

## ***PRIORITY: HEALTHY BIRTHS (Maternal, Infant and Child Health)***

According to *Healthy People 2010*,

The health of mothers, infants, and children is of critical importance, both as a reflection of the current health status of a large segment of the U.S. population and as a predictor of the health of the next generation. This focus area addresses a range of indicators of maternal, infant, and child health—those primarily affecting pregnant and postpartum women (including indicators of maternal illness and death) and those that affect infants' health and survival (including infant mortality rates; birth outcomes; prevention of birth defects; access to preventive care; and fetal, perinatal, and other infant deaths).

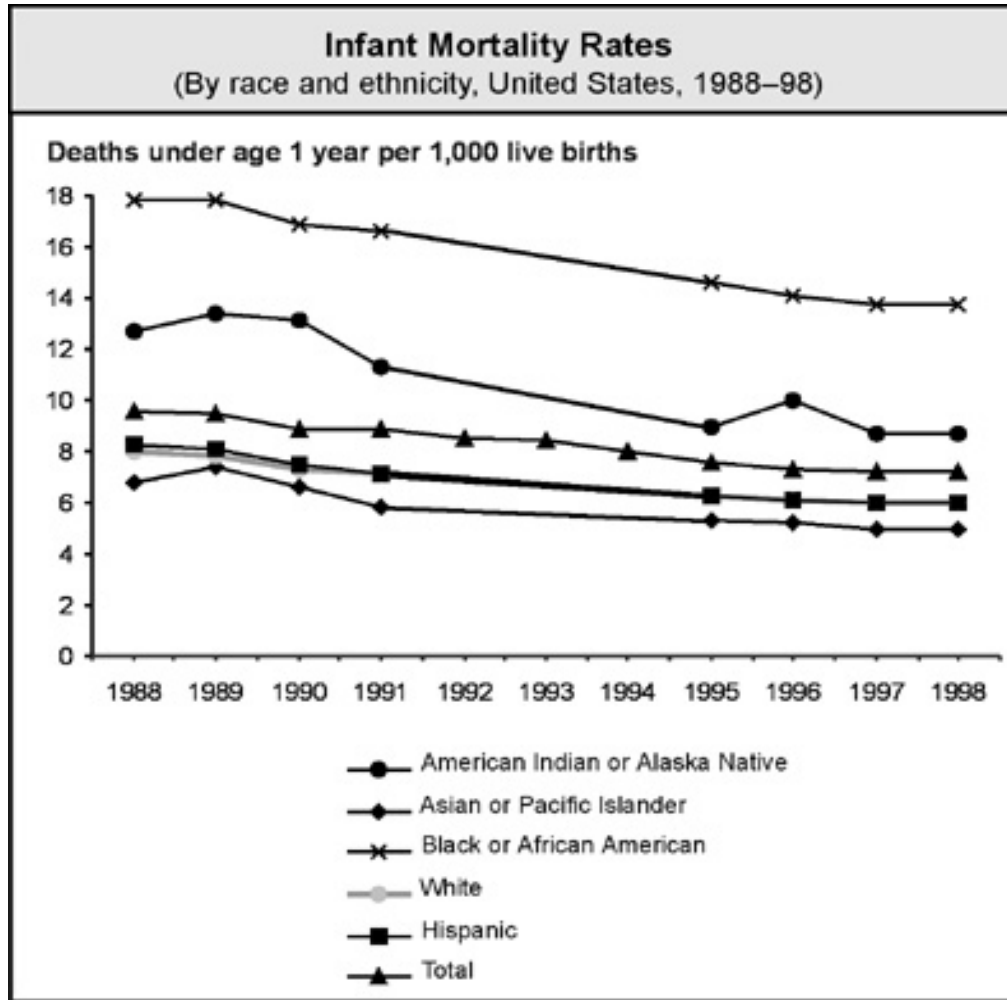
Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social well-being. As noted in the *2010 Initiative*,

In the past decade, critical measures of risk of infant death, such as new cases of low birth weight (LBW) and very low birth weight (VLBW) have shown increases in the United States. In addition, the disparity in infant mortality rates between whites and specific racial and ethnic groups (especially African Americans, American Indians or Alaska Natives, Native Hawaiians, and Puerto Ricans) persists. Although the overall infant mortality rate has reached record low levels, the rate for African Americans remains twice that of whites.

## Issues and Trends

Figure 1 shows data for infant mortality by race and ethnicity in the U.S. (1988-98). Overall infant mortality has declined during this time period, although the rates for some subpopulations remain higher than for others. Infants of Blacks/African Americans consistently have had the highest mortality rates, and although the rate has declined over time, it still remains higher than for other subpopulations. Infants of Native Americans also have a higher-than-average risk, with greater fluctuations in the mortality rate than for other subpopulations.

Figure 1. Infant Mortality Rates in the U.S. 1988-98.



Source: CDC, NCHS. National Vital Statistics System (NVSS). Data for 1998 are preliminary; 1992-94 linked live birth-infant death files are not available.

Note: Data for white and Hispanic overlap from 1991 to 1998.

[http://www.healthypeople.gov/Document/HTML/Volume2/16MICH.htm#\\_Toc494699659](http://www.healthypeople.gov/Document/HTML/Volume2/16MICH.htm#_Toc494699659)

## Healthy People 2010 and Healthy Births

The following chart presents the *Healthy People 2010* targets for the objectives pertinent to ensuring healthy births, along with baseline data for the year(s) indicated. This chapter examines Chautauqua County data for the Priority: *Healthy Births* indicators listed in **bold type** and selected other indicators associated with healthy births.

### A. Health Data

#### 1. Infant, Neonatal, Post Neonatal and Spontaneous Fetal Deaths in Chautauqua County

Table 1 shows that Chautauqua County has higher rates of infant deaths, neonatal deaths, and perinatal deaths, but lower rates of post-natal deaths than does New York State overall.

The County is close to the *Healthy People 2010* target rate for postneonatal deaths (1.4 deaths vs. target of 1.2 deaths per 1,000 live births). However, the County infant death rate (6.3 per 1,000 live births) and neonatal death rate (4.9 per 1,000 live births) is higher than the *2010* target (4.5 and 2.9, respectively). According to the *Healthy People 2010* Initiative, short gestation and low birth weight (LBW) are among the leading causes of neonatal death, accounting for 20 percent of neonatal deaths in the United States. County rates for gestation and LBW are examined later in this chapter. The County rate for perinatal deaths (14.5) is more than three times as high as the *2010* target (4.5 deaths per 1,000 live births).

#### Healthy People 2010 Baselines and Targets for Priority: Healthy Births

Objective	Indicators	1998 Baseline	2010 Target
	Reduction in Fetal and Infant Deaths		
		<i>Per 1,000 Live Births</i>	
16-1a.	<b>Fetal deaths at 20 or more weeks of gestation</b>	6.8 (1997)	4.1
16-1b.	<b>Fetal and infant deaths during perinatal period (28 weeks of gestation to 7 days or more after birth)</b>	7.5	4.5
16-1c.	<b>All infant deaths (within 1 year)</b>	7.2*	4.5
16-1d.	<b>Neonatal deaths (within the first 28 days of life)</b>	4.8	2.9
16-1e.	<b>Post-neonatal deaths (between 28 days and 1 year)</b>	2.4	1.2
16-1f.	All birth defects	1.6	1.1
16-1g.	Congenital heart defects	0.53	0.38
16-h.	<b>Reduce deaths from SIDS</b>	0.72**	0.25
Objective	Reduction in Maternal Deaths		
		<i>Rate per 100,000 live births</i>	
16-4.	<b>Maternal Deaths</b>	7.1	3.3
Objective	Reduction in Maternal Illness and Complications		
		<i>Per 100 Deliveries</i>	
16-5a.	Maternal complications during hospitalized labor and delivery	31.2	24

16-5b.	(developmental) Ectopic pregnancies		
16-5c.	(developmental) Postpartum complications, including postpartum depression		
Objective	Increase in Maternal Prenatal Care		
		<i>Percent of Live Births</i>	
16-6a.	<b>Care beginning in first trimester of pregnancy</b>	83%	90%
16-6b.	Early and adequate prenatal care	74%	90%
16.7	(developmental) Increase proportion of pregnant women who attend a series of prepared childbirth classes.		
16.8	Increase proportion of VLB infants born at level III hospitals or subspecialty perinatal centers	73% (1996-97)	90%
Objective	Reduction in Cesarean Births		
		<i>Percent of Live Births</i>	
16-9a.	Women giving birth for the first time	18%	15%
16-9b.	Prior cesarean birth	72%	63%
Objective	Reduction in Low and Very Low Birth Weight		
		<i>Percent</i>	
16-10a.	<b>Low birth weight (LBW)</b>	7.6%	5.0%
16-10b.	<b>Very low birth weight (VLBW)</b>	1.4%	0.9%
Objective	Reduction in Preterm Births	<b>1998 Baseline</b>	<b>2010 Target</b>
		<i>Percent</i>	
16-11a.	<b>Total preterm births</b>	11.6%	7.6%
16-11b.	Live births at 32 to 36 weeks of gestation	9.6%	6.4%
16-11c.	Live births at less than 32 weeks of gestation	2.0%	1.1%
16.12	(developmental) Increase proportion of mothers who achieve a recommended weight gain during their pregnancies.		
16.13	Increase percentage of healthy full-term infants who are put to sleep on their backs.	35%	70%
Objective	Reduction in Developmental Disabilities in Children	<b>1991-94 Baseline</b>	<b>2010 Target</b>
		<i>Rate per 10,000</i>	
16-14a.	Mental retardation	131**	124
16-14b.	Cerebral palsy	32.2 <sup>†</sup>	31.5
16.15	<b>Reduce occurrence of spina bifida &amp; other NTDs</b>	6 new cases (1998)	3 new cases

16-14c.	Autism spectrum disorder	Developmental	
16-14d.	Epilepsy	Developmental	
Objective	<b>Increase in Pregnancies Begun With Optimum Folic Acid Level</b>	<b>1991–94 Baseline</b>	<b>2010 Target</b>
		<i>Percent</i>	
16-16a.	Consumption of at least 400 µg of folic acid each day from fortified foods or dietary supplements by non-pregnant women aged 15 to 44 years	21%	80%
16-16b.	Median RBC folate level among non-pregnant women aged 15 to 44 years	160 ng/ml	220 ng/ml
Objective	Increase in Reported Abstinence in Past Month From Substances by Pregnant Women***	<b>1996–97 Baseline</b>	<b>2010 Target</b>
		<i>Percent</i>	
16-17a.	Alcohol	86%	94%
16-17b.	Binge drinking	99%	100%
16-17c.	Cigarette smoking <sup>††</sup>	87% (1998)	99%
16-17d.	Illicit drugs	98%	100%
16.18	(developmental) Reduce occurrence of FAS		
Objective	Increase in Mothers Who Breastfeed	<b>1998 Baseline</b>	<b>2010 Target</b>
		<i>Percent</i>	
16-19a.	In early postpartum period	64%	75%
16-19b.	At 6 months	29%	50%
16-19c.	At 1 year	16%	25%
16-20.	(developmental) Ensure appropriate new born bloodspotting screening, follow up testing and service referrals.		
16-21.	(developmental) Reduce hospitalizations for life-threatening sepsis among children age < 4 years with sickling helpgloinopathides		
16-22.	(developmental) Increase proportion of children with special health care needs who have access to a medical home.		
13-17.	<b>(developmental) Reduce new cases of perinatally acquired HIV infection</b>		

Objective	<b>FAMILY PLANNING</b>	<b>1995 Baseline</b>	<b>2010 Target</b>
9.1	Increase the proportion of pregnancies that are intended. (of pregnancies of women aged 15 to 44 years)	51%	70%
9.2	Reduce the proportion of births occurring within 24 months of a previous birth. (% of pregnancies of women aged 15 to 44 years)	11%	6%
9.3	Increase the proportion of females at risk of unintended pregnancies (and their partners) who use contraception. (% of pregnancies of women aged 15 to 44 years)	93%	100%
9.4	Reduce the proportion of females experiencing pregnancy despite use of reversible contraception method. (% of pregnancies of women aged 15 to 44 years)	13%	7%
9.5	(developmental) Increase the proportion of health care providers who provide emergency contraception.		
9.6	(developmental) Increase male involvement in pregnancy prevention and family planning efforts.		
9.7	<b>Reduce pregnancies among adolescent females (per 1,000 females aged 15 to 17 years)<sup>†††</sup></b>	68 (1996)	43
9.8	Increase the proportion of adolescents who have never engaged in sexual intercourse before age 15 years.		
9.8a	Females	81%	88%
9.8b	Males	79%	88%
9.9	Increase the proportion of adolescents who have never engaged in sexual intercourse. ( adolescents aged 15 to 17 years)		
9.9a	Females	62%	75%
9.9b	Males	75%	75%
9.10	Increase the proportion of sexually active, unmarried adolescents aged 15 to 17 years who use contraception that both effectively prevents pregnancies and provides barrier protection against disease.		
	Condom		
9.10a	Females	67%	75%
9.10b	Males	72%	83%
	Condom plus hormonal method		
9.10c	Females	7%	9%
9.10d	Males	8%	11%
9.11	Increase the proportion of young adults who have received formal instruction before turning age 18 year on reproductive health issues, including all of the following topics: birth control methods, safer sex	64%	90%

	to prevent HIV, prevention of sexually transmitted diseases, and abstinence.		
9.12	Reduce the proportion of married couples whose ability to conceive or maintain a pregnancy is impaired.	13%	10%
9.13	(developmental) Increase the proportion of health insurance policies that cover contraceptive supplies and services.		

\* Plus fetal deaths

\*\* Children aged 8 years in metropolitan Atlanta, GA, having an IQ of 70 or less.

\*\*\*Pregnant women aged 15 to 44 years.

†Children age 8 years in metropolitan Atlanta, GA.

††Smoking during pregnancy for all women giving birth in 1998 in 46 States, the District of Columbia, and New York City.

††† Baseline and target data for adolescents under age 15 not available. According to *Healthy People 2010* Initiative, "nearly two-thirds of pregnancies in this age group end in induced abortion or fetal loss. Because of the relatively small numbers of events (and small sample sizes for fetal losses) involved, the resulting rates are not as stable as for older females. Almost no discernible decline in pregnancy rates for this age group occurs on an annual basis."

**Table 1. Infant Deaths, Neonatal Deaths, Postneonatal Deaths and Perinatal Mortality in Chautauqua County and New York State, 2004.**

	Infant Deaths <sup>1</sup>		Neonatal Deaths <sup>2</sup>		Post Neonatal Deaths <sup>3</sup>		Perinatal Mortality <sup>4</sup>	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate <sup>5</sup>
<b>Chautauqua County</b>	9	6.3	7	4.9	2	1.4	21	14.5
New York State Total	1,502	6.0	1,058	4.3	444	1.8	2,842	11.3
<i>Healthy People 2010</i> Target		4.5		2.9		1.2		4.5

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

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

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

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

5 Perinatal Mortality Rate -- the number of neonatal deaths + spontaneous fetal deaths of gestation 20+ weeks per 1,000 spontaneous fetal deaths of gestation 20+ weeks + live births

([http://www.health.state.ny.us/nysdoh/vital\\_statistics/2004/table45.htm](http://www.health.state.ny.us/nysdoh/vital_statistics/2004/table45.htm))

For spontaneous fetal deaths in Table 2, the County rate of 6.8 per 1,000 live births is below the rate for New York State (7.4), although the County rate is somewhat higher than for the western New York region (6.4). The County fetal death rate also is higher than the *Healthy People 2010* target rate (4.1 per 1,000 live births).

**Table 2. Spontaneous Fetal Deaths in Chautauqua County and New York State, 2002-2004.**

	Fetal Deaths 20+ Weeks				Births+SFDs 2002-2004	Rate*
	2002	2003	2004	Total		
<b>Chautauqua County</b>	8	8	14	30	4,433	6.8
Western New York Region Total	117	117	100	334	52,409	6.4
New York State Total	1,986	1,865	1,784	5,635	758,443	7.4
<i>Healthy People 2010</i> Target						4.1

\* Per 1,000 Live Births

+Spontaneous Fetal Deaths 20+ weeks gestation.

Source: 2002-2004 Vital Statistics Data as of September, 2006

(<http://www.health.state.ny.us/statistics/chac/birth/sfd20.htm>)

## 2. Deaths from SIDS in New York State

Table 3 presents data on sudden infant death syndrome (SIDS) for New York State (excluding New York City) by race/ethnicity for infants less than one year of age. Although relatively few deaths, the data suggest that Hispanic infants might be at greater mortality risk from SIDS than other infants.

**Table 3. Deaths from Sudden Infant Death Syndrome (SIDS) in New York State (excluding New York City), 2000.**

Total Deaths	Number	Percent of deaths < 1 year, all causes
SIDS	66	7.6%
White		
SIDS	48	7.8%
Black		
SIDS	15	6.6%
Hispanic <sup>2</sup>		
SIDS	7	8.5%
<i>Healthy People 2010 Target</i>		2.5%

<sup>1</sup>Total Deaths = White + Black + Other + Not Stated

<sup>2</sup> Hispanic is a separate count equal to Hispanic White + Hispanic Black + Hispanic Other + Hispanic Not Stated

(<https://commerce.health.state.ny.us/hin>)

## 3. Maternal Mortality in Chautauqua County

As shown in Table 4, no cases of maternal death in Chautauqua County were reported for the years 2002, 2003 and 2004, unlike in the Western New York region and New York State. The county is below the 2010 goal of 3.3 maternal deaths per 100,000 live births.

**Table 4. Maternal Mortality in Chautauqua County and New York State, 2002-2004.**

	Maternal Deaths				Births 2002-2004	Rate (100,000 live births)
	2002	2003	2004	Total		
<b>Chautauqua County</b>	0	0	0	0	4,403	0.0
Western New York Region Total	0	3	6	9	52,075	17.3
New York State Total	32	52	51	135	752,808	17.9
<i>Healthy People 2010 Target</i>						3.3

Source: 2002-2004 Vital Statistics Data as of September, 2006

(<http://www.health.state.ny.us/statistics/chac/birth/matmort.htm>)

#### 4. Maternal Prenatal Care in Chautauqua County

One important factor in fostering healthy births is early prenatal care. As Table 5 shows, for the years 2002-2004, Chautauqua County has a lower 3-year rate of women with early prenatal care (73.9%) than the western New York region and New York State. The 2010 goal is for 90% of women to receive early prenatal care (early and adequate care in first trimester).

**Table 5. Early Prenatal Care in Chautauqua County and New York State, 2002-2004.**

	Births, Early Prenatal Care				Births	Percentage
	2002	2003	2004	Total	2002-2004	
<b>Chautauqua County</b>	965	962	1,025	2,952	3,996	73.9%
Western New York Region Total	12,335	12,118	11,975	36,428	48,103	75.7%
<u>New York State Total</u>	175,032	180,872	175,196	531,100	711,358	74.7%
<i>Healthy People 2010 Target</i> (Early & Adequate Care/Care in First Trimester)						90%

Percentage per 100 live births

Source: 2002-2004 Vital Statistics Data as of September, 2006

(<http://www.health.state.ny.us/statistics/chac/birth/pnce.htm>)

Another way to assess the utilization of prenatal care is to examine the percentage of women receiving late or no prenatal care. Table 6 presents these data. Chautauqua County has fewer women receiving late or no prenatal care (5.5%) than western New York (6.1%) or New York State (5.6%).

**Table 6. Late or No Prenatal Care in Chautauqua County and New York State, 2002-2004.**

	Births, Late or No Prenatal Care				Births	Percentage
	2002	2003	2004	TOTAL	2002-2004	
<b>Chautauqua County</b>	78	74	67	219	3,996	5.5%
Western New York Region Total	1,157	1,208	563	2,928	48,103	6.1%
<u>New York State Total</u>	14,163	13,772	11,608	39,543	711,358	5.6%

Source: 2002-2004 Vital Statistics Data as of September, 2006 (<http://www.health.state.ny.us/statistics/chac/birth/pncl.htm>)

#### 5. Anemia During Pregnancy

In a 1996 WIC report, children showed inappropriate or inadequate nutrient intake and anthropometric risks (low weight for height, for example) as their most frequently recorded risks. Three-quarters of WIC infants were recorded at risk due to the WIC-eligibility of their mothers or because their mothers were at risk during pregnancy. At least one nutritional risk was reported for 99.4 percent of WIC enrollees in April 1996. Not getting enough iron during pregnancy can cause preterm labor and delivering a low-birth weight baby. Table 7 shows the percentages of WIC participants with hematocrit or hemoglobin below New York State standards by level of poverty in 1996.

**Table 7. Pregnant WIC Participants with Anemia in New York State by Level of Poverty, 1996.**

Hematocrit or Hemoglobin below State standards	1% to 100%	101% to 130%	131-185%	186% and over	Zero Reported Income	Income Not Reported
New York State	26.6%	22.9%	21.2%	19.6%	23.3%	31.1%

Decreased hematocrit indicates anemia; below-normal hemoglobin levels may be the result of anemia, among other conditions.

(<http://www.nlm.nih.gov/medlineplus/anemia.html>)

Data Source: *Study of WIC Participant and Program Characteristics 1996* (1998) (<https://commerce.health.state.ny.us/hin/>).

## **6. Folic Acid During Pregnancy**

Issues related to folic acid during pregnancy are discussed in the following study.

The New York State Department of Health Center for Environmental Health conducted a case-control study in fourteen urban New York State counties of infants born with a heart that did not form normally (congenital heart defect). The study compared the use of regular multivitamins with the use of special vitamins, or prenatal vitamins, for pregnant mothers. Prenatal vitamins usually contain about twice as much folic acid as regular multivitamins. Vitamins containing folic acid are important to study because previous research suggests that folic acid may prevent many serious congenital defects, including some heart defects, as well as neural tube defects (defects of the brain and spinal cord).

The study results suggest that mothers who take prenatal vitamins or vitamins containing high levels of folic acid early in pregnancy, before or during the formation of the fetal heart, had a six percent reduction in the risk of giving birth to a baby with a congenital heart defect. The study also found a 30 percent risk reduction for a group of related congenital heart defects called conotruncal defects, confirming previous research findings.

The results of this study are consistent with current recommendations that all women take folic acid either in a vitamin or in food products fortified with folic acid. These results should encourage public health agencies to continue educating women about the benefits of including folic acid in their diet (<https://commerce.health.state.ny.us/hin/>).

## **7. Low Birth Weight and Preterm Births in Chautauqua County**

According to the *Healthy People 2010 Initiative*,

Four causes account for more than half of all infant deaths: birth defects, disorders relating to short gestation and unspecified low birth weight (LBW), sudden infant death syndrome (SIDS), and respiratory distress syndrome. LBW and short gestation contribute to increased risks of poor pregnancy outcomes. Despite the low proportion of pregnancies resulting in LBW babies, expenditures for the care of LBW infants total more than half of the costs incurred for all newborns. The general category of LBW infants includes both those born too early (preterm infants) and those who are born at full term but who are too small, a condition known as intrauterine growth retardation (IUGR). Maternal cigarette smoking is the greatest known risk factor. LBW is associated with long-term disabilities, such as cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities.

In Chautauqua County, fewer LBW infants with weights less than 2.5 kilograms were born to resident mothers (6.81%) than in western New York (7.87%) or New York State (7.89%), as shown in Table 8. However, the county's percentage of LBW infants is higher than the 2010 target of 5.0%.

**Table 8. Low Birth Weight Infants of Mothers Residing in Chautauqua County and New York State, 2003.**

(LBW= <2.5KG)		
	Birth Percentages(x100)	Counts (Number of LBW Infants / Live County Births, 2003)
<b>Chautauqua County</b>	6.81	( 100/ 1,468 )
Western New York Region Total	7.87	(1,373 /17,457 )
New York State Total	7.89	(19,970/253,001)
<i>Healthy People 2010 Target</i>	5.0	----

<https://commerce.health.state.ny.us/hin/cgi-bin/applinks/vitalrec/birth.cgi/birthpctj>

As noted in the *Healthy People 2010* guidelines,

included in the LBW category are very low birth weight (VLBW) infants weighing less than 1,500 grams (3.3 pounds), usually is associated with preterm birth. According to the 2010 statement, relatively little is known about risk factors for preterm birth, but the primary risk factors are prior preterm birth and spontaneous abortion, low pre-pregnancy weight, and maternal cigarette smoking. These risk factors account for only one-third of all preterm births, however.

Only 1.23% of Chautauqua County infants were very low birth weight (VLBW), compared to 1.70% in Western New York and 1.53% in New York State. With the *Healthy People 2010* target for VLBW infants at 0.9%, the county is close to meeting this goal (see Table 9).

**Table 9. Very Low Birth Weight Infants of Mothers Residing in Chautauqua County and New York State, 2003.**

(VLBW= <1.5KG)		
	Birth Percentages(x100)	Counts(Number of VLBW /100 Births in 2003)
<b>Chautauqua County</b>	1.23	(18 / 1468 )
Western New York Region Total	1.70	(296 / 17,457 )
New York State Overall	1.53	(3,869 / 253,001 )
<i>Healthy People 2010 Target</i>	0.9	----

<https://commerce.health.state.ny.us/hin/cgi-bin/applinks/vitalrec/birth.cgi/birthpctj>

The general category of LBW infants includes those born too early (preterm infants). As noted in the 2010,

Initiative, 11.6% of U.S. births were preterm in 1998. LBW is associated with long-term disabilities, such as cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities.

The *Healthy People 2010* goal is 7.6% or fewer live births occurring prior to 37 weeks gestation. In Table 10, Chautauqua County's rate is 9.8%, which compares favorably both to the rates for western New York and New York State (11.2% and 11.6%, respectively), but will need to be reduced to meet the 2010 target of 7.6%.

**Table 10. Short Gestation Births (<37 weeks) in Chautauqua County and New York State, 2000-2002.**

	Births <37 Weeks				Births	Percentage
	2002	2003	2004	TOTAL	2002-2004	
<b>Chautauqua County</b>	133	145	137	415	4,251	9.8 %
Western New York Region Total	1,896	1,837	1,815	5,548	49,474	11.2 %
New York State Total	27,646	27,955	29,100	84,701	727,863	11.6 %
<i>Healthy People 2010 Target</i>						7.6%

Source: 2002-2004 Vital Statistics Data as of September, 2006.  
<http://www.health.state.ny.us/statistics/chac/birth/shtges.htm>

## 9. Family Planning

### a. Pregnancy in Chautauqua County

Table 11 presents data on pregnancies for females age 15-44 in Chautauqua County, 2002-2004. The County has a lower pregnancy rate (62.4 pregnancies per 1,000 females) than western New York (73.2) or New York State (89.8).

**Table 11. Pregnancy Rate and Trends in Chautauqua County and New York State per 1,000 Females Age 15-44, 2002-2004**

	Pregnancies (Age 15-44)				Population	Rate
	2002	2003	2004	Total	2003	
<b>Chautauqua County</b>	1,824	1,768	1,681	5,273	28,149	62.4
Western New York Region Total	24,002	23,647	22,926	70,575	321,570	73.2
New York State Total	375,836	374,552	371,185	1,121,573	4,161,106	89.8
<i>Healthy People 2010 Target</i>						---

Source: 2002-2004 Vital Statistics Data as of September, 2006  
<http://www.health.state.ny.us/statistics/chac/birth/tpreg.htm>

Table 12 shows a lower pregnancy rate for adolescents age 10-14 in Chautauqua County (0.8 pregnancies per 1,000 females age 10-14) for 2002-2004. than in western New York (1.4) or New York State (1.5). There were few pregnancies for adolescents age 10-14 in the County for each of these years, adding up to only 11 for the three-year period.

**Table 12. Pregnancy Rate and Trends in Chautauqua County and New York State per 1,000 Females Age 10-14, 2002-2004.**

	Pregnancies (Age 10-14)				Population	Rate
	2002	2003	2004	Total	2003	
<b>Chautauqua County</b>	2	6	3	11	4,660	0.8
Western New York Region Total	71	85	76	232	53,341	1.4
New York State Total	1,002	950	1,019	2,971	647,296	1.5
<i>Healthy People 2010 Target</i>						---

Source: 2002-2004 Vital Statistics Data as of September, 2006

(<http://www.health.state.ny.us/statistics/chac/birth/tp1014.htm>)

\*Baseline and target data for adolescents under age 15 not available. See note in *Healthy People 2010* chart in this chapter.

The data in Table 13 reveal that Chautauqua County has a lower rate of pregnancy for females age 15-19 (43.6 per 1,000 females age 15-19) than either western New York (51.4) or New York State (62.4).

**Table 13. Pregnancy Rate and Trends in Chautauqua County and New York State per 1,000 Females Ages 15-19, 2002-2004.**

	Pregnancies (Age 15-19)				Population	Rate
	2002	2003	2004	Total	2003	
<b>Chautauqua County</b>	249	235	226	710	5,429	43.6
Western New York Region Total	2,991	2,852	2,715	8,558	55,457	51.4
New York State Total	39,893	38,575	38,293	116,761	623,989	62.4
<i>Healthy People 2010 Target</i>						--

Source: 2002-2004 Vital Statistics Data as of September, 2006

(<http://www.health.state.ny.us/statistics/chac/birth/tp1519.htm>)

In Table 14, the pregnancy rate in Chautauqua County for adolescents age 15-17 is 23.9 pregnancies per 1,000 females, age 15-17, which is lower than the western New York or New York State rates (30.4 and 38.0, respectively.) The County rate is also below the *Healthy People 2010* target of 43.

**Table 14. Teenage Pregnancy (Age 15-17) in Chautauqua County and New York State per 1,000 Females, Age 15-17, 2002-2004.**

	Pregnancies (Age 15-17)				Population	Rate
	2002	2003	2004	Total	2003	
<b>Chautauqua County</b>	76	64	72	212	2,953	23.9
Western New York Region Total	1,057	986	949	2,992	32,857	30.4
New York State Total	14,591	13,966	13,972	42,529	373,439	38.0
<i>Healthy People 2010 Target</i>						43

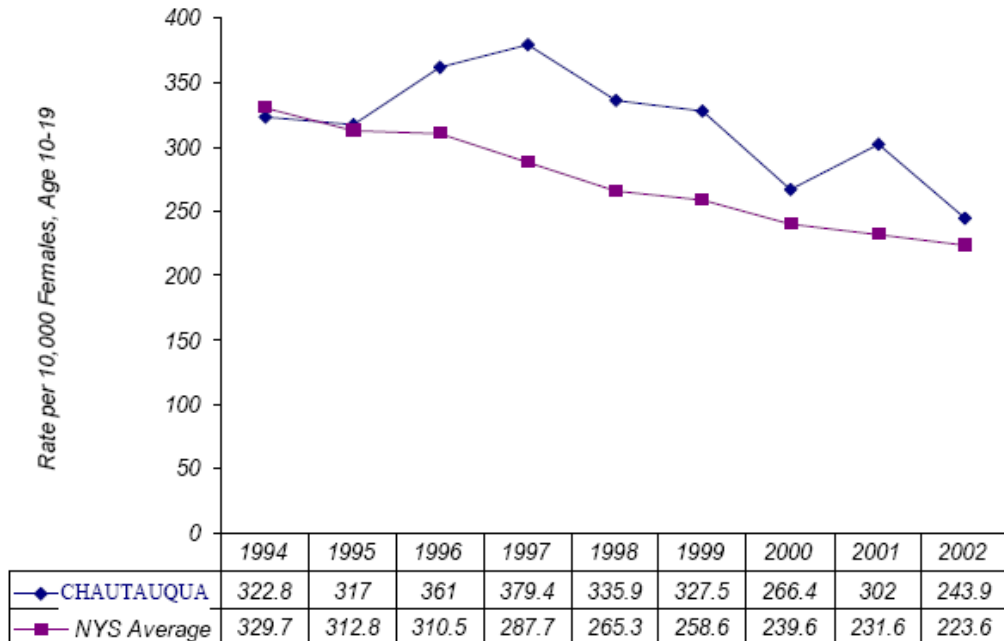
Source: 2002-2004 Vital Statistics Data as of September, 2006

(<http://www.health.state.ny.us/statistics/chac/birth/tp1517.htm>)

Figure 2 presents trends in teenage pregnancy in Chautauqua County and New York State, 1994-2002. Although the rate of teen pregnancies in the County is higher than in the state during most of the years shown, the County rate has declined nearly 25 percent during this time period.

**Figure 2. Trends in the Teenage Pregnancy Rate in Chautauqua County and New York State per 10,000 females age 10-19, 1994-2002.**

*Teenage Pregnancy*



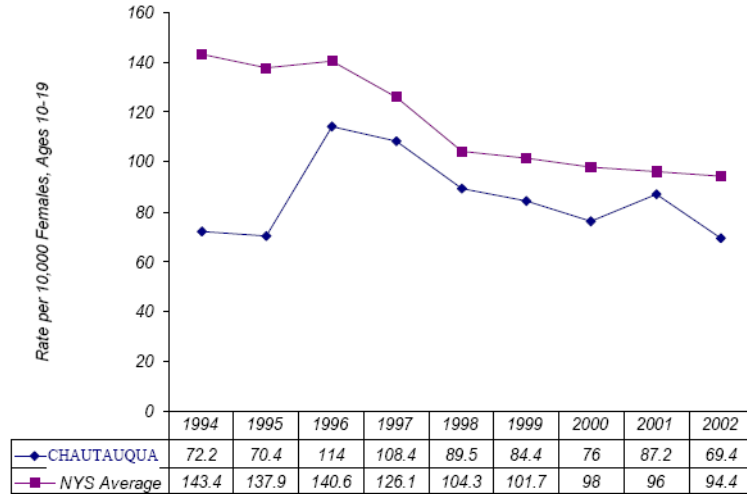
([http://www.oasas.state.ny.us/hps/datamart/2005\\_PRISMS\\_Profiles/Chautauqua.pdf](http://www.oasas.state.ny.us/hps/datamart/2005_PRISMS_Profiles/Chautauqua.pdf))

**b. Teenage Abortion in Chautauqua County**

Trends in teenage abortion rates per 10,000 females ages 10-19 are shown in Figure 3. The teen abortion rate was lower in Chautauqua County (72.2 abortions per 10,000 females age 10-19) than in the state in 1994, and also is lower in the county (69.4) in 2002 than in the state (94.4). However, the County rate has fluctuated during this time period, and is slightly lower in 2002 than in 1994.

**Figure 3. Trends in the Teenage Abortion Rate in Chautauqua County and New York State per 10,000 females age 10-19, 1994-2002.**

*Teenage Abortions*



([http://www.oasas.state.ny.us/hps/datamart/2005\\_PRISMS\\_Profiles/Chautauqua.pdf](http://www.oasas.state.ny.us/hps/datamart/2005_PRISMS_Profiles/Chautauqua.pdf))

**10. HIV/AIDS in Chautauqua County**

(Note: Some of these data are also presented in the HIV/AIDS and Sexual Activity chapters.)

Table 15 presents trends in AIDS cases and HIV cases in newborns for the years 2000-2004 in Chautauqua County. Over this time period, the rate of county AIDS cases has fluctuated between 2.9 and 7.2 cases per 100,000 residents, with a rate of 4.4 cases in 2004. The number of newborns with HIV has been between 2 and 4 during this time period, though data is not available for the years 2003 and 2004.

**Table 15. Trends in AIDS Cases and HIV Seropositive Newborns in Chautauqua County, 2000-2004.**

	2004		2003		2002		2001		2000	
	#	RATE	#	RATE	#	RATE	#	RATE	#	RATE
<b>AIDS Cases*</b>	6	4.4	4	2.9	10	7.2	9	6.5	8	5.7
<i>Healthy People 2010 Target</i> 1.0 new cases per 100,000 persons (age 13+)										
<b>Newborn HIV Seropositive*</b> (per 100 births)	N/A*	N/A*	N/A*	N/A*	4	0.3	2	0.1	2	0.1
<i>Healthy People 2010 Target</i> (developmental: reduce incidence)		--		--		--		--		--

\* N/A - Not Available

\*\* AIDS Cases are presented by diagnosis year and exclude prison inmates. Newborn seropositivity is per 100 births. AIDS case rates are per 100,000 population. Source: New York State Department of Health (<http://www.health.state.ny.us/nysdoh/cfch/pchaut.htm>).

Table 16 shows that in the Buffalo Ryan White Region, more males than females (78% vs. 22%) were diagnosed with HIV/AIDS as of December 2003. Ages 30-49 had the highest percentage of cases (69%), followed by ages 50+ (13%) and ages 25-29 (12%). The percentages for blacks and whites are 43% and 44%, respectively; Hispanics comprise 11% of the total prevalent cases. (Data are not standardized to the population).

**Table 16. HIV/AIDS Cases\* by Gender, Age and Race/Ethnicity in  
Ryan White Region: Buffalo, Diagnosed Through December 2003.**

	Living HIV**		AIDS***			
			Living		Cumulative	
	Number	Percent	Number	Percent	Number	Percent
<b>Gender</b>						
Male	400	0.61	706	0.73	1,755	0.78
Female	258	0.39	261	0.27	501	0.22
Unk	0	0.00	0	0.00	0	0.00
<b>TOTAL</b>	<b>658</b>	<b>1.00</b>	<b>967</b>	<b>1.00</b>	<b>2,256</b>	<b>1.00</b>
<b>Age Group</b>						
<13	17	0.03	5	0.01	18	0.01
13-19	39	0.06	14	0.01	21	0.01
20-24	80	0.12	40	0.04	91	0.04
25-29	110	0.17	96	0.10	269	0.12
30-49	373	0.57	694	0.72	1,560	0.69
50+	39	0.06	118	0.12	297	0.13
<b>TOTAL</b>	<b>658</b>	<b>1.00</b>	<b>967</b>	<b>1.00</b>	<b>2,256</b>	<b>1.00</b>
<b>Race/Ethnicity</b>						
White	253	0.38	388	0.40	992	0.44
Black	295	0.45	426	0.44	974	0.43
Hispanic	99	0.15	126	0.13	249	0.11
Asian/PI	3	0.00	6	0.01	9	0.00
Native Am	1	0.00	9	0.01	12	0.01
Multi Race	4	0.01	9	0.01	9	0.00
Other/Unk	3	0.00	3	0.00	11	0.00
<b>TOTAL</b>	<b>658</b>	<b>1.00</b>	<b>967</b>	<b>1.00</b>	<b>2,256</b>	<b>1.00</b>

\* Excludes Prisoners

\*\* All cases reported and confirmed from June 2000 - December 2004

\*\*\* All cases reported and confirmed from 1983 - December 2004

([http://www.health.state.ny.us/diseases/aids/statistics/semiannual/2003/surveillance\\_semiannual\\_report\\_2003.pdf](http://www.health.state.ny.us/diseases/aids/statistics/semiannual/2003/surveillance_semiannual_report_2003.pdf))

Table 17 shows that in Chautauqua County a total of 4 deaths from AIDS occurred between 2002-2004. The age-adjusted rate of 1.1 deaths per 100,000 residents is below the 1998 *Healthy People 2010* baseline of 4.9 deaths. The county also has a lower AIDS mortality rate than in western New York or New York State.

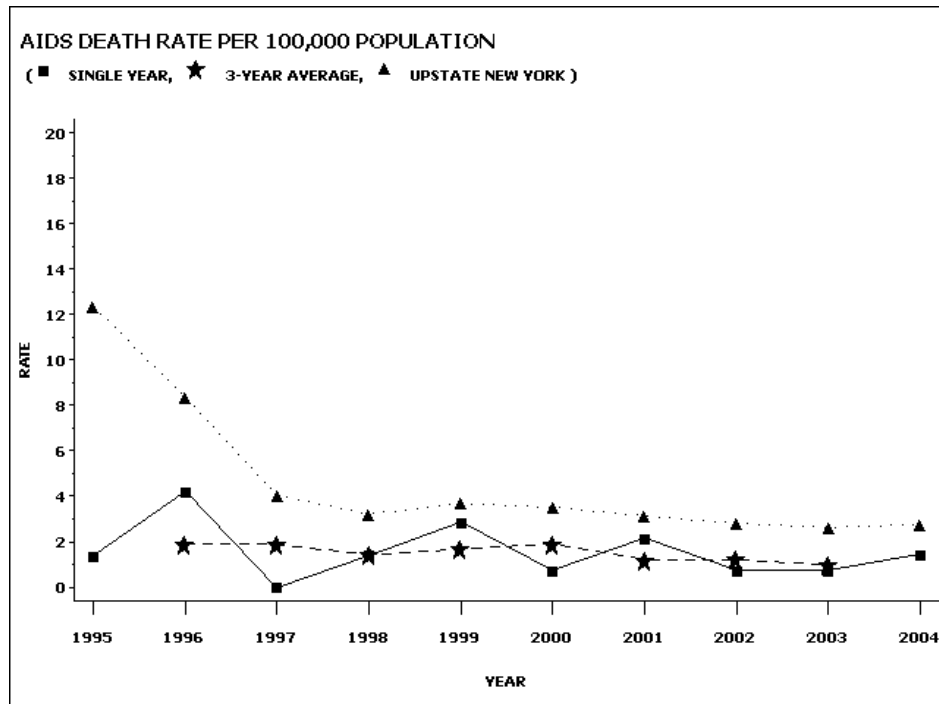
**Table 17. AIDS Deaths and Death Rates per 100,000 Residents in Chautauqua County and New York State, 2002-2004.**

	Deaths from AIDS				Population	Adjusted
	2002	2003	2004	Total	2003	Rate * (100,000)
<b>Chautauqua County</b>	1	1	2	4	137,645	1.1
Western New York Region	29	37	45	111	1,577,585	2.3
New York State	1,995	1,901	1,722	5,618	19,190,115	9.5
<i>Healthy People 2010</i> Target						---

Source: 2002-2004 Vital Statistics Data as of September, 2006. \* Adjusted rates are age adjusted to the 2000 United States population (<http://www.health.state.ny.us/statistics/chac/mortality/aids.htm>).

Figure 4 shows the mortality trend for AIDS in Chautauqua County by presenting single year and 3-year average death rates for the years 1993-2002. The single-year mortality rate declined slightly during the ten-year time period; the 3-year average smoothes out year-to-year fluctuations to more clearly illustrate this trend.

**Figure 4. Trends in AIDS Death Rate in Chautauqua County, 1993-2004.**



(<http://www.health.state.ny.us/statistics/chac/mortality/aids6.htm>)

## B. Unmet Needs

### Summary: *Healthy Births* in Chautauqua County

In Table 1, the County rate for perinatal deaths (14.5 per 1,000 spontaneous fetal deaths of gestation 20+ weeks + live births) is three times as high as the *Healthy People 2010* target (4.5), and the neonatal death rate (4.9 per 1,000 live births) is higher than the 2010 target (2.9). Chautauqua County also has a rate of 9.8% short gestation births, which will need to be reduced further to meet the 2010 target of 7.6% (Table 10).

Table 18 presents trends for Chautauqua County (1997-2004) on many of the other *Healthy Birth* targets discussed in this chapter. As Table 18 shows, the percentage of women receiving early prenatal care has increased since 1997 (from 69.7% to 75.6%), but needs to increase further to meet the 2010 target of 90%. There were no maternal deaths in 2000-2004. The rate of HIV seropositive newborns fluctuated between 0.1-0.3, though data is not available for 2003-2004.

The pregnancy rate for ages 15-19 has declined by about 40% between 1997 and 2004 although the rate for ages 10-14 has increased slightly. The teenage abortion rate has been in flux during the last few years, and is slightly lower in 2002 than in 1994 (Figure 4).

The rate of diagnosed AIDS cases (males and females) has increased, as has the AIDS mortality rate (males and females). In the Buffalo Ryan White Region (which includes Chautauqua County), the majority of prevalent HIV/AIDS cases is in the 30-49 age group (69%); another 17% is between ages 13-29 (see Table 16).

**Table 18. Trends for Selected *Healthy Births* Indicators for Chautauqua County, 1997-2004.\***

Chautauqua County	2010 Target	2004 Rate**	2003 Rate**	2002 Rate**	2001 Rate**	2000 Rate**	1999 Rate**	1998 Rate**	1997 Rate**
Infant Deaths	4.5	6.3	10.2	6.4	8.9	4.5	5.2	7.1	8.0
Neonatal Deaths	2.9	4.9	8.2	4.3	7.0	3.2	3.9	5.2	4.9
Postneonatal Deaths	1.2	1.4	2.0	2.1	1.9	1.3	1.3	1.9	3.1
Spontaneous Fetal Deaths (20+ Wks)	4.1	9.7	5.4	5.7	10.0	5.8	3.2	9.6	8.5
Low Birthweight (< 2500 Grams)	5.0%	6.8	6.8	7.1	8.1	6.5	7.4	6.5	6.8
Prenatal Care (1st Trimester)	90%	75.6	72.5	73.2	71.9	73.3	73.5	74.3	69.7
Pregnancies Age 10-14	---	0.6	1.3	0.4	0.1	0.16	0.16	0.20	0.09
Pregnancies Age 15-19	4.3% (15-17 yrs.)	4.4	4.5	4.6	5.7	4.9	6.5	6.6	7.7
Maternal Mortality	3.3	0	0	0	0	0	--	--	--
Newborn HIV Seropositive	--	N/A***	N/A***	0.3	0.1	0.1	0.3	0.1	0.2
AIDS Cases (males and females)	--	4.4	2.9	7.2	6.5	5.7	3.5	7.8	2.8
AIDS Mortality (males and females)		1.5	0.7	0.7	2.2	0.7	2.8	1.4	0.0

\* Census population estimates were used for all years.

\*\* Total Pregnancy Rate is per 1,000 women 15-44. Pregnancy rates for ages 10-14 and 15-19 rates are per 100 women in these age groups.

The Birth Rate is live births per 1,000 population.

The Low Birthweight and Early Prenatal Care Rates are per 100 births. Infant, Neonatal and Postneonatal Death Rates are per 1,000 births.

AIDS mortality and cases are per 100,000 population; case rates are presented by diagnosis year and exclude prison inmates. Newborn Seropositivity is per 100 births Maternal mortality rates are per 100,000 live births.

Sources: New York State Department of Health (<http://www.health.state.ny.us/statistics/chip/chautauqua.htm>)

Maternal mortality from Vital Statistics Data. See respective tables in this chapter for additional information.

\*\*\*N/A=Not Available.

## **Healthy People 2010**

As pointed out in the *Healthy People 2010* Initiative,

Many of the pregnancy risk factors can be mitigated or prevented with good preconception and prenatal care. Preconception screening and counseling offer an opportunity to identify and mitigate maternal risk factors before pregnancy begins. During preconception counseling, healthcare providers also can refer women for medical and psychosocial or support services for any risk factors identified. Interventions targeted at prevention and cessation of substance use during pregnancy may be helpful in further reducing the rate of preterm delivery and low birth weight. Further promotion of folic acid can improve infants' health and chances of survival. Breastfeeding has been shown to reduce rates of infection in infants and to improve long-term maternal health. SIDS may be preventable as well; studies show that putting infants to sleep on their backs can help to prevent SIDS

(<http://www.healthypeople.gov/Document/pdf/Volume2/16MICH.pdf>).

As also discussed in the *2010* Initiative,

Bearing a child while an adolescent is associated with poor outcomes for young females and their children. Giving birth to a second child while still a teen further increases these risks. Research has shown that second and subsequent births to very young females are associated with physical and mental health problems for the mother and the child. Yet, analysis indicates that in the 2 years following the first birth, teenage mothers in the U.S. have a second birth at about the same rate as other mothers. In 1997, nearly one in every five births to teenage mothers was a birth of second order or higher.

According to *2010*, there is increasing recognition of the value of male involvement in pregnancy prevention and family planning. Several related developments in public health and welfare demonstrate that male involvement is key, including culturally and linguistically appropriate programs promoting condom use and addressing HIV and STD prevention, culturally and linguistically competent services targeting men as part of managed care marketing strategies, emphasis on male responsibility in welfare, child support enforcement, and pregnancy prevention efforts. Concern about the spread of HIV and other STDs and the recognition of condoms as the most effective way of preventing transmission during intercourse have accentuated the need to change the sexual behavior of males. The need for rapid treatment of male partners of females testing positive for bacterial STDs is a critical element in slowing not only STD spread but also that of HIV (<http://www.healthypeople.gov/document/Word/Volume1/09Family.doc>).

## **C. Resources in Chautauqua County**

The following list includes public service organizations, agencies and programs in Chautauqua County that offer assistance for pregnant or parenting women, infants, young children, and pregnant women/parenting persons with HIV/AIDS.

- Abstinence Education Advisory Board, Mayville
- Alternatives to Violence Program
- A Healthy Future by Choice not Chance, The Resource Center, Jamestown
- Baby and Me Tobacco Free
- 2 Breastfeeding classes: WCA Hospital, Westfield Memorial Hospital
- Breastfeeding/Lactation Consultants: WIC Program and Success by Six
- Chautauqua County AIDS Advisory Board, Falconer
- Chautauqua County Health Department
- Chautauqua County Teen Pregnancy Prevention Coalition, Mayville
- Child Health Plus

- Domestic Violence Coalition, Jamestown
- Family Planning Advisory Committee, Fredonia
- Growing Together (alternative middle and high school for pregnant/parenting teens), Fredonia/Dunkirk
- Health Education Network, Fredonia
- 3 Hospitals with maternity services: Brooks Memorial Hospital, WCA Hospital, Westfield Memorial Hospital
- 3 Hospitals that offer childbirth classes: Brooks Memorial Hospital, WCA Hospital, Westfield Memorial Hospital
- Infant Mortality Review Committee, Mayville
- Mental Health Association, Jamestown
- MOMS Program
- Newborn Education: WCA Hospital, Westfield Memorial Hospital,
- NYS Partner Notification Program
- Obstetricians
- Project Know, BOCES
- STEPS Consortium
- Success by Six
- TEAM (teen motherhood)
- YWCA

#### **D. Opportunities for Action**

Opportunities for action in Chautauqua County pertinent to the needs of pregnant or parenting women, infants, young children, and pregnant women/parenting persons with HIV/AIDS are presented in this section. Data-derived statements are followed by more specific objectives, which are adapted from the *Healthy People 2010* Initiative

- Reduce perinatal, neonatal deaths and short gestation births, and increase the percentage of women receiving early prenatal care.
  - Reduce births to adolescents under age 15
  - Reduce the teenage abortion rate.
  - Reduce the rate of diagnosed AIDS cases, especially in the reproductive years age groups.
  - Reduce the rate of newborn seropositive infants.
  - Reduce the AIDS mortality rate.
- Reduce second and subsequent births while the parent is still a teen. Research has shown that second and subsequent births to very young females are associated with physical and mental health problems for the mother and the child.
- Expand public education and information about family planning and sexual abstinence. Numerous studies and polls indicate a disturbing degree of misinformation about contraceptive methods.
- Increase access to quality contraceptive services, an important factor in promoting healthy pregnancies

and preventing unintended pregnancies.

- Expand public education and information about emergency contraception and the relative effectiveness of various contraceptive methods.
- Encourage the media – print, broadcast, and video – to help in the task of conveying accurate and balanced information on contraception, highlighting the benefits as well as the risks of contraceptives.
- Encourage male involvement in pregnancy prevention and family planning. Concerns about the spread of HIV and other STDs, and the recognition of condoms as the most effective way of preventing transmission during intercourse, have accentuated the need to change the sexual behavior of males.
- Expand preconception screening and counseling services to identify and mitigate maternal risk factors before pregnancy begins, such as daily folic acid consumption and alcohol use. Work with healthcare providers to ensure that women are referred for medical and psychosocial or support services for any risk factors identified.
- Provide culturally appropriate and linguistically competent counseling to identify women who are at particularly high risk and take steps to mitigate risks, such as the risk of high blood pressure or other maternal complications.
- Ensure access to quality contraceptive services by encouraging health insurance plans to cover family planning services

Determine whether women opt for whatever method may be covered by their health plan rather than the method most appropriate for their individual needs and circumstances, and whether women use contraception if it is not covered under their insurance plan.