics concerning client pregnancy and parenting is apparently low; opportunities for making referrals may be correspondingly low.

Few of the surveyed providers screen clients and provide health education on the topics of safer-sex or nutrition and weight management. One of the agencies that offers safer-sex services reached capacity eighteen months ago. Another reported that its parenting programs are full.

Local data is not available for the rate of incidence of Domestic Partner Violence (previously termed Domestic Violence) and Perinatal Mood Disorders in either Herkimer or Oneida Counties. Estimates must therefore be drawn from New York State figures. Since these counties are seldom in line with New York State figures for other health concerns, such estimates are an inadequate tool for planning.

While local information about rates of immunization is currently not readily available, a statewide immunization registry is planned.

Adolescent and Older Mothers Pregnancy Rates

Birth rate: Between 2003 and 2005, Herkimer County saw a 52% decrease in birth rate for 15-17 years olds, but lost some of that ground in 2006 and 2007 with a small upward rise that reduced the 2003-2007 improvement to 36%. In Oneida County, the birth rate for 15-17 year olds rose slightly each year from 2003 until a drop in 2007 resulted in an overall improvement of 8%. In comparison, the Central New York Region birth rates for this age group dropped between 2001 and 2004 but then steadily rose back to 2003 levels. These three areas' birth rates are all significantly lower than the national average of 22% for 15-17 year olds.

Proportion of births by age: There has been a decrease in the proportion of births among mothers 19 years of age and under in both Herkimer and Oneida counties. This may be in keeping with the ageing of the population in this region. However while Oneida county's percent for this age group dropped by little more than half a percent between 1999 and 2007, the drop in Herkimer county was 35%, with the drop in the second four years almost double that of the drop in the first four years.

On the other hand, for the two counties the proportion of births among older mothers rose 12% over the 1999-2007 period. Since infant mortality rates for infants of teens and mothers over forty are the highest of all age groups, a shift in the number of these births could be significant to the services required of the Mohawk Valley Perinatal Network.

Birth Delivery Type

Healthy People 2010 objectives call for a reduction in the rate of C-Section births for women giving birth for the first time. However, trends in the data indicate the rates for Cesarean births are increasing.

Premature Births

The rate of premature births from 2004 – 2007 is higher than the rate from 1999 – 2003 for Herkimer County, Oneida County, and the CNY Region. In general, the rate in Herkimer County is lower than in Oneida County. From 2004-2007, the premature birth rates for the urban 13501 and 13502 zip codes were higher than for Oneida County, within which these zip codes are located, and higher than the CNY Region.

Low Birthweight Infants

The Healthy People 2010 target is for fewer than 5% of births to be low birthweight and 0.9% to be very low birthweight (less than 1500 grams).

Over the past nine years, there has been fluctuation in the percentages of infants who were born with low birthweight in Herkimer and Oneida Counties. However, similar to a nationwide trend, the average percentage of low birthweight babies in 2004-2007 is higher than the previous five year average. In general, the percentage of low birthweight babies born in Herkimer County is lower than the CNY Region percentage and the percentage of babies in Oneida County born with low birthweight is higher than the CNY Region.

During the focus groups, participants complained that they could not get whole or 2% milk through WIC, even for low weight babies.

Early Prenatal Care
The percent of women receiving early prenatal care in Herkimer and Oneida counties has fluctuated over the last nine years, but never gotten far from its current level of 75%. This is short of the Healthy People Goal of 90%.

Difference across Age Groups. In 2003, among all age groups, there was little difference in the rate of early prenatal care in the two counties – both at about 71%. And teenage mothers in the two counties were significantly less likely to receive early prenatal care, with Oneida teens about 12% more likely than their Herkimer counterparts to receive such care. However, during 2004-2007 the situation in Herkimer changed: the proportion of teen mothers decreased, and the likelihood that they would receive early care increased 21%. During this same time frame, Oneida counties numbers changed very little, and while Herkimer also made gains in early prenatal care for 20-24 year olds, early prenatal care for that age group in Oneida County decreased. *See* Insurance for a parallel change.

Difference Across Race. The number of women of color giving birth in Herkimer County increased between the time periods of 1999-2003 and 2004-2007. However, it remains statistically very small. Therefore conclusions here are based on Oneida County and the CNY Region. Comparing 1999-2003 and 2004-2007 data, the percent of white women who received early prenatal care changed by less than one percent in both the CNY Region and in Oneida County. For both areas, African-American women were less likely than other women of any race to receive early prenatal care. In the CNY Region the disparity between early prenatal care for African American women and white women dropped by 4%, but it rose by 6% in Oneida County.

In Oneida County the percent of women receiving early prenatal care decreased for all non-white women. Given that the proportion of these women giving birth increased 39% in Oneida County between 1999-2003 and 2004-2007, addressing the early prenatal care for this group will be an important issue for the MVPN.

Breastfeeding
For the past nine years, women in Herkimer and Oneida Counties have been less likely to be breastfeeding at discharge than the CNY Region overall. While the rates of breastfeeding have increased during the past four years in both counties, improvement has significantly lagged behind that in CNY Regions: CNY Region (13%), Herkimer County (11%), and Oneida County (7%).

Among focus group participants, cans of formula had high visibility in the care they were offered.

Infant Care
Many women in the focus groups commented that the nutritional information that was offered to them focused on nutrition during pregnancy. Very little information was geared to nutrition for the baby. Several women in a focus group commented that they would be very happy to find a class that could teach them how to take care of their baby.

Infant Mortality
The mortality rates for children under one year of age are higher in Oneida County than either Herkimer County or the rest of New York outside of New York City. Due to the low numbers of deaths, caution must be used about conclusions for this data.

Mother's Educational Level
Women's level of education is directly tied to the welfare and survival of their children.[4] Both Herkimer and Oneida countries saw gains in mother's educational attainment. Higher levels of education may also be an indicator of likelihood to obtain and understand health-related information. The focus group discussions seem to indicate that much of the educational material offered to women is reading material, and therefore relies on a presumed level of reading proficiency. At least one focus group member reported that the reading level was too difficult for her.

Sexually Transmitted Infections
Herkimer County's rates for gonorrhea and chlamydia were much lower than the Central New York area. Oneida County's rate for gonorrhea was higher but still lower for chlamydia than the Central New York area. However, Oneida County's rate for syphilis is higher than the Central New York region.

HIV
The New York State Department of Health reports that, as of December 2006, there were 36 people living with HIV or AIDS in Herkimer County and 295 in Oneida County. These figures are excluding prisoners, defined as persons incarcerated in state correctional facilities at the time of diagnosis.

Smoking, Alcohol and Substance Use
Over the past nine years the rate of teenage women who indicated they were smoking during pregnancy in 2007 has dropped almost 10%, the rate for women between 20 and 34 has remained about the same, and the rate for older pregnant women (35 and older) has dropped slightly.

According to Regional Perinatal Data System data, very few women report using alcohol or illegal drugs during pregnancy. In both Herkimer and Oneida Counties, women were more likely to report using illegal drugs than alcohol.

DEMOGRAPHIC PROFILE OF SERVICE AREA

Geography

Herkimer and Oneida Counties are located in Central New York west of the Capital District and east of Syracuse, NY. The New York State Thruway cuts through the southern section of the two counties where the population density is the greatest. The northern sections of both counties are more rural and less populated. Hamilton, Fulton and Montgomery Counties lie to the east of Herkimer while St. Lawrence County is to its north and Otsego County is south. Oneida County is bordered by Lewis County to the north, and Oswego and Madison Counties to its west. Together, Herkimer and Oneida Counties comprise the Utica-Rome Metropolitan Statistical Area (MSA).

Herkimer County is comprised of 19 towns, 10 villages, and one city, Little Falls. It contains nearly 1,412 square miles of land. More than 51% of the population lives in rural areas. Herkimer County is not very densely populated at nearly 46 people per square mile. The northern portion of Herkimer County is inside the "Blue Line" of the Adirondack Park.

Oneida County is comprised of 26 towns, 19 villages, and 3 cities, Utica, Rome, and Sherrill (the smallest city in New York State). It has 1,213 square miles of land. Not as rural as Herkimer County, almost 36% of the population lives in rural areas. Of the two counties, Oneida County is geographically smaller but more heavily populated with 187 people per square mile. A portion of northern Oneida County is also in the Adirondack Park.

Perinatal data is collected by the New York State Department of Health, through the State Perinatal Data System (SPDS). Regional centers are provided data to analyze for each New York State region. Oneida County lies in the Central New York (CNY) Region and Herkimer County was shifted from the CNY Region to the Northeast New York Region in 2002. The Central New York Region is comprised of 13 counties that include Broome, Cayuga, Chenango, Cortland, Jefferson, Lewis, Madison, Onondaga, Oneida, Oswego, St. Lawrence, Tioga, and Tompkins. Because Oneida County births account for more than 80% of births in the Mohawk Valley Perinatal Network area, the Central New York Region is used for comparative purposes when analyzing perinatal data, despite Herkimer County not being part of the region.

Population

According to the 2000 Census, the population of the Mohawk Valley Perinatal Network's service area totaled 299,896 people. This is a 5.3% decline from the 1990 population count of 316,633. New York State, by contrast, had an overall increase of 5.5% during the same time period. Oneida County had a greater loss of population (6.1%) than Herkimer County (2.1%). In addition, the female population decreased more than the male population in both counties.

Table 1: Population by Sex

(Source: U.S. Census Bureau, 1990 and 2000 Census)

	Herkimer County			Oneida County			Combined			NYS		
	1990	2000	% change	1990	2000	% change	1990	2000	% change	1990	2000	% change
Population	65,797	64,427	-2.1%	250,836	235,469	-6.1%	316,633	299,896	-5.3%	17,990,455	18,976,457	5.5%
Male	31,769	31,248	-1.6%	124,145	116,913	-5.8%	155,914	148,161	-5.0%	8,625,673	9,146,748	6.0%
Female	34,028	33,179	-2.5%	126,691	118,556	-6.4%	160,719	151,735	-5.6%	9,364,782	9,829,709	5.0%

In Herkimer County, more than half of the population resides in rural areas, while in Oneida County, nearly two-thirds reside in urban areas. This contrasts with New York State where 87.5% of the total residents reside in urban areas.

Table 2: Urban and Rural Population

(Source: U.S. Census Bureau, 2000 Census)

	Herkimer County	Oneida County	Service Area Total	NYS
Total Population	64,427	235,469	299,896	18,976,457
Urban Population	31,421	151,858	183,279	16,602,582
Urban Population %	48.8	64.5	61.1	87.5
Rural Population	33,006	83,611	116,617	2,373,875
Rural Population %	51.2	35.5	38.9	12.5
Land Area (sq miles)	1,412.8	1,257	2,669.8	47,214
Population Density (persons per square mile)	45.6	187.3	112.3	401.9

Urban Population

There are three urban clusters[1] and one urbanized area[2] in the Mohawk Valley Perinatal Network's service area. These regions are used to define urban population rather than relying specifically on cities because the communities that are part of urban clusters and urbanized areas tend to provide greater access to public transportation and community services than outlying rural areas. The Rome Urban Cluster and Utica Urbanized area fall primarily within Oneida County while the Little Falls and Ilion-Herkimer Urban Clusters lie within Herkimer County.

Table 3: Population in Urbanized Area/Urban Clusters

(Source: U.S. Census Bureau, 2000 Census)

	Population
Ilion Herkimer Urban Cluster	25,015
Little Falls Urban Cluster	5,095
Rome Urban Cluster	34,164
Utica Urban Cluster	113,409
Total Urbanized Area/Cluster	177,683
Outside Urban Area/Cluster	122,213

Race and Ethnicity

Racial minorities comprise 32.1% of New York State but just 8.1% of the MVPN's service area. Herkimer County residents report 97.8% white, and Oneida County is somewhat more diverse with 5.5% African American and 3.2% Hispanic of any race.

Table 4: Population by Race

(Source: U.S. Census Bureau, 2000 Census)

	Herkimer County		Oneida County		Service Area Total		NYS Comparison	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	64,427		235,469		299,896		18,976,457	
White	63,031	97.8%	212,414	90.2%	275,445	91.8%	12,893,689	67.9%
African American	329	0.5%	13,521	5.7%	13,850	4.6%	3,014,385	15.9%
American Indian or Alaska Native	139	0.2%	549	0.2%	688	0.2%	82,461	0.4%
Asian, Hawaiian Native, or Pacific Islander	274	0.4%	2,777	1.2%	3,051	1.0%	1,053,794	5.6%
Other*	113	0.2%	2,625	1.1%	2,738	0.9%	1,341,946	7.1%
Two or more races	541	0.8%	3,583	1.5%	4,124	1.4%	590,182	3.1%
Hispanic, of any race**	580	0.9%	7,545	3.2%	8,125	2.7%	2,867,583	15.1%

*Some other race alone, not identified above

** This category overlaps the numbers found in other races

[1]A densely settled area that has at least 2,500 people but less than 50,000.

[2]An area consisting of a central place(s) and adjacent territory with a general population density of at least 1,000 people per square mile of land area that together have a minimum residential population of at least 50,000 people.

The cities of Rome and Utica in Oneida County have higher percentages of minorities than the county as a whole. Rome's minority population is nearly 13% while Utica's minority population exceeds 20%. The largest minority population in both cities is comprised of African Americans, 7.6% in Rome and 12.9% in Utica. Hispanics of any race make up 4.7% of the population in Rome and 5.8% in Utica.

Table 5: Population by Race
(Source: U.S. Census Bureau, 2000 Census)

	City of Rome		City of Utica	
	Number	**Percent**	**Number**	**Percent**
Total:	34,950		60,651	
White alone	30,704	87.9%	48,166	79.4%
Black or African American alone	2,650	7.6%	7,838	12.9%
American Indian and Alaska Native alone	93	0.3%	170	0.3%
Asian alone	309	0.9%	1,341	2.2%
Native Hawaiian and Other Pacific Islander alone	6	0.0%	29	0.0%
Other*	473	1.4%	1,309	2.2%
Two or more races	715	2.0%	1,798	3.0%
Hispanic or Latino of any race**	1,648	4.7%	3,510	5.8%

*Some other race alone, not identified above

** This category overlaps the numbers found in other races

Women of Childbearing Age

Women of childbearing age (15-44) comprise just under twenty percent (20%) of the population of Mohawk Valley Perinatal Network's service area. This is almost 3% less than the New York State population of women of childbearing age. The largest difference between state and local percentages is in the 20-39 age group, where women make up 14.9% of the population in New York State and women comprise 12.2% of the population in the MVPN service area.

Table 6: Women of Childbearing Age

(Source: U.S. Census Bureau, 2000 Census)

		Total Age 15-44	15-19	20-29	30-39	40-44
Herkimer County	Number	12,670	2,361	3,356	4,428	2,525
	Percent of Population	19.7%	3.7%	5.2%	6.9%	3.9%
Oneida County	Number	45,638	7,953	12,635	16,161	8,889
	Percent of Population	19.4%	3.4%	5.3%	6.9%	3.8%
Service Area Total	Number	58,308	10,314	15,991	20,589	11,414
	Percent of Population	19.4%	3.4%	5.3%	6.9%	3.8%
CNY Region	Number	346,633	63,360	101,675	116,840	64,758
	Percent of Population	21.3%	3.9%	6.3%	7.2%	4.0%
NYS	Number	4,213,932	625,927	1,285,690	1,533,069	769,246
	Percent of Population	22.2%	3.3%	6.8%	8.1%	4.1%

In urban areas, Rome's Urban Cluster has the lowest proportion of women of childbearing age while the Ilion-Herkimer Urban Cluster has the highest proportion. Their percentage of women of childbearing age is higher than the other clusters in the 15-19 and 20-29 age groups.

Table 7: Women of Childbearing Age

(Source: U.S. Census Bureau, 2000 Census)

		Total Age 15-44	15-19	20-29	30-39	40-44
Ilion-Herkimer Urban Cluster	Number	5,041	1,016	1,518	1,594	913
	Percent of Population	20.2%	4.1%	6.1%	6.4%	3.6%
Little Falls Urban Cluster	Number	953	150	294	315	194
	Percent of Population	18.7%	3.0%	5.8%	6.2%	3.8%
Rome Urban Cluster	Number	6,192	980	1,926	2,134	1,152
	Percent of Population	18.1%	2.9%	5.6%	6.2%	3.4%
Utica Urbanized Cluster	Number	21,748	3,745	6,668	7,359	3,976
	Percent of Population	19.2%	3.3%	5.9%	6.5%	3.5%

Households

Almost 33% of households in both Herkimer and Oneida Counties have children under 18 years of age. This compares to 35% of households in New York State. In Herkimer County, 68% of these households are headed by married couples, whereas 66% of the households in Oneida County are headed by married couples. Both percentages are higher than the statewide figure of 65%. Male householders with children account for a higher percentage in both Herkimer (9.6%) and Oneida (7.8%) Counties than in New York State (6.5%). The percentages of female householders with children in Herkimer (20.7%) and Oneida (24.8%) Counties is lower than the statewide percentage of 27.5%.

Table 8: Household Type

(Source: U.S. Census Bureau, 2000 Census)

	Herkimer County		Oneida County		New York State	
	Number	Percent	Number	Percent	Number	Percent
Total Households	25,734		90,496		7,056,860	
1-Person household:	**7,106**	**27.6%**	**26,731**	**29.5%**	**1,982,742**	**28.1%**
Male householder	2,963	11.5%	10,929	12.1%	822,308	11.7%
Female householder	4,143	16.1%	15,802	17.5%	1,160,434	16.4%
2-or-more-person household:	**18,628**	**72.4%**	**63,765**	**70.5%**	**5,074,118**	**71.9%**
Family households:	17,101	66.5%	59,170	65.4%	4,639,387	65.7%
Married-couple family:	13,183	51.2%	44,474	49.1%	3,289,514	46.6%
Other family:	3,918	15.2%	14,696	16.2%	1,349,873	19.1%
Male householder, no wife present:	1,270	4.9%	3,807	4.2%	311,697	4.4%
Female householder, no husband present:	2,648	10.3%	10,889	12.0%	1,038,176	14.7%
Nonfamily households:	1,527	5.9%	4,595	5.1%	434,731	6.2%
Male householder	876	3.4%	2,693	3.0%	242,900	3.4%
Female householder	651	2.5%	1,902	2.1%	191,831	2.7%

Table 9: Households with People under 18 Years of Age

(Source: U.S. Census Bureau, 2000 Census)

	Herkimer County		Oneida County		Service Area Total		New York	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Households with one or more people under 18 years:	**8,453**		**29,560**		**38,013**		**2,466,483**	
Family households:	8,328	98.5%	29,180	98.7%	37,508	98.7%	2,443,450	99.1%
Married-couple family:	5,764	68.2%	19,557	66.2%	25,321	66.6%	1,606,928	65.2%
Other family:	2,564	30.3%	9,623	32.6%	12,187	32.1%	836,522	33.9%
Male householder, no wife present:	815	9.6%	2,294	7.8%	3,109	8.2%	159,373	6.5%
Female householder, no husband present:	1,749	20.7%	7,329	24.8%	9,078	23.9%	677,149	27.5%
Nonfamily households:	125	1.5%	380	1.3%	505	1.3%	23,033	0.9%
Male householder	101	1.2%	293	1.0%	394	1.0%	16,150	0.7%
Female householder	24	0.3%	87	0.3%	111	0.3%	6,883	0.3%

The percentage of households with children is lower in all four urban clusters than in the counties as a whole. Whereas both counties have a percentage of 33% of households with children, the Ilion-Herkimer Urban Cluster has 30.7%, the Little Falls Urban Cluster has 26.8%, the Rome Urban Cluster has 30.5% and the Utica Urbanized Area has 29.6% of households with children.

In urban areas married couples comprise a smaller proportion of households with children. All four urban areas have a lower percentage than the statewide figure of 65.2%.

Conversely, only the Ilion-Herkimer Urban Cluster (26.6%) has a lower percentage of female households than the statewide figure of 27.5%. Little Falls (31.5%), Rome (32.6%), and Utica (31%) are all substantially higher.

Table 10: Household Type, Urban Areas
(Source: U.S. Census Bureau, 2000 Census)

	Ilion-Herkimer Urban Cluster		**Little Falls Urban Cluster**		**Rome Urban Cluster**		**Utica Urbanized Area**	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total:	10,344		2,296		13,374		44,919	
1-person household:	3,210	31.0%	912	39.7%	4,448	33.3%	15,470	34.4%
Male householder	1,178	11.4%	322	14.0%	1,827	13.7%	6,004	13.4%
Female householder	2,032	19.6%	590	25.7%	2,621	19.6%	9,466	21.1%
2-or-more-person household	7,134	69.0%	1,384	60.3%	8,926	66.7%	29,449	65.6%
Family households:	6,388	61.8%	1,251	54.5%	8,183	61.2%	27,111	60.4%
Married-couple family:	4,640	44.9%	858	37.4%	5,717	42.7%	19,275	42.9%
Other family:	1,748	16.9%	393	17.1%	2,466	18.4%	7,836	17.4%
Male householder, no wife present:	464	4.5%	105	4.6%	589	4.4%	1,649	3.7%
Female householder, no husband present:	1,284	12.4%	288	12.5%	1,877	14.0%	6,187	13.8%
Nonfamily households:	746	7.2%	133	5.8%	743	5.6%	2,338	5.2%
Male householder	408	3.9%	80	3.5%	414	3.1%	1,318	2.9%
Female householder	338	3.3%	53	2.3%	329	2.5%	1,020	2.3%

Table 11: Urban Households with People under 18 Years of Age
(Source: U.S. Census Bureau, 2000 Census)

	Ilion-Herkimer Urban Cluster		Little Falls Urban Cluster		Rome Urban Cluster		Utica Urbanized Area	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Households with one or more people under 18 years:	**3,179**		**615**		**4,084**		**13,274**	
Family households:	3,134	98.6%	600	97.6%	4,022	98.5%	13,125	98.9%
Married-couple family:	2,009	63.2%	344	55.9%	2,304	56.4%	8,146	61.4%
Other family:	1,125	35.4%	256	41.6%	1,718	42.1%	4,979	37.5%
Male householder, no wife present:	280	8.8%	62	10.1%	385	9.4%	859	6.5%
Female householder, no husband present:	845	26.6%	194	31.5%	1,333	32.6%	4,120	31.0%
Nonfamily households:	45	1.4%	15	2.4%	62	1.5%	149	1.1%
Male householder	36	1.1%	11	1.8%	47	1.2%	109	0.8%
Female householder	9	0.3%	4	0.7%	15	0.4%	40	0.3%

Refugee and Immigrant Population

The Mohawk Valley has become home to many refugees and immigrants from around the world. Over the past ten years, 4,687 refugees have relocated to the area. During the first half of that decade (1999-2003), refugees were primarily from Bosnia, countries of the former Soviet Union, Myanmar (Burma), Vietnam and Sudan. During the second half, refugees have, primarily, come from Myanmar (Burma), Somalia, countries of the former Soviet Union, and Liberia.

TABLE 12: Number of Refugees by Country of Origin
(Source: The Mohawk Valley Resource Center for Refugees)

Country	Total 1999-2003	2004	2005	2006	2007	2008 to 9-16-08	Total 2004-2008	Total 1979-2008
AFGHANISTAN	61	7	5	0	0	0	12	73
AMERASIAN (VIETNAM)	29	0	0	0	0	0	0	1281
VIETNAM	169	2	0	0	0	5	7	787
BOSNIA	1472	4	0	1	0	0	5	4449
BULGARIA	0	0	0	0	0	0	0	25
CAMBODIA	4	0	0	0	0	0	0	365
CHINA	0	0	0	0	0	0	0	9
CONGO (ZAIRE)	21	0	0	0	0	0	0	21
CUBA	2	0	0	0	0	0	0	63
CZECHOSLOVAKIA	0	0	0	0	0	0	0	80
EGYPT	0	3	0	0	0	0	3	3
ERITREA	0	0	0	0	0	4	4	4
ETHIOPIA	0	2	0	1	0	0	3	11
FORMER SOVIET UNION	471	78	27	25	10	0	140	2381
LITHUANIA	0	0	5	0	0	0	5	5
UKRAINE	0	0	8	22	15	10	55	55
UZBEKISTAN/ M. Turks	0	0	18	37	9	1	65	65
HAITI	0	0	0	0	0	0	0	89
HUNGARY	0	0	0	0	0	0	0	29
IRAN	30	8	0	0	0	3	11	52
IRAQ	26	0	0	0	4	5	9	175
KOSOVO	77	0	0	0	0	0	0	77
LAOS	0	0	0	0	0	0	0	266
LEBANON	0	0	1	0	0	0	1	1
LIBERIA	15	38	24	7	0	3	72	87
LIBYA	0	0	0	0	0	0	0	6
MYAN MAR(BURMA)	117	124	105	194	504	493	1420	1543
POLAND	0	0	0	0	0	0	0	146
ROMANIA	0	0	0	0	0	0	0	28
SIERRA LEONE	19	1	2	0	0	0	3	22
SOMALIA	61	113	47	15	1	1	177	253
SUDAN	95	21	3	0	0	0	24	127
YUGOSLAVIA	2	0	0	0	0	0	0	5
TOTALS	2671	401	245	302	543	525	2016	12583

Population Projections
Population projections from New York Statistical Information System (NYSIS) Data at Cornell University's Program on Applied Demographics indicate that the population of both counties is expected to continue to decline between 2000 and 2035. The combined loss of population in the MVPN service area is projected to be 22.6%. This is in contrast to overall NYS projections which estimate the population will grow statewide by about 6%. The rate of population loss for both Herkimer and Oneida Counties is expected to grow over each of the next three decades while the rate of population growth for the state is expected to decline during each of these decades. Following national trends, the population of people 60 and older is expected to grow by more than 15% in both counties. This increase is expected to peak in 2025 and begin to decline slightly by 2030. The most dramatic increases will take place among those more than 80 years of age.

The rates of population loss among women of childbearing age in both counties are significantly greater than for those of the general population and explains one reason for declining population projections and the increase in the population's median age. While the population of all 20-29 year olds will increase in New York State, that population will decrease by 28% in Herkimer and Oneida Counties.

Herkimer County
According to NYSIS, Herkimer County is expected to lose more than 22% of its population between 2000 and 2035. The population of women of childbearing age is expected to decrease by more than 41% with 10% of this loss occurring between 2000 and 2010. By 2035 the net loss of women of childbearing age is projected at 5,223 women in Herkimer County.

All age groups younger than 60 are expected to decrease by 2035. It is projected that the number of men and women over age 60 will increase by 23.5 %. The population of people over 85 years of age is expected to increase by more than 70%.

Oneida County
NYSIS predicts that between 2000 and 2035, the overall population of Oneida County is expected to decrease by 22.6%, but the trends among different age groups vary significantly. The number of women of childbearing age is estimated to decrease by more than 35% with the total loss of women of childbearing age projected to be 16,180. The median age for males in Oneida County is expected to decrease from 36.5 in 2000 to 36.1 by 2010. It is expected to continue to decrease slightly before returning to near 2000 levels in 2030. The median age for females is expected to increase from 40.1 in 2000 to 41.8 in 2010 and will be 42.2 by the year 2030.

As in Herkimer County, all age groups, younger than 60 are expected to decrease. The population of people over 60 years of age is expected to increase by more than 12%. This is a much smaller increase than the statewide figure of 49%. All age groups from 60 to 64 through 85 and up increase at a much lower rate than the statewide increases, with the largest increase in population at the 65 to 69 age group.

Table 13: Population Projections to 2035

(Source: New York State Statistical Information System Data, Program on Applied Demographics, Cornell University)

	Herkimer County			Oneida County			Service Area			New York State		
Year	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
2000	64,427	31,248	33,179	235,469	116,913	118,556	299,896	148,161	151,735	18,976,457	9,146,748	9,829,709
2005	63,597	30,886	32,711	233,969	116,462	117,507	297,566	147,348	150,218	19,315,721	9,352,351	9,963,370
2010	62,346	30,420	31,926	226,880	113,781	113,099	289,226	144,201	145,025	19,547,993	9,505,273	10,042,720
Percent Change 2000-2010	-3.2%	-2.6%	-3.8%	-3.6%	-2.7%	-4.6%	-3.6%	-2.7%	-4.4%	3.0%	3.9%	2.2%
2015	60,622	29,732	30,890	219,490	110,684	108,806	280,112	140,416	139,696	19,766,612	9,638,601	10,128,011
2020	58,491	28,793	29,698	211,544	107,036	104,508	270,035	135,829	134,206	19,961,588	9,749,565	10,212,023
Percent Change 2010-2020	-6.2%	-5.3%	-7.0%	-6.8%	-5.9%	-7.6%	-6.6%	-5.8%	-7.5%	2.1%	2.6%	1.7%
2025	55,967	27,616	28,351	202,707	102,780	99,927	258,674	130,396	128,278	20,101,492	9,824,501	10,276,991
2030	53,070	26,192	26,878	192,915	97,965	94,950	245,985	124,157	121,828	20,165,840	9,857,235	10,308,605
2035	49,843	24,586	25,257	182,287	92,671	89,616	232,130	117,257	114,873	20,155,957	9,853,586	10,302,371
Percent Change 2020-2030	-9.3%	-9.0%	-9.5%	-8.8%	-8.5%	-9.1%	-8.9%	-8.6%	-9.2%	1.0%	1.1%	0.9%
Percent Change 2000-2035	-22.6%	-21.3%	-23.9%	-22.6%	-20.7%	-24.4%	-22.6%	-20.9%	-24.3%	6.2%	7.7%	4.8%

Table 14: Population Projections to 2035 - Women of Childbearing Age

(Source: New York State Statistical Information System Data, Program on Applied Demographics, Cornell University)

	Herkimer County			Oneida County			Service Area			New York State		
Year	Females	Women of Childbearing Age	% of Total Population	Females	Women of Childbearing Age	% of Total Population	Females	Women of Childbearing Age	% of Total Population	Females	Women of Childbearing Age	% of Total Population
2000	33,179	12,670	19.7%	118,556	45,648	19.4%	151,735	58,318	19.4%	9,829,709	4,213,932	22.2%
2005	32,711	12,591	19.8%	117,507	45,267	19.3%	150,218	57,858	19.4%	9,963,370	4,126,717	21.4%
2010	31,926	11,374	18.2%	113,099	41,957	18.5%	145,025	53,331	18.4%	10,042,720	4,028,986	20.6%
Percent Change 2000-2010	-3.8%	-10.2%		-4.6%	-8.1%		-4.4%	-8.6%		2.2%	-4.4%	
2015	30,890	10,318	17.0%	108,806	38,631	17.6%	139,696	48,949	17.5%	10,128,011	3,961,668	20.0%
2020	26,698	9,629	16.5%	104,508	36,317	17.2%	131,206	45,946	17.0%	10,212,023	3,969,480	19.9%
Percent Change 2010-2020	-16.4%	-15.3%		-7.6%	-13.4%		-9.5%	-13.8%		1.7%	-1.5%	
2025	28,351	8,941	16.0%	99,927	34,092	16.8%	128,278	43,033	16.6%	10,276,991	3,985,000	19.8%
2030	26,878	8,148	15.4%	94,950	31,740	16.5%	121,828	39,888	16.2%	10,308,605	3,967,699	19.7%
2035	25,257	7,447	14.9%	89,616	29,468	16.2%	114,873	36,915	15.9%	10,302,371	3,942,455	19.6%
Percent Change 2020-2030	0.7%	-15.4%		-9.1%	-12.6%		-7.1%	-13.2%		0.9%	0.0%	
Percent Change 2000-2035	-23.9%	-41.2%		-24.4%	-35.4%		-24.3%	-36.7%		4.8%	-6.4%	

Median Age
The median age for males in Herkimer County is expected to increase from 37.7 in 2000 to 41 by 2010 and 43.6 by 2030. The median age for females is expected to increase from 40.2 in 2000 to 43.8 in 2010 and will be 47 by the year 2030.

The median age for males in Oneida County is expected to decrease from 36.5 in 2000 to 36.1 by 2010. It is expected to continue to decrease slightly before returning to near 2000 levels in 2030. The median age for females is expected to increase from 40.1 in 2000 to 41.8 in 2010 and will be 42.2 by the year 2030.

Table 15: Median Age Projections

(Source: New York State Statistical Information Systems, Program on Applied Demographics, Cornell University)

	Herkimer County		Oneida County	
	Male	**Female**	**Male**	**Female**
2000	37.7	40.2	36.5	40.1
2005	39.7	42.2	36.5	41.2
2010	41.0	43.8	36.1	41.8
2015	41.8	44.9	35.7	41.8
2020	42.4	45.7	36.0	41.7
2025	43.0	46.3	36.3	41.9
2030	43.6	47.0	36.4	42.2

Economic Indicators

Median Income

In 1999, Herkimer and Oneida County median incomes fell well below the New York State median income of $43,393. Herkimer County's median income was $32,924 while Oneida County's was $35,909. Urban areas had lower median incomes than the counties in which they are located. The Little Falls Urban Cluster has the lowest median income at $23,994 while Rome's Urban Cluster was highest at $34,227.

Table 16: Median Income for Selected Areas

(Source: U.S. Census Bureau, 2000 Census)

	Median Household Income 1999	% of NYS
Herkimer County	$32,924	75.9%
Oneida County	35,909	82.8%
NYS	43,393	
Ilion-Herkimer Urban Cluster	29,650	68.3%
Little Falls Urban Cluster	23,994	55.3%
Rome Urban Cluster	34,227	78.9%
Utica Urbanized Area	31,425	72.4%

Unemployment

Since 2000, the region's unemployment rate, not seasonally adjusted, has been lower than that of New York State. After 2004, Herkimer County's unemployment rate rose above New York State's and has remained there. Oneida County's unemployment rate has been generally lower than Herkimer County, with the exception of 2001. Since 2000, the unemployment rate of New York State gradually rose, peaking in 2003 and has returned to the 2000 level of 4.5%.

Table 17 Annual Unemployment Rate, Not Seasonally Adjusted

(Source: New York State Department of Labor)

Unemployment Rate	2000	2001	2002	2003	2004	2005	2006	2007
Herkimer County	4.3%	4.5%	5.4%	5.7%	5.6%	5.3%	5.0%	4.8%
Oneida County	3.9%	4.6%	5.3%	5.5%	5.2%	4.8%	4.4%	4.3%
Herkimer/Madison/Oneida LWIA	3.9%	4.6%	5.3%	5.5%	5.3%	5.0%	4.6%	4.4%
New York State	4.5%	4.9%	6.2%	6.4%	5.8%	5.0%	4.6%	4.5%

Poverty

Census data indicates that nearly 13 percent of the people in Herkimer and Oneida Counties are living in poverty. This figure is slightly higher in Oneida County (13%) than Herkimer County (12.5%), but is lower than New York State's poverty rate of 14.6%. Poverty is especially concentrated in two urban clusters with 16% of the service area's urban population living below the poverty line. The Little Falls Urban Cluster has a poverty rate of 16.6% while Utica's Urbanized Area has a poverty rate of 16.7%. Outside of the urban clusters and Utica's Urbanized Area, the poverty rate is just 8.7%.

Table 18: Poverty Rates for Selected Areas
(Source: U.S. Census Bureau, 2000 Census)

	Sample Size Population	Persons in Poverty	Percentage
Herkimer County	63,206	7,921	12.5%
Oneida County	220,539	28,764	13.0%
Service Area	283,745	36,685	12.9%
NYS	18,449,899	2,692,202	14.6%
Ilion-Herkimer Urban Cluster	24,348	3,401	14.0%
Little Falls Urban Cluster	4,895	814	16.6%
Rome Urban Cluster	30,906	4,620	14.9%
Utica Urbanized Area	104,225	17,416	16.7%
Total Urbanized Area/Cluster	**164,374**	**26,251**	**16.0%**
Outside Urban Area/Cluster	**119,371**	**10,434**	**8.7%**

Public Assistance

According to the 2000 Census, 3.9% of the Service Area including Herkimer and Oneida Counties were receiving public assistance. This figure is higher in Oneida County (4.1%) than in Herkimer County (3.1%). This area has a lower percentage of the population receiving public assistance than all of New York State (4.9%). However, the Little Falls Urban Cluster (6.2%), the Rome Urban Cluster (5.1%), and the Utica Urbanized Area (5.5%) have higher rates of the population reporting income from public assistance than the region and New York State as a whole.

Table 19: Households with Public Assistance Income for Selected Areas

(Source: U.S. Census Bureau, 2000 Census)

	Households with Public Assistance Income in 1999		
Region	**Sample Size**	**Number**	**Percentage**
Service Area	116,247	4,482	3.9%
Herkimer County	25,740	803	3.1%
Oneida County	90,507	3,679	4.1%
New York State	7,060,595	344,175	4.9%
Ilion Herkimer Urban Cluster	10,360	350	3.4%
Little Falls Urban Cluster	2,291	142	6.2%
Rome Urban Cluster	13,376	685	5.1%
Utica Urbanized Area	44,881	2,464	5.5%
Total Urbanized Area/Cluster	70,908	3,641	5.1%
Outside Urban Area/Cluster	45,339	841	1.9%

Due to changing welfare regulations, the number of people receiving public assistance since 1995 has declined. During 2003-2005, this shift temporarily reversed with more recipients of public assistance until 2006 when the figures generally were reduced to below 2002 numbers. The exception is Oneida County where the number of recipients has remained above 2003 levels. It should be noted that, in Oneida County, a big jump up began in 2004 and has been steadily reduced.

Table 20: Average Monthly Recipients of TANF

Source: Office of Temporary and Disability Assistance, Bureau of Policy Analysis and Data Management)

	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**Percent Change 1999-2003**	**Percent Change 1999-2006**
Herkimer County	931	752	620	651	648	703	693	627	-30.4%	-32.7%
Oneida County	7,962	6,430	5,606	5,185	5,280	5,917	6,013	5,639	-33.7%	-29.2%
Combined	8,893	7,182	6,226	5,836	5,928	6,620	6,706	6,266	-33.3%	-29.5%
New York State	943,461	794,503	688,547	620,518	612,422	629,063	604,922	572,151	-35.1%	-39.4%
Outside NYC	266,230	221,923	196,270	187,767	188,477	195,134	188,910	180,222	-29.2%	-32.3%

Medicaid

Unlike the trends found in cash assistance programs, the number of people eligible to receive Medicaid rose steadily throughout the state, including Herkimer and Oneida Counties, peaking in 2005, after which the numbers began to decrease. Nevertheless, during the period from 1999 to 2007, the numbers of eligible recipients of Medicaid rose 43% in Herkimer County and 5% in Oneida County. Overall in upstate New York, the number of eligible Medicaid recipients increased 29%.

Due to a statewide mandate to move Medicaid recipients into managed care plans, the percentage of recipients in Herkimer and Oneida Counties in managed care has increased to 80% or more. This is significantly more than the overall upstate New York figure of 67% of Medicaid recipients in managed care programs.

Table 21: Medicaid Recipients and Enrollment in Managed Care (Under Temporary Assistance to Needy Families/Aid to Dependent Children, Home Relief/Safety Net Assistance)

(Source: New York State Department of Health)

	Enrollment Status as of December									
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Change over time (1999-2007)**
Herkimer County Medicaid Recipients	3,912	3,794	4,024	4,457	5,398	6,047	6,653	5,862	5,584	43%
Enrolled in Managed Care	120	308	701	1,346	3,796	5,141	4,823	4,524	4,658	3782%
Managed Care Enrollment Rate	3%	8%	17%	30%	70%	85%	72%	77%	83%	
Oneida County Medicaid Recipients	19,083	17,744	17,606	18,400	21,263	22,694	23,617	20,446	19,945	5%
Enrolled in Managed Care	4,983	6,175	7,846	15,374	17,332	18,412	17,214	15,090	16,052	222%
Managed Care Enrollment Rate	26%	35%	45%	84%	82%	81%	73%	74%	80%	
Upstate New York Medicaid Recipients	584,631	548,856	569,180	610,751	726,102	798,213	844,235	773,935	754,780	29%
Enrolled in Managed Care	257,409	261,994	298,927	387,759	459,032	502,295	484,153	471,173	509,298	98%
Managed Care Enrollment Rate	44%	48%	53%	63%	63%	63%	57%	61%	67%	

Perinatal Health Indicators

Data Sources
The following section contains data about perinatal health indicators. Data analysis for this section is complicated by the fact that Herkimer and Oneida Counties span two different Perinatal Data System regions and women travel both into and out of the regions to give birth.

Perinatal data is collected by the New York State Department of Health, through the State Perinatal Data System (SPDS). Regional centers are provided data to analyze for each New York State region. Oneida County lies in the Central New York Region and Herkimer County was shifted from the CNY Region to the Northeast New York Region in 2002. The Central New York Region is comprised of 13 counties that include Broome, Cayuga, Chenango, Cortland, Jefferson, Lewis, Madison, Onondaga, Oneida, Oswego, St. Lawrence, Tioga, and Tompkins. Because Oneida County births account for more than 80% of births in the Mohawk Valley Perinatal Network area, the Central New York Region is used for comparative purposes when analyzing perinatal data, despite the fact that Herkimer County is no longer part of the region. Recent statewide and national data are not available in most cases so it is not always possible to compare local trends to those seen throughout New York State and the nation.

In 2002, Little Falls Hospital in Herkimer County became part of the Northeast New York Perinatal Data System, so approximately 20% of the births spanned data collection regions. In Fall, 2004, Little Falls Hospital closed their maternity unit. There are no longer any hospitals in Herkimer County offering childbirth delivery services. Those births that occur at Bassett Healthcare are part of the Northeast New York Region.

Births

The number of births in Herkimer and Oneida Counties has remained relatively constant over the past nine years, from a low of 3,088 in 2000 to a high of 3,324 in 2007. Herkimer County decreased in number of births from 1999 to 2003 and then increased steadily to 714 in 2007, a 24% change. Oneida County has fluctuated slightly each year with about the same number of births in 1999 as in 2007.

Table 22: Live Births

(Source: NYS Dept. of Health, SPDS Data)

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Herkimer County	598	595	636	615	575	686	667	643	714
Oneida County	2,651	2,493	2,518	2,499	2,585	2,551	2,486	2,563	2,610
Service Area	3,249	3,088	3,154	3,114	3,160	3,237	3,153	3,206	3,324
CNY Region	20,118	19,970	19,741	18,812	19,282	18,832	19,064	19,302	19,467

In Herkimer County, the proportion of births by race is comparable to the population at large (see Table 4 on page 3). In Oneida County, the proportion of births of African-American heritage is higher than the population at large and the population of Hispanic births is slightly higher than the proportion of the population at large.

Table 23: Births by Race

(Source: NYS Dept. of Health, SPDS Data)

	1999-2003				2004-2007			
	Herkimer County	Oneida County	Service Area	CNY	Herkimer County	Oneida County	Service Area	CNY
White	97.7%	87.2%	89.2%	87.2%	95.5%	82.1%	85.3%	85.4%
African-American	0.6%	7.6%	6.3%	7.7%	0.7%	8.3%	6.5%	7.1%
Hispanic	0.4%	2.4%	2.0%	1.1%	1.6%	4.3%	3.6%	5.2%
Other	1.3%	2.8%	2.5%	4.1%	2.1%	5.3%	4.5%	2.3%

Between 1999 and 2007, the trend is that the age group of 15-19 year olds has declined in the proportion of births for both Herkimer and Oneida County. Conversely, there has been an increase in the proportion of births for the 20-24 year olds and the 35 and older age group.

Table 24: Births by Age

(Source: NYS Dept. of Health, SPDS Data)

	1999				2003				2007			
	Herkimer County	Oneida County	Total	CNY Region	Herkimer County	Oneida County	Total	CNY Region	Herkimer County	Oneida County	Total	CNY Region
<15	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.3%	0.0%	0.1%	0.1%
15-19	13.4%	11.0%	11.4%	10.9%	11.5%	9.8%	9.9%	9.3%	8.4%	10.4%	10.0%	9.6%
20-24	24.1%	24.2%	23.9%	24.6%	27.9%	27.7%	27.5%	25.7%	27.2%	26.9%	26.9%	26.9%
25-34	51.2%	52.3%	52.4%	51.1%	49.1%	48.3%	48.4%	50.9%	50.8%	49.1%	49.5%	50.1%
35+	11.4%	12.5%	12.2%	13.3%	11.5%	14.1%	14.1%	13.9%	13.3%	13.6%	13.5%	13.3%

Adolescent Births

Although not a steady decline, the number of births to girls in Oneida County, aged 15-17, dropped by almost 38% between 1999 and 2007. This trend was paralleled in Herkimer County with a drop of 30%. Both counties dropped more than the CNY Region which had a decrease of 29.5%.

Herkimer County and the CNY Region have seen declines in the number of 18-19 year olds giving birth, while the numbers have increased in Oneida County by 14% during the period from 1999-2007. The number of births to these young women has fluctuated from a low of 165 in 2004 to a high of 211 in 2006.

Table 25: Teen Births - Age 15-19

(Source: NYS Dept. of Health, SPDS Data)

	Herkimer County			Oneida County			Combined			CNY Region		
	15-17	**18-19**	**Total**	**15-17**	**18-19**	**Total**	**15-17**	**18-19**	**Total**	**15-17**	**18-19**	**Total**
1999	23	57	80	111	178	289	134	235	369	736	1,453	2,189
2000	27	46	73	78	209	287	105	255	360	648	1,445	2,093
2001	14	44	58	84	186	270	98	230	328	660	1,383	2,043
2002	24	38	62	86	194	280	110	232	342	610	1,321	1,931
2003	25	41	66	75	177	252	100	218	318	519	1,283	1,802
2004	21	68	89	77	165	242	98	233	331	475	1,260	1,735
2005	12	45	57	81	178	259	93	223	316	509	1,261	1,770
2006	13	41	54	84	211	295	97	252	349	504	1,354	1,858
2007	16	44	60	69	203	272	85	247	332	519	1,354	1,873

According to the National Vital Statistics Report for 2006, preliminary data indicates that the birth rate for girls, age 15-17, rose to 22.0 per 1,000. [5] Data for Herkimer County, Oneida County, and the CNY Region show birth rates for that age group are much lower, although there is a suggestion of an upward trend in Herkimer County and the CNY Region. Oneida County's birth rate in 2007 is 18% lower than 2006 when the birth rate was 17.3 per 1,000 births.

Table 26: Teen Birth Rates - Age 15-19

(Source: NYS Dept. of Health, SPDS Data)

	Herkimer County			Oneida County			Combined			CNY Region		
	15-17	**18-19**	**15-19**	**15-17**	**18-19**	**15-19**	**15-17**	**18-19**	**15-19**	**15-17**	**18-19**	**15-19**
1999	16.2	60.8	33.9	22.9	57.3	36.3	21.4	58.1	35.8	21.5	50.0	34.5
2000	19.0	49.1	30.9	16.1	67.3	36.1	16.7	63.1	34.9	18.9	49.7	33.0
2001	9.8	47.0	24.6	17.3	59.9	33.9	15.6	56.9	31.8	19.2	47.6	32.2
2002	16.9	40.6	26.3	17.7	62.5	35.2	17.5	57.4	33.2	17.8	45.4	30.5
2003	17.6	43.8	28.0	15.5	57.0	31.7	15.9	53.9	30.8	15.1	44.1	28.4
2004	14.7	72.6	37.7	15.9	53.1	30.4	15.6	57.6	32.1	13.9	43.3	27.4
2005	8.4	48.0	24.1	16.7	57.3	32.6	14.8	55.2	30.6	14.8	43.4	27.9
2006	9.1	43.8	22.9	17.3	67.9	37.1	15.5	62.3	33.8	14.7	46.6	29.3
2007	11.2	47.0	25.4	14.2	65.4	34.2	13.6	61.1	32.2	15.1	46.6	29.6

Fertility Rate

Fertility rate is the number of live births per 1,000 females, aged 15-44. The fertility rates for Herkimer and Oneida Counties, as well as Central New York are lower than for the remainder of upstate New York.

Table 27: Fertility Rate: Live Births per 1,000 Female Population 15-44

(Source: NYS Department of Health, Vital Statistics)

	Herkimer County	Oneida County	CNY	Upstate NY
1999	54.3	53.3	55.0	58.7
2000	52.0	54.7	54.2	59.8
2001	53.1	55.2	53.0	58.4
2002	54.2	54.6	51.5	57.8
2003	55.8	57.4	52.4	58.3
2004	55.5	56.8	54.3	57.5
2005	54.2	55.5	55.0	57.4

Educational Attainment

Rates of educational attainment for perinatal women in Herkimer and Oneida Counties have changed in four years. In Herkimer County, there has been a 14% drop in the percentage of women having a high school education or less, with a corresponding increase in the number of women having at least some college education. The trend in Oneida County is similar, although less dramatic. As with the Central New York region, there has been a 5.5% increase in the percentage of women attaining at least some college education.

Table 28: Birth by Mother's Educational Attainment

(Source: NYS Department of Health, Vital Statistics)

	Herkimer County		Oneida County		Service Area		CNY Region	
	2003	2007	2003	2007	2003	2007	2003	2007
NO HS Diploma	19.0%	13.3%	19.2%	17.4%	19.2%	16.5%	17.6%	15.6%
HS Diploma	34.6%	26.2%	34.0%	30.3%	34.1%	29.4%	30.6%	26.8%
Some College	28.0%	37.0%	26.9%	32.2%	27.1%	33.2%	25.7%	21.1%
College Diploma	8.9%	10.5%	9.5%	11.3%	9.4%	11.1%	11.5%	24.3%
Graduate Studies	9.6%	13.0%	10.2%	8.8%	10.1%	9.7%	13.7%	12.0%

Insurance

The proportion of women using Medicaid to pay for their births increased steadily between 1999 and 2003 in Herkimer and Oneida Counties. Then the counties diverge. From 2003 to 2007, this percentage has decreased in Herkimer County from a high of 46.5% in 2003 to a low of 36.3% in 2007. The proportion in Oneida County has been higher than the Central New York Region fluctuating between 44% and 48% since 2003. The Central New York Region has continued to increase the percentage of women using Medicaid insurance from a low of 38.5% in 1999 to the 2007 level of 45.1%. In Herkimer and Oneida Counties, the percentage of women giving birth without insurance has increased slightly from 1999 to 2007.

Table 29: Births by Type of Insurance

(Source: NYS Dept. of Health, SPDS Data)

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Herkimer County									
Medicaid	40.3%	39.9%	42.4%	44.1%	46.5%	42.3%	37.7%	39.6%	36.3%
Private	58.5%	59.2%	57.0%	54.8%	52.6%	47.1%	53.5%	56.8%	60.3%
None	1.2%	0.8%	0.6%	1.1%	0.9%	0.9%	1.5%	1.4%	1.7%
Oneida County									
Medicaid	39.9%	42.2%	42.3%	43.6%	46.7%	44.2%	46.1%	48.4%	46.7%
Private	59.4%	57.1%	56.9%	56.0%	52.8%	52.0%	48.5%	46.0%	47.6%
None	0.7%	0.6%	0.8%	0.4%	0.5%	0.4%	0.5%	0.9%	1.2%
Combined									
Medicaid	40.0%	41.8%	42.3%	43.7%	46.7%	43.8%	44.3%	46.7%	44.4%
Private	59.2%	57.6%	56.9%	55.8%	52.8%	50.9%	49.6%	48.1%	50.3%
None	0.8%	0.7%	0.8%	0.5%	0.5%	0.5%	5.3%	1.0%	1.3%
CNY Region									
Medicaid	38.5%	37.5%	38.6%	40.8%	41.6%	43.4%	44.3%	45.6%	45.1%
Private	60.2%	60.7%	59.1%	57.9%	56.8%	55.3%	54.8%	53.4%	53.7%
None	1.3%	1.8%	2.3%	1.3%	1.5%	1.4%	0.9%	1.0%	1.2%

Prenatal Care

The U.S. Department of Health and Human Services found that in 2004 infants of mothers who began prenatal care after the first trimester (early prenatal care) had an infant mortality rate 37% higher than those who received early prenatal care. [6] The Healthy People 2010 goal for prenatal care is to increase the percent of infants born to pregnant women receiving prenatal care in the first trimester to 90%.

Over the past nine years, 74.5% of pregnant women in Herkimer and Oneida Counties received early prenatal care. As seen in Table 31, this rate is typically higher in Herkimer County than in Oneida County. Herkimer County's rate of early prenatal care has fluctuated from 75.6% in 1999 to a low of 71.3% in 2003 to a high of 80.4% in 2007. Oneida County's rates have fluctuated between 71% and 75.5% over the past nine years. The rate in the CNY Region has remained fairly steady. In 2006 (the latest year for which data is available), 76.3% of all women in upstate New York received early prenatal care, a higher figure than both Herkimer and Oneida Counties.[7] As can be found in the Perinatal Profiles for Zip Codes 13501 and 13502 in the appendix, only 59% and 65.1% of women in these zip codes received early prenatal care.

Table 30: Prenatal Care for Women in Herkimer and Oneida Counties

(Source: NYS Dept. of Health, SPDS Data)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Early	75.2%	76.3%	75.9%	74.6%	71.2%	75.8%	74.3%	72.0%	75.0%	74.5%
Mid	21.2%	19.1%	19.7%	21.0%	24.0%	19.1%	20.2%	22.3%	20.7%	20.8%
Late/None	3.6%	4.6%	4.4%	4.4%	4.8%	5.1%	5.5%	5.7%	4.3%	4.7%

Table 31: Rate of Early Prenatal Care

(Source: NYS Dept. of Health, SPDS Data)

	Herkimer County	Oneida County	Combined	CNY
1999	75.6%	75.1%	75.2%	77.4%
2000	79.7%	75.5%	76.3%	76.5%
2001	77.7%	75.5%	75.9%	75.5%
2002	73.5%	74.8%	74.6%	75.9%
2003	71.3%	71.2%	71.2%	76.3%
2004	78.3%	75.1%	75.8%	75.2%
2005	78.4%	73.3%	74.3%	75.9%
2006	75.9%	71.0%	72.0%	76.1%
2007	80.4%	73.5%	75.0%	74.4%

According to 2003 data, teenagers were significantly less likely to receive early prenatal care. Between 2004 and 2007, the data suggests that in Herkimer County that trend changed dramatically. The early prenatal care for teenagers in that county improved from 45.5% in 2003 to 65.3% during the period from 2004 - 2007. In addition, there was an improvement for the 20-24 year old age group of over 10% in Herkimer County. In Oneida County, early prenatal care for those age groups changed slightly. For the 15-19 year old age group, the percentage increased from 51.6% to 54.2%. However, in the 20-24 year old age group, the percentage decreased from 67.9% to 65.3%. Central New York Region's data showed a slight decrease for both age groups from 2003 to 2007. For the age group of women over the age of 24, the percentage of women receiving early prenatal care generally increased in both counties. Only the category of women over 34 in Herkimer County showed a decrease.

Table 32: Early Prenatal Care by Age

(Source: NYS Dept. of Health, SPDS Data)

	2003				2004 - 2007			
	Herkimer County	Oneida County	Combined	CNY	Herkimer County	Oneida County	Combined	CNY
15-19	45.5%	51.6%	50.7%	59.9%	65.3%	54.2%	56.3%	58.3%
20-24	63.8%	67.9%	67.2%	70.4%	74.0%	65.3%	67.2%	68.3%
25-34	78.4%	76.1%	76.2%	91.1%	82.8%	80.0%	80.6%	80.6%
>34	84.8%	74.9%	76.1%	91.3%	81.7%	80.5%	80.7%	82.3%
Total	71.3%	71.2%	71.1%	76.3%	76.0%	70.0%	71.2%	72.4%

During the period from 1999-2003, women of color were significantly less likely to receive prenatal care than white women in both Herkimer and Oneida Counties. African-American women were less likely than Hispanic women of any race to receive prenatal care. From 2004-2007, the percentage of women of color in Herkimer County receiving early prenatal care is similar to that of white women, but the percentage decreased in Oneida County. Because of the small numbers of women of color in Herkimer County, it is important to be careful when drawing any conclusions from this data.

Table 33: Early Prenatal Care by Race

(Source: NYS Dept. of Health, SPDS Data)

	1999 - 2003				2004 - 2007			
	Herkimer County	Oneida County	Combined	CNY	Herkimer County	Oneida County	Combined	CNY
White	76.2%	77.1%	76.9%	78.6%	78.6%	77.6%	77.8%	77.9%
African-American	58.3%	52.9%	53.0%	57.5%	78.9%	48.2%	48.9%	55.3%
Hispanic	66.7%	65.0%	65.1%	65.3%	74.4%	58.8%	60.2%	67.8%
Other	73.9%	58.1%	59.0%	67.3%	67.2%	56.9%	57.9%	64.1%

Women who had private insurance were far more likely to obtain early prenatal care than women who had Medicaid for health insurance. Over the nine year period from 1999 to 2007, rates of early prenatal care were 20% higher for women with private insurance in Herkimer County and 25% higher in Oneida County. The Central New York Region had a similar disparity.

Table 34: Early Prenatal Care by Payor

(Source: NYS Dept. of Health, SPDS Data)

	Herkimer County		Oneida County		Combined		CNY Region	
	Medicaid	Private	Medicaid	Private	Medicaid	Private	Medicaid	Private
1999	64.9%	83.2%	61.0%	84.9%	61.7%	84.6%	65.3%	85.2%
2000	70.2%	86.4%	64.9%	83.3%	65.9%	83.9%	65.4%	83.9%
2001	63.6%	87.8%	62.1%	86.0%	62.4%	86.4%	64.4%	83.4%
2002	63.6%	82.5%	61.6%	84.7%	62.0%	84.3%	64.8%	83.9%
2003	65.5%	91.1%	58.2%	82.8%	59.6%	84.3%	64.7%	84.7%
Average 1999-2003	65.5%	86.1%	61.5%	84.4%	62.2%	84.7%	64.9%	84.2%
2004	67.9%	87.9%	60.6%	87.3%	62.1%	87.4%	64.1%	84.7%
2005	69.2%	86.0%	57.3%	86.8%	60.3%	86.6%	65.3%	85.0%
2006	61.8%	87.1%	55.3%	87.3%	56.4%	87.3%	65.6%	85.8%
2007	71.4%	87.4%	58.3%	89.4%	60.6%	88.9%	63.0%	84.7%
Average 2004-2007	67.6%	87.1%	57.9%	87.7%	59.9%	87.6%	64.5%	85.1%
Average 1999-2007	66.5%	86.6%	59.9%	85.8%	61.2%	86.0%	64.7%	84.6%

Delivery Type

Healthy People 2010 objectives call for a reduction in the rate of C-Section births for women giving birth for the first time from 18% to 15% by 2010. The target for cesarean births for women who have previously had a cesarean birth is 63%. The data obtained from the Regional Perinatal Data System for this report did not distinguish between first time and repeated births, but trends indicate the rates for cesarean births are increasing rather than decreasing.

The number of cesarean births performed in Herkimer and Oneida Counties over the past nine years has risen. From 1999 to 2003, births by cesarean section was 27.6% of the total number of births in the two counties. By 2007, that percentage has risen to 34% with the four year average from 2004-2007 at 32.3%. This is similar to the rate in New York State. In 2006, the most recent year for which data is available, the cesarean section rate was 32.5% for all of New York State and 34.4% for upstate New York (excluding New York City).[8]

Table 35: Type of Delivery to Residents of Herkimer and Oneida Counties

(Source: NYS Dept. of Health, SPDS Data)

		1999-2003 Total/Average	2004	2005	2006	2007	2004-2007 Total/Average
Vaginal	#	11346	2203	2183	2128	2193	8707
	%	72.4%	69.2%	69.3%	66.4%	66.0%	67.7%
C-Section	#	4328	981	969	1077	1128	4155
	%	27.6%	30.8%	30.7%	33.6%	34.0%	32.3%

Pregnancy Intendedness

The percentage of post-natal women who reported that their pregnancy was unintended has been slightly higher in Herkimer and Oneida Counties than in the Central New York Region. These percentages have been lower during the past four years when compared to the 1999 and 2003 percentages.

There may be an emerging trend comparing the number of unintended pregnancies with the number of abortions in Herkimer and Oneida Counties from 2004 to 2006. During 2004, more unintended pregnancies were reported than abortions. For 2005 and 2006, more abortions were reported than unintended pregnancies. It should be noted that the data on unintended pregnancy is the number of births resulting from an unintended pregnancy.

Table 36: Births Resulting from Unintended Pregnancy

(Source: NYS Dept. of Health, SPDS Data)

	1999	2003	2004	2005	2006	2007
Herkimer and Oneida Counties	39.2%	41.6%	35.1%	30.6%	32.9%	34.7%
CNY Region	37.8%	38.0%	33.6%	29.1%	30.2%	34.3%

Table 36a: Births Resulting from Unintended Pregnancy

(Source: NYS Dept. of Health, SPDS Data)

	2004		2005		2006	
	Number	Percent	Number	Percent	Number	Percent
Herkimer and Oneida Counties	1063	35.1	907	30.6	1003	32.9
CNY Region	6330	33.6	5541	29.1	5837	30.2

Table 37: Abortions in Herkimer and Oneida Counties

(Source: New York State Dept. of Health, Vital Statistics)

2004				2005				2006			
Herkimer	Oneida	Combined	Upstate New York	Herkimer	Oneida	Combined	Upstate New York	Herkimer	Oneida	Combined	Upstate New York
112	893	1005	34,816	81	947	1028	35,022	157	887	1044	38,052

Smoking

The U.S. Department of Health and Human Services has indicated that smoking during pregnancy can result in spontaneous abortions, low birthweight, and sudden infant death syndrome. It has been associated with infertility, miscarriages, tubal pregnancies, infant mortality, and childhood morbidity. Additionally, cigarette smoking during pregnancy may cause long-term learning disabilities in the child.

The Healthy People 2010 target is for 99% of women to abstain from smoking while pregnant.

According to the Regional Perinatal Data System, younger women in the region are almost twice as likely to report smoking during pregnancy as older women. One good sign is that the rate of teenage women who indicated they were smoking during pregnancy in 2007 has dropped almost 10% from 1999. The rates of smoking during pregnancy for women between 20 and 34 has remained about the same over the past nine years. For older pregnant women (35 and older), the rate has dropped slightly.

As can be seen in the Perinatal Profiles for Zip Codes 13501 and 13502 in the appendix, women in this urban area reported slightly higher tobacco use during pregnancy. Over the past four years, the average percentage in zip code 13501 was 24.1% and, in zip code 13502, it was 26.7%.

Table 38: Tobacco Use During Pregnancy by Age, Herkimer and Oneida Counties

(Source: NYS Dept. of Health, SPDS Data)

Age	1999	2000	2001	2002	2003	1999-2003 Average	2004	2005	2006	2007	2004-2007 Average
15-19	39.3%	36.9%	36.6%	34.8%	35.2%	36.6%	39.3%	37.0%	34.4%	29.8%	34.1%
20-24	31.6%	31.1%	32.2%	30.9%	31.5%	31.5%	35.4%	33.1%	32.7%	31.7%	33.2%
25-34	18.1%	18.8%	18.4%	15.7%	18.8%	18.0%	19.6%	19.1%	18.8%	17.9%	18.8%
>34	13.9%	16.4%	13.0%	20.1%	15.2%	15.7%	14.2%	15.0%	15.4%	12.9%	14.4%
Rate among all age groups	23.2%	23.4%	23.3%	22.4%	23.5%	23.1%	25.3%	24.3%	24.0%	22.1%	23.9%

Alcohol and Substance Use

"Drinking alcohol during pregnancy can cause physical and mental birth defects. Each year, more than 40,000 babies are born with some degree of alcohol related damage. Although many women are aware that heavy drinking during pregnancy can cause birth defects, many do not realize that light or moderate drinking may harm the fetus." In addition, the March of Dimes reports that, according to recent studies, women who continue to drink alcohol, even in small amounts, while attempting to become pregnant, may reduce their chances of conceiving a child.[9]

Fetal alcohol syndrome (FAS) is a diagnosis that means a child will probably suffer stunted growth and facial deformities, attention and behavior problems, and, in some cases, mental retardation. "FAS is one of the most common known causes of mental retardation and the only cause that in entirely preventable." "The CDC estimates that as many as three times the number of babies born with FAS are born with lesser degrees of alcohol-related damage. This condition is sometimes referred to as fetal alcohol effects (FAE)" or fetal alcohol spectrum disorder (FASD). "These children have some of the physical or mental birth defects associated with FAS. The Institute of Medicine has proposed more specific diagnostic categories for FAE, referring to the physical birth defects (such as heart defects) as alcohol-related birth defects (ARBD), and to the mental and behavioral abnormalities as alcohol-related neurodevelopmental disorders (ARND)." [9]

"When a pregnant woman drinks, alcohol passes swiftly through the placenta to her fetus. In the unborn baby's immature body, alcohol is broken down much more slowly than in an adult's body. As a result, the alcohol level of the baby's blood can be even higher and can remain elevated longer than the level in the mother's blood." [9]

"In general, alcohol-related birth defects (such as heart and facial defects) are more likely to result from drinking during the first trimester", while growth problems are more likely to result from drinking in the third trimester. However, "drinking at any stage of pregnancy can effect the brain as well as growth." [9]

The American Pregnancy Association (APA) reports that "marijuana, like cigarette smoke, contains toxins that keep the fetus from getting the proper supply of oxygen that he or she needs to grow." "Smoking marijuana during pregnancy can increase the chance of miscarriage, low birth-weight, premature births, developmental delays, behavioral and learning problems." [10]

"According to the Organization of Teratology Information Services (OTIS), cocaine exposure during the early months of pregnancy may increase the risk of miscarriage. Later in pregnancy, cocaine use can cause placental abruption, which can lead to severe bleeding, pre-term birth, and fetal death. According to the American College of Obstetricians and Gynecology (ACOG), women who use cocaine during their pregnancy have a 25% increased chance of premature labor." "OTIS also states that the risk of a birth defect appears to be greater when the mother has used cocaine frequently during pregnancy." [10]

"Using heroin during pregnancy increases the chance of premature birth, low birth-weight, infant deaths" and withdrawal syndrome in newborns. "Withdrawal symptoms include irritability, convulsions, diarrhea, fever, sleep abnormalities and joint stiffness." [10]

According to Regional Perinatal Data System data, very few women report using alcohol or illegal drugs during pregnancy. It might be interesting to note that illegal drug use was reported twice as much as

alcohol. Women living in zip code 13501 reported using alcohol slightly more than both counties (1.3%). Women from zip code 13502 reported using alcohol at about the same rate as Oneida County. As with both Herkimer and Oneida Counties, the women from zip codes 13501 and 13502 were more likely to report using illegal drugs than alcohol. These rates, 3.7% and 3.1% respectively, were higher than the percentages reported for both Herkimer and Oneida Counties.

Table 39: Alcohol Use 2004 - 2007
(Source: NYS Dept. of Health, SPDS Data)

	2004	2005	2006	2007
Herkimer County	*	0.7%	0.9%	0.8%
Oneida County	0.6%	0.9%	1.4%	0.6%
CNY Region	0.8%	1.1%	1.3%	1.0%
* Too few cases to report				

Table 39a: Illegal Drug Use 2004 - 2007
(Source: NYS Dept. of Health, SPDS Data)

	2004	2005	2006	2007
Herkimer County	1.3%	1.5%	1.7%	1.4%
Oneida County	2.4%	3.1%	3.0%	2.6%

Breastfeeding

"Breastfeeding provides many physical, medical, immunological, and psychological benefits to mothers and their children. Human milk contains just the right amount of fatty acids, lactose, water, and amino acids for human digestion, brain development, and growth. Breastfed babies have fewer illnesses because human milk transfers to the infant a mother's antibodies to disease." [11] "Human milk also contains immunologic agents and other compounds that act against viruses, bacteria, and parasites. Since an infant's immune system is not fully developed until age 2, human milk provides a distinct advantage over formula." [11] "Mothers, too, are the recipients of many positive hormonal and physical effects," including reducing the risk of breast and ovarian cancer. [12] Finally, breastfeeding may save families hundreds of dollars which would have been spent on formula and medical bills.

Healthy People 2010 target call for 75% of women to breastfeed in the early postpartum period, 50% to breastfeed at six months, and 25% to breastfeed at one year.

For the past nine years, women in Herkimer and Oneida Counties have been less likely to be breastfeeding at discharge than the CNY Region overall. Women in Herkimer County were more likely to be breastfeeding than women in Oneida County. The rates of breastfeeding have increased during the past four years compared to the previous five year average.

Table 40: Breastfeeding at Discharge

(Source: NYS Dept. of Health, SPDS Data)

	1999-2003 Average	2004	2005	2006	2007
Herkimer County	56.9%	63.6%	60.9%	65.0%	64.5%
Oneida County	54.0%	57.7%	58.5%	57.5%	58.4%
Service Area	54.5%	58.9%	59.0%	59.0%	59.7%
CNY Region	59.2%	64.9%	66.3%	66.9%	67.4%

Women over 25 years of age were breastfeeding at discharge at a much higher rate than teenagers. As the mother's age increased, she was more likely to be breastfeeding at discharge. Both counties had lower rates in every age group than the CNY Region.

Table 41: 2004-2007 Breastfeeding at Discharge by Region and Age

(Source: NYS Dept. of Health, SPDS Data)

Age	Herkimer County	Oneida County	Total	CNY Region
15-19	50.0%	48.8%	49.0%	53.8%
20-24	57.3%	52.1%	53.2%	61.3%
25-34	68.6%	62.2%	63.5%	70.5%
>34	68.8%	63.1%	64.2%	73.7%
Total all ages	63.5%	58.0%	59.2%	66.9%

White and Hispanic women were more likely to be breastfeeding at discharge than black women in both Herkimer and Oneida Counties. Herkimer County has relatively few black or Hispanic women, so caution should be used about drawing conclusions with this data.

Table 42: 2004-2007 Breastfeeding at Discharge by Race

(Source: NYS Dept. of Health, SPDS Data)

	Herkimer County	Oneida County	Total	CNY Region
White	63.2%	59.3%	60.3%	67.7%
Black	47.4%	40.6%	40.7%	50.3%
Hispanic	75.0%	58.3%	59.8%	n/a
Other	72.7%	64.8%	65.6%	n/a

Low Birthweight Births

Low birthweight infants are defined as weighing less than 2500 grams or about 5.5 pounds. Low birthweight is correlated with a number of factors such as high blood pressure, certain infections, and heart, kidney or lung problems. An abnormal uterus or cervix can increase the mother's risk of having a premature, low birthweight baby. Women can take steps to prevent low birthweight infants by seeing their doctor before and early in their pregnancy. Women are advised not to smoke or drink alcohol during pregnancy and to eat a well balanced diet with adequate calories to gain an appropriate amount of weight based on Body Mass Index at the time of pregnancy.

The March of Dimes reports that socioeconomic factors such as "low income and lack of education are associated with increased risk of having a low birthweight baby, although the underlying reasons for this are not well understood [13] Women under 17 or over 35, unmarried mothers and women who have had a previous pre-term birth are at increased risk of having low birthweight babies. Teenagers, in particular, may not have good health habits. Women who experience excessive stress and are victims of domestic partner violence or other abuse may be at increased risk of having a low birthweight baby.

The Healthy People 2010 target is for fewer than 5% of births to be low birthweight and 0.9% to be very low birthweight (less than 1500 grams).

Over the past nine years, there has been fluctuation in the percentages of infants who were born with low birthweight in Herkimer and Oneida Counties. However, similar to a nationwide trend, the average percentage of low birthweight babies from 2004-2007 is higher than the previous five year average. The reasons for this are not yet understood. In general, the percentage of low birthweight babies born in Herkimer County is lower than the CNY Region percentage and the percentage of babies in Oneida County born with low birthweight is higher than the CNY Region. The rate of low birthweight births for the urban 13501 and 13502 zip codes was higher than for Oneida County and for the CNY Region as a whole.

For comparison, during 2006, there were 7.9% of infants born with low birthweight in all of upstate New York (all of the state, exclusive of New York City). This rate included 7.3% for white, 12.9% for African-American, and 7.5% for Hispanic babies. [14]

Table 43: Low Birthweight Births

(Source: NYS Dept. of Health, SPDS Data)

	1999-2003 Rate	2004 Rate	2005 Rate	2006 Rate	2007 Rate	2004-2007 Rate
Herkimer County	6.3%	6.3%	6.3%	7.9%	6.0%	6.6%
Oneida County	7.9%	9.3%	8.2%	9.1%	8.6%	8.8%
Total	7.7%	8.6%	7.8%	8.9%	8.1%	8.4%
CNY Region	7.3%	8.1%	7.9%	7.9%	7.6%	7.9%

Table 43a: Low Birthweight Births by Race

Source: NYS Dept. of Health, SPDS Data

County	Race	Low	Normal	Total	Percent of LBW to Total Births
Herkimer	White/Caucasian	164	2425	2589	6.3%
	Black/African American	2	17	19	10.5%
	Other	9	49	58	15.5%
	Hispanic	4	40	44	9.1%
	Total	179	2531	2710	6.6%
Oneida	White/Caucasian	670	7714	8384	8.0%
	Black/African American	141	710	851	16.6%
	Other	50	487	537	9.3%
	Hispanic	37	398	435	8.5%
	Total	898	9309	10207	8.8%
Total - Both Counties		1077	11840	12917	8.3%

Pre-term births are more likely to be of low birthweight. Similar to low birthweight babies, children born early are at greater risk of medical complications, long term disabilities and death. For reasons not yet understood, the rate of premature birth is 30% higher than it was in 1981. [15]

The rate of premature births from 2004 – 2007 is higher than the rate from 1999 – 2003 for Herkimer County, Oneida County, and the CNY Region. In general, the rate in Herkimer County is lower than in Oneida County. From 2004-2007, the premature birth rates for the urban zip codes 13501 and 13502 were 10% and 10.5%, respectively. These rates are higher than for Oneida County, within which these zip codes are located, and higher than the CNY Region.

Table 44: Premature Births

(Source: NYS Dept. of Health, SPDS Data)

	1999-2003 Rate	2004	2005	2006	2007	2004-2007 Rate
Herkimer County	7.5%	8.9%	7.4%	9.0%	8.0%	8.3%
Oneida County	9.0%	10.1%	10.3%	9.2%	9.3%	9.7%
Total	8.7%	9.9%	9.7%	9.2%	9.0%	9.5%
CNY Region	9.1%	9.6%	9.8%	9.8%	9.7%	9.7%

By race, the rate of pre-term births for both counties is consistent with the overall rate except for "Other" in Herkimer County and "Black/African American" in Oneida County. Due to the low overall numbers in Herkimer County, caution should be used in generalizing about the rate of pre-term births in that county.

Table 44a: Premature Births by Race
(Source: NYS Dept. of Health, SPDS Data)

County	Race	Premature	Normal	Total	Percent of Premature to Total Births
Herkimer	White/Caucasian	214	2372	2586	8.3%
	Black/African American	1	18	19	5.3%
	Other	7	50	57	12.3%
	Hispanic	3	40	43	7.0%
	Total	225	2480	2705	8.3%
Oneida	White/Caucasian	773	7607	8380	9.2%
	Black/African American	139	711	850	16.4%
	Other	49	487	536	9.1%
	Hispanic	33	402	435	7.6%
	Total	994	9207	10201	9.7%
Total - Both Counties		1219	11687	12906	9.4%

Birth Defects

"Birth defects are abnormalities of structure, function, or metabolism present at birth that result in physical or mental disabilities or death." [16] In the United States, 1 in 33 babies are born annually with evidence of a birth defect. Genetic factors, such a gene defects, and environmental factors, such as alcohol and drug use or infections, are believed to be responsible for birth defects. Although the cause of about 70 percent of birth defects is unknown, the risk of birth defects can be reduced. Preconception visits to a doctor and continuing prenatal care are an important step toward prevention of birth defects. They are particularly important for women with chronic health conditions, such as diabetes or high blood pressure. Neural tube defects can be significantly reduced by the consumption of 400 micrograms of synthetic folic acid daily before and during pregnancy. Spina bifida and anencephaly are two common forms of NTD.

Healthy People 2010 has set a target of 80% of all women between the ages of 15 and 40 consuming at least 400 micrograms of folic acid daily and a median red blood cell folate level among nonpregnant women in this age group at 220 ng/ml (nanograms per milliliter). It is believed that these levels will help achieve the target of reducing neural tube defects to 3 per 10,000 live births.

The New York Perinatal Data System monitors rates of congenital malformations in newborns. Conditions recorded include anencephaly, spina bifida, cleft lip/palate, congenital heart disease, and Down Syndrome. Data for the years from 2004 to 2007 are included below.

Table 45: Congenital Malformations
2004-2007

(Source: NYS Dept. of Health, SPDS Data)

County	Herkimer	Oneida	Combined
Percent	7.2%	5.7%	6.0%

Infant Mortality

Healthy People 2010 targets include the reduction of **infant deaths**[1] to 4.5 per 1,000 live births; **neonatal deaths**[2] to 2.9 per 1,000 live births; **post neonatal deaths**[3] to 1.2 per 1,000 live births; and **perinatal deaths**[4] to 4.5 per 1,000 live births plus fetal deaths.

According to the U.S. Department of Health and Human Services National Vital Statistics Report, the U.S. infant mortality rate was 6.86 infant deaths per 1,000 live births in 2005. Infant mortality is highest among teenage mothers, followed by children of mothers over age 40. According to the National Vital Statistics Report, the infant mortality rate was 74% higher for smokers in states including New York than for mothers who did not smoke in 2005. [17]

The mortality rates for children under one year of age are higher in Oneida County than either Herkimer County or the rest of New York outside of New York City. Due to the low numbers of deaths, caution must be used about conclusions for this data. National figures for 2005 from the National Vital Statistics Report show that the infant mortality rate for non-Hispanic whites was 5.76 deaths per 1,000 live births. The non-Hispanic black infant mortality rate was 13.63 with the Hispanic infant mortality rate ranging from 4.42 for Cuban mothers to 8.30 for mothers from Puerto Rico.

Table 46: Infant Mortality, 2004-2006

(Source: New York State Dept. of Health, Vital Statistics)

	Infant Deaths (< 1 year)	Neonatal Deaths (<28 Days)	Post Neonatal Deaths (28 Days to 1 year)	Perinatal Mortality
	Rate per 1,000 live births	Rate per 1,000 live births	Rate per 1,000 live births	Rate per 1,000 live births
Herkimer County				
2004	5.7	5.7	0	12.8
2005	8.9	7.4	1.5	20.6
2006	3.1	3.1	0	10.7
Oneida County				
2004	8.9	7.4	1.6	12.4
2005	7.3	3.2	4	7.2
2006	7.3	5.8	1.5	12.6
Upstate New York (Exclusive of NYC)				
2004	6	4.4	1.6	9.3
2005	5.9	4.3	1.6	8.8
2006	5.5	3.8	1.7	8.4

[1]Infant deaths include children up to one year old, including neonatal and post neonatal deaths.
[2]Neonatal deaths are for infants less than 28 days old.
[3]Post-neonatal deaths are infants between 28 days and one year old.
[4]Perinatal deaths are infants less than 28 days old as well as spontaneous fetal deaths of 20+ weeks gestation.

Sexually Transmitted Infections

According to the U.S. Department of Health and Human Services, the highest rates of sexually transmitted disease (STD) in the industrialized world are in the United States. In this country, "about 19 million new infections are estimated to occur each year". Women who contract STDs are more likely to suffer serious complications than men.[18]

The New York State Department of Health reports that women with gonorrhea may not have symptoms that can be seen. Untreated, gonorrhea may cause pelvic inflammatory disease (PID) in women, or infect the blood, joints, skin and brain of infected men and women. PID may lead to infertility in women. [19]

One of the most common STD, chlamydia presents no symptoms in 75% of women with this infection. The New York State Department of Health fact sheet on chlamydia states that "untreated Chlamydia in women can lead to infection in other parts of the reproductive system", including pelvic inflammatory disease (PID). In addition, pregnant women can infect babies during vaginal delivery, which may result in the baby developing chlamydia pneumonia (lung infection). [20]

A third type of sexually transmitted disease tracked by the New York State Department of Health is syphilis which, if left untreated, can be passed to unborn children by pregnant women. Called congenital syphilis, this infection may result in a stillbirth or permanent damage to the liver, lungs, glands, brain, eyes, or teeth of a baby. In New York State, pregnant women are tested for syphilis by their health care providers. [21]

The Healthy People 2010 objective for gonorrhea is 19 cases per 100,000 people. For Chlamydia, the Healthy People 2010 goal is to reduce the number of 15-24 year olds testing positive to 3% of females attending family planning clinics and 3% of males and females attending STD clinics. The Healthy People 2010 goal for syphilis is 0.2 incidents of syphilis per 100,000 people and 1 case per 100,000 population for congenital syphilis.

For 2004, the Upstate New York rate for gonorrhea was 70.4 and, for chlamydia, the rate was 225.4 per 100,000. Herkimer County's rates were much lower than Upstate New York or the Central New York area. Oneida County's rate for gonorrhea was higher but lower for chlamydia for those two regions.

Table 47: Gonorrhea and Chlamydia, 2004 Rates per 100,000

(Source: NYS Dept. of Health, Sexually Transmitted Diseases Data)

	Gonorrhea	Chlamydia
	Rate	Rate
Herkimer	7.8	119.5
Oneida	81.1	179.2
Central NY (Syracuse) Area	68.1	257.6
Upstate New York	70.4	225.4

Women in both Herkimer and Oneida Counties were more likely to be diagnosed with either gonorrhea or chlamydia than men. In Oneida County, women were more likely to be diagnosed with gonorrhea than men until age 30, after which more men were diagnosed.

Table 48: Gonorrhea and Chlamydia, 2004 Reported Cases by County, Age, and Gender

(Source: NYS Dept. of Health, Sexually Transmitted Diseases Data)

	Herkimer County				Oneida County			
	Gonorrhea		Chlamydia		Gonorrhea		Chlamydia	
	Male	Female	Male	Female	Male	Female	Male	Female
All Ages	*	*	11	66	84	107	88	334

*Total equals fewer than 5

The rate per 100,000 for syphilis in Herkimer and Oneida Counties is lower than the Upstate New York rate of 6.87 per 100,000. Oneida County's rate of 4.25 is higher than the Central New York (Syracuse) area. Due to the small number of cases in Herkimer and Oneida Counties, an age breakdown is not provided.

Table 49: Syphilis, 2004 Cases and Rates per 100,000

(Source: NYS Dept. of Health, Sexually Transmitted Diseases Data)

	Syphilis					
	Primary	Secondary	Early Latent	Total Early	Late and Late Latent	Total
	Rate	Rate	Rate	Rate	Rate	Rate
Herkimer	0	1.55	0	1.55	1.55	3.1
Oneida	0	0	0.42	0.42	3.82	4.25
Central NY (Syracuse) Area	0	0.29	0.06	0.35	1.96	2.31
Upstate New York	0.34	0.63	0.61	1.58	5.3	6.87

HIV/AIDS Infection

The New York State Department of Health reports that, as of December 2006, there were 36 people living with HIV or AIDS in Herkimer County and 295 in Oneida County. These figures are excluding prisoners, defined as persons incarcerated in state correctional facilities at the time of diagnosis.

Living HIV and AIDS cases in Central New York (Syracuse Ryan White Region) are more likely to be women than in the rest of upstate New York. The Syracuse Ryan White Region includes Cayuga, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence, and Tompkins counties. Of the total cases, 32.5% were women in the Syracuse Ryan White Region and 29.8% were women in the rest of the state, excluding New York City.

HIV/ AIDS should no longer be considered a young person's disease. As can be seen on the chart on the following page, 72.1% of all living HIV and AIDS cases in New York State are over the age of 40. That percentage is slightly lower in the Syracuse Ryan White Region at 68.9%.

There is a much larger percentage of living HIV and AIDS cases among white men and women in the Syracuse Ryan White Region (51.7%) than in upstate New York State (30.5%) or the entire state (22.1%). This is likely due to the very small percentages of Hispanic and Black residents in this region compared to the rest of New York State.

Table 50: Living HIV and AIDS Cases as of December 2006

(Source: NYS Dept. of Health, NYS HIV/AIDS Surveillance Report, May 2008)

	Including Prisoners**			Excluding Prisoners**		
	HIV (not AIDS)	AIDS	HIV and AIDS	HIV (not AIDS)	AIDS	HIV and AIDS
Herkimer County	15	22	37	15	21	36
Oneida County	328	569	897	111	184	295
Syracuse Ryan White Region	1,215	1,916	3,131	635	1,050	1,685
NYS (Excluding NYC)	10,501	17,144	27,645	7,654	12,939	20,593

Table 51: Living HIV and AIDS Cases(excluding prisoners) as of December 2006
(Source: NYS Dept. of Health, NYS HIV/AIDS Surveillance Report, May 2008)

		HIV (not AIDS)			AIDS			HIV and AIDS		
		Syracuse Ryan White Region	Rest of State (not NYC)	All of NYS	Syracuse Ryan White Region	Rest of State (not NYC)	All of NYS	Syracuse Ryan White Region	Rest of State (not NYC)	All of NYS
		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gender	Male	61.1	66.1	66.0	71.4	72.8	70.1	67.5	70.2	68.5
	Female	38.9	33.9	34.0	28.6	27.2	29.9	32.5	29.8	31.5
Current Age	12 & under	1.1	1.4	1.9	*	0.1	0.2	0.4	0.6	0.8
	13-19	3.5	2.0	2.4	0.5	0.8	1.1	1.6	1.3	1.6
	20-24	5.0	3.3	3.7	0.9	1.0	1.2	2.4	1.9	2.1
	25-29	8.2	5.4	6.9	3.0	1.8	2.2	5.0	3.2	4.0
	30-39	22.7	21.9	24.7	21.0	16.1	16.1	21.6	18.3	19.3
	40-49	40.0	38.7	36.2	43.5	43.2	41.0	42.2	41.5	39.2
	50-59	16.5	21.6	18.4	23.6	29.2	28.6	20.9	26.3	24.8
	60 & over	3.0	5.6	5.8	7.5	7.8	9.5	5.8	6.9	8.1
Race/Ethnicity	White	49.8	31.3	23.9	52.9	29.9	21.1	51.7	30.5	22.1
	Black	31.7	39.9	44.4	33.6	42.1	45.6	32.9	41.2	45.1
	Hispanic	12.4	24.2	28.3	9.8	24.1	31.3	10.8	24.1	30.1
	Asian/PI	0.9	0.4	1.2	0.4	0.2	0.9	0.6	0.3	1.0
	Native American	0.3	0.2	0.1	0.4	0.2	0.1	0.4	0.2	0.1
	Multi Race	4.6	3.8	1.0	3.0	3.5	1.0	3.6	3.6	1.0
	Unknown	0.3	0.1	1.0	*	0.1	0.1	0.1	0.1	0.4

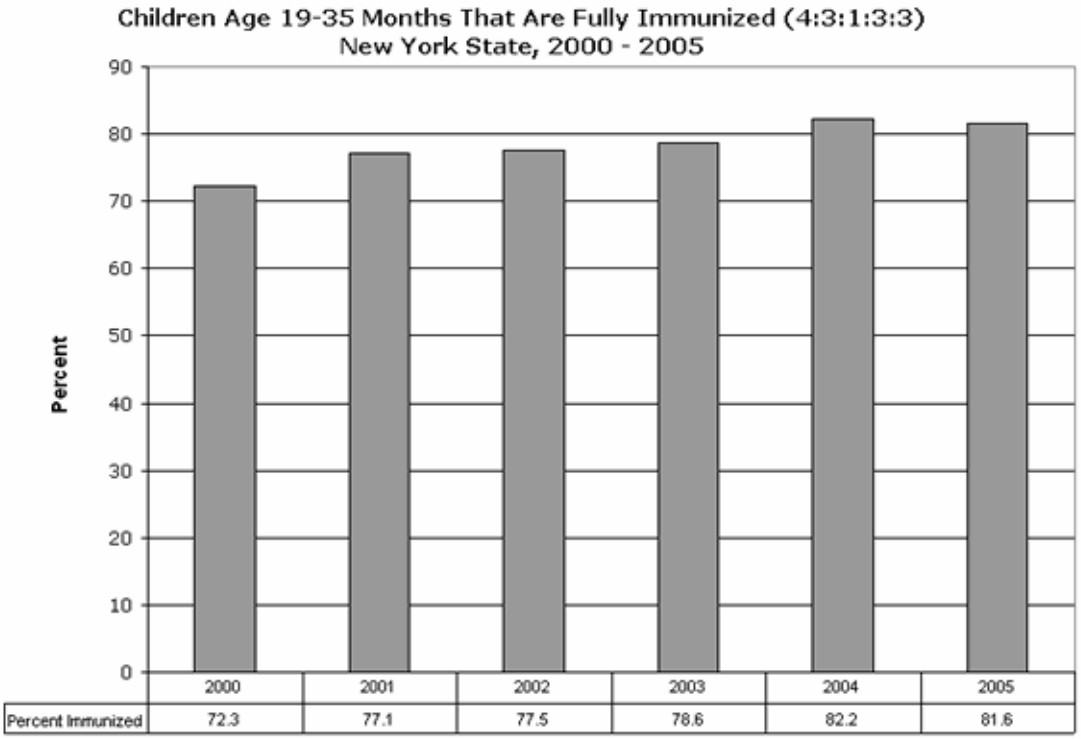
Immunization Rates

The U.S. Department of Health has stated that 2 year old children should be receiving 12 – 16 doses of vaccine to be protected against 10 vaccine preventable childhood diseases. The goal for Healthy People 2010 is 90% full immunization for 24-35 month olds with four or more doses of diphtheria/tetanus/acellular pertussis (DTaP) vaccine, three or more doses of polio vaccine, one or more doses of measles/mumps/rubella (MMR) vaccine, three or more doses of Haemophilus influenza type B (Hib) vaccine, and three or more doses of hepatitis B (Hep B) vaccine (4:3:1:3:3).

The New York State legislature passed the Immunization Registry Law in 2006 directing the New York State Department of Public Health to establish a statewide immunization registry which is automated so that health care providers will be able to report required vaccinations to young people less than 19 years of age. This system is currently being implemented.

National data compiled for New York State from the National Immunization Survey suggests that immunization efforts for children, aged 24-35 months, is improving. After a large increase in 2001, there has been a steady increase in the percentage of fully immunized children in this age group.

Table 52



	2000	2001	2002	2003	2004	2005
Percent Immunized	72.3	77.1	77.5	78.6	82.2	81.6

Fully Immunized includes all Dap, polio, MMR, Hib and HepB (4:3:1:3:3)
Source: National Immunization Survey

Domestic Partner Violence

Data from the 1999 PRAMS[1] survey in New York State found that five percent of the mothers surveyed reported physical abuse during pregnancy. This is increased from four percent on the 1997 PRAMS survey. In addition, 11 percent of women surveyed reported verbal abuse by her husband or partner during the year previous to delivery of her child.[22] A 2002 report, published by the Government Accounting Office, concluded that associated factors to violence during pregnancy are intimate (domestic) partner violence present before pregnancy, unplanned pregnancy, and age of the victim. [23]

There are several health concerns for pregnant women as a result of physical violence. Abdominal trauma can lead to serious injuries including loss of the fetus, early onset of labor, bone fractures of the fetus, and uterine rupture or hemorrhage. In addition, physical violence is associated with alcohol, drug and tobacco use, low birthweight, infection and anemia.

Although specific domestic partner violence data pertaining to pregnant women is not collected, data from Herkimer and Oneida County service providers show that domestic partner violence is a serious concern in these two counties.

Table 53: YWCA Domestic Violence Statistics 2003 and 2006

(Source: YWCA, Utica, NY)

	Herkimer County		Oneida County		Combined	
	2003	2006	2003	2006	2003	2006
Domestic Violence Hotline Calls	n/a	n/a	n/a	1424	1043	1424
Sexual Violence Hotline Calls	76	80	457	246	533	326

[1]The Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance project of the Centers for Disease Control and Prevention (CDC) and state health departments that collect data from women who recently gave birth.

Perinatal Mood Disorders

In a Brief Introduction to Perinatal Mood Disorders by Helen Jones, this article on the Postpartum Support International website clarifies that while "the general public tends to believe that pregnancy and having a baby is a time of emotional well-being for women…….a substantial number of women will experience distressing symptoms that can make pregnancy and motherhood one of the most frightening times in their lives". [24] Commonly known as postpartum depression (PPD), mood changes occur during pregnancy as well as after and have a variability of symptoms other than depression. For these reasons, the term perinatal mood disorders is frequently being used to encompass the time period in a woman's life from pregnancy to ending breastfeeding when she may be experiencing mood changes. In addition, there is public recognition for a range of mood disorders which includes prenatal depression, the "baby blues", postpartum depression and postpartum psychosis. [24]

It is estimated that 60%-80% of women experience the "baby blues". This term refers to a period of temporary moodiness, which usually begins 1-3 days after delivery. Symptoms may include sadness, irritability, frustration and fatigue. Symptoms of prenatal or postpartum depression are similar but more persistent (lasting throughout the day and longer than two weeks) than those of the "baby blues". It is estimated that 10-20% of new mothers experience these types of depression; however, it is suspected that this number is greater since many cases go unreported. Additional symptoms may include frequent crying, sleep disturbances, feelings of anger or irritability, suicidal thoughts, and sometimes anxiety or panic attacks. The new mom may feel overwhelmed, inadequate and unable to cope. Postpartum psychosis is a severe but extremely rare disorder (1 or 2 women per 1,000) that can develop in the postpartum period. This illness is characterized by a loss of contact with reality for extended periods of time. Symptoms usually occur during the first few weeks after delivery and include hallucinations, delusions, rapid mood swings, and suicidal/infanticidal thoughts or actions. [25]

Causes of perinatal mood disorders are complicated and include psychological, biological and/or social factors. Risk factors include sleep deprivation, the stress of new motherhood, lack of social support and individual and family histories of depression. Treatment for perinatal mood disorders can include medication, counseling and support groups.

Countywide data on perinatal mood disorders is not available. Based on the above rates, it can be estimated that, within Herkimer and Oneida Counties for those giving birth in 2007, between 1994 and 2659 women experienced the "baby blues". Approximately 332 to 665 women suffered with prenatal or postnatal depression, and from one to six women would have had symptoms of postpartum psychosis.

A study conducted in 2002 used PRAMS data from New York State, Colorado, and North Carolina to try to determine factors which might be predictive of serious depression in women during the months after delivery of her child. This study concluded that mothers who had a very difficult pregnancy were 4.6 times more likely to report being very depressed in the months after delivery. In addition, other risk factors for serious post-partum depression were partner-associated stress, physical abuse, and not breastfeeding. The authors concluded that "clinicians need to be aware of the needs of some women for mental health services both during and after pregnancy." [26]

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Appendix I: Perinatal Profile for Zip Code 13501

Zip Code 13501	Births	Premature Births		Low Birthweight		Teen Births					
						Age 15 - 17		Age 18 - 19		Age 15 - 19	
	#	#	%	#	%	#	Rate per 1,000	#	Rate per 1,000	#	Rate per 1,000
1999-2003 Total/Average	2,581	254	9.80%	237	9.20%	165	45.8	249	109.2	414	70.4
2004	539	58	10.80%	58	10.80%	30		37		67	
2005	544	51	9.40%	42	7.70%	29		55		84	
2006	571	52	9.10%	50	8.80%	31		58		89	
2007	563	61	10.80%	54	9.60%	21		53		74	
2004-2007 Total/Average	2217	222	10.03%	204	9.23%	111	n/a	203	n/a	314	n/a

Zip Code 13501	Births	Early Prenatal Care		Breastfeeding		Tobacco		Alcohol Use		Illegal Drug Use	
	#	#	%	#	%	#	%	#	%	#	%
1999-2003 Total/Average	2,581	1558	60.40%	1254	48.60%	663	25.70%				
2004	539	340	63.00%	276	52.10%	132	24.40%	7	1.30%	20	3.70%
2005	544	330	61.00%	289	53.40%	145	26.70%	8	1.50%	24	4.40%
2006	571	316	55.60%	304	53.90%	131	22.90%	8	1.40%	20	3.50%
2007	563	314	56.50%	308	55.00%	127	22.60%	5	0.90%	18	3.20%
2004-2007 Total/Average	2217	1300	59.03%	1177	53.60%	535	24.10%	28	1.30%	82	3.70%

Appendix I: Perinatal Profile for Zip Code 13502

Zip Code 13502	Births	Premature Births		Low Birthweight		Teen Births					
						Age 15 - 17		Age 18 - 19		Age 15 - 19	
	#	#	%	#	%	#	Rate per 1,000	#	Rate per 1,000	#	Rate per 1,000
1999-2003 Total/Average	1,999	184	9.20%	183	9.20%	64	24.7	159	59.2	223	42.2
2004	406	48	11.80%	49	12.10%	7		25		32	
2005	387	37	9.60%	30	7.80%	15		28		43	
2006	415	46	11.10%	48	11.60%	13		34		47	
2007	395	37	9.40%	33	8.40%	12		36		48	
2004-2007 Total/Average	1603	168	10.48%	160	9.98%	47	n/a	123	n/a	170	n/a

Zip Code 13501	Births	Early Prenatal Care		Breastfeeding		Tobacco		Alcohol Use		Illegal Drug Use	
	#	#	%	#	%	#	%	#	%	#	%
1999-2003 Total/Average	1,999	1362	68.10%	968	48.40%	469	23.50%				
2004	406	279	69.10%	205	51.50%	130	32.00%	3	0.70%	7	1.70%
2005	387	240	62.50%	200	52.50%	94	24.30%	2	0.50%	12	3.10%
2006	415	258	62.50%	206	51.00%	108	26.00%	5	1.20%	15	3.60%
2007	395	262	66.30%	206	52.60%	96	24.30%	1	0.30%	15	3.80%
2004-2007 Total/Average	1603	1039	65.10%	817	51.90%	428	26.70%	11	0.70%	49	3.10%