

MONROE COUNTY PERINATAL HEALTH STATUS REPORT



PERINATAL NETWORK OF MONROE COUNTY
FINGER LAKES HEALTH SYSTEMS AGENCY
MONROE COUNTY DEPARTMENT OF PUBLIC HEALTH

2009



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MONROE COUNTY PERINATAL HEALTH STATUS REPORT

This study is the product of the collaborative efforts of the Perinatal Network of Monroe County, The Finger Lakes Health Systems Agency, and the Monroe County Department of Public Health.

The Perinatal Network of Monroe County (PNMC) is a not-for-profit agency charged with the improvement of birth outcomes, reduction in infant mortality, and elimination of racial disparities in birth outcomes in Monroe County, New York. PNMC services include coordination of community needs identification and collaborative responses to improve women's health; infrastructure and support to identify and refer at-risk pregnant women to services; direct case management for pregnant and parenting women and provision of tools and information to support community case management programs; training for health and human service providers in perinatal issues and coordination of multidisciplinary coalitions to address specific issues; and health education and psychosocial services for pregnant women and those with children up to the age of two.

The Finger Lakes Health Systems Agency (FLHSA) is the leader in community based health planning and works to promote the health of the region's population by:

- providing a "community table" where all stakeholders meet;
- conducting outreach to community groups;
- retaining extensive data on the region's health and health care.

The FLHSA traces its roots back to the inception of health care planning in the early 1960s and has received national recognition from the American Health Planning Association and the American Public Health Association. Through its many projects, the organization continues to strive to ensure the region's population receives the right care, at the right place, at the right time.

The Monroe County Department of Public Health mission is to provide direct public health services and leadership to assure improved health status of individuals, families, the environment and the community. The Department:

- Strives to achieve excellence in the Department's performance to advance Monroe County as a leader in the field of public health.
- Collaborates with community partners to achieve optimum health status in the community.
- Interacts proactively with the changing health care environment to assure that public health issues are recognized and addressed.

Funding for this project came from grants to PNMC from:

**The Health Resources and Services Administration Healthy Start Program
and**

The New York State Department of Health Bureau of Women's Health
Comprehensive Prenatal-Perinatal Services Network Program

Foreword

The Finger Lakes Health Systems Agency (FLHSA) was engaged to provide the Perinatal Network of Monroe County (PNMC) with an analysis of the health status and wellness needs of women of childbearing age (defined as ages 15 to 44). The geographic areas of study include the PNMC target Healthy Start area (nine ZIP Codes^a within the heart of the city of Rochester), Rochester itself, suburban Monroe County, and total Monroe County.^b This chart book represents a comprehensive analysis of current and trend data of demographic, socioeconomic, health status, and birth outcome factors in the study areas. The analysis strengthens PNMC's adoption of the Life Course Perspective by providing data that support further exploration into the physiological, social, and economic needs of women of child-bearing age in the Healthy Start area.

FLHSA approached this task with an understanding that the foundation of a successful needs assessment is the collection and analysis of information that addresses the range of health issues relevant to PNMC's client base. As a result, FLHSA gathered data about a range of health indicators for women of child-bearing age. Data were collected from a variety of sources, including national demographic databases, state and county health/hospitalization information, and from community databases, including the 2006 Monroe County Adult Health Survey, the 2004-2007 Children's Institute Parent Appraisal of Children's Experiences (PACE) Survey, and the Monroe County Sheriff's Department. For a complete listing of the sources consulted throughout this analysis, please refer to the appendix.

The Life Course Perspective is fully consonant with FLHSA's strategic direction and the emerging paradigm that it has built for community health improvement. This direction has emerged from the understanding that many health problems are influenced by individual behavior and by the environmental conditions in which people live and work, which are referred to as the social determinants of health. Behavioral and lifestyle risk factors such as smoking, diet, physical inactivity, obesity, and alcohol consumption contribute to chronic disease. In addition, individual socioeconomic characteristics such as race, ethnicity, mental health status, lack of social support, and occupational stress also influence the onset, severity and management of chronic disease.

FLHSA believes that it has provided PNMC with actionable data for planning that are connected to, and responsive to, the overall context of Monroe County's socioeconomic and health disparities. Health planning and medical care has been paying increasing attention to the roles of the environment and behavior in understanding of causes and treatments for chronic diseases.

a 14605, 14606, 14607, 14608, 14609, 14611, 14613, 14619, and 14621

b Whenever possible, data are presented for Monroe County and for more geographically or subpopulation-specific targets.

The Finger Lakes Health Systems Agency

The Life Course Health Development Framework

Health develops throughout life as the product of the cumulative experience of multiple risks and protective factors, and most notably the time-specific influence of stimulus or insults during sensitive periods that link together to form pathways that constrain health potential. This health development model, called the Life Course Health Development framework, connects the dots from prenatal to late adult life, describes the pathways or health trajectories, and addresses the mechanisms that influence those health trajectories.

The Perinatal Network uses this framework to describe perinatal health in Monroe County because of its power to shed light on many of the seemingly intractable health issues in the community. African American and Latino babies are more likely to be born too early and too small than their white peers; they grow up to have more health and behavioral challenges; and as adults they experience more (and more severe) chronic diseases. These disparities persist across generations, even when socioeconomic status changes. Clearly, improving perinatal outcomes requires understanding the dynamics of these disparate health trajectories.

This chart-book includes data that extend beyond traditional measures of perinatal health to include the environmental, behavioral, and biological determinants of health. These data inform a deeper understanding of the dynamics of health development by exploring the determinants that support or suppress health trajectories for various groups within the community.

PNMC Executive Summary of Key Findings

Biology – Early Programming

1. In the Healthy Start zip codes in the years 2005 – 2007, the rate of low birth weight for African Americans was 75% higher than the rate for white babies; the rate for Hispanics was 40% higher than the rate of whites. These rates have changed very little in the past 10 years.
2. Not having a high school diploma is also highly correlated with low birth weight. Mothers without a high school diploma in the Healthy Start zip codes have a 30% higher rate of low birth weight than high school graduates; in suburban Monroe County, mothers without a high school diploma have 42% higher rate of lbw than high school graduates. Latinas living in the Healthy Start zip codes have the highest rate of less than high school education, followed by African Americans living in the city.
3. Being born at less than 2500g is a risk factor for adult-onset chronic heart disease, stroke, hypertension, and Type 2 diabetes. Looking at women of child bearing age, the percent of African American women reporting they had been told they had diabetes and the percentage reporting they had been told they had high blood pressure were both three times the rate of white women. The prevalence of these diseases increases with age, so bearing children early may be a protective factor against even greater disparity in adult health conditions; African Americans and Latinas are more likely than white women to have children before age 25.
4. Overweight and excessive weight gain during pregnancy and diabetes are each independently associated with preterm delivery and low birth weight; in addition,

- excessive gain during pregnancy is linked to subsequent overweight in the baby at age three. From 2005 to 2007, approximately 50% of birth mothers living in the Healthy Start area were overweight or obese, compared to approximately 40% in suburban Monroe County.
5. Stress during pregnancy is strongly associated with preterm delivery and with impaired HPA axis functioning in the offspring. Among Latinas and women with less than a high school education, at least 30% reported Frequent Mental Distress. African American women reported FMD at less than half the rate of Latinas, but double the rate of white women. City and Healthy Start zip code residents were significantly more likely to report FMD than suburban Monroe County residents.

Social Environment Determinants of Health Trajectory

1. The Healthy Start area population is heavily female, particularly among African Americans. In 2008, there were 79.7 African American males ages 15-44 per 100 females; the Latino ratio is 86.0 males per 100 females. This disproportion has implications for the sexual behavior of African American women whose potential partners are severely constrained.
2. Family composition has implications for stress, social support, and financial resources. From 2000 to 2008, nearly 16% of households in the Healthy Start area were composed of single females with children, compared to 5% in suburban Monroe County. From 2005 to 2007, fewer than 30% of Healthy Start birth mothers were married at the time of their children's births, compared to nearly 80% of suburban Monroe County birth mothers.
3. There is a well-documented linear correlation between socioeconomic status and health status across the life span. Within Monroe County, poverty is concentrated in the Healthy Start area and the city as a whole. In 2008, one in five families in the Healthy Start area lived below the poverty level compared to 3% in the suburbs. Over two-thirds of female-headed households with children in this area were below the poverty line.
4. Access to health care is tied to ability to access health insurance. In 2005, nearly 11% of individuals of all income levels and 7% of those living at or below the 250% federal poverty level in Monroe County lacked health insurance. The percent lacking health insurance was higher among female residents ages 18 – 64 of all income levels than for males.
5. As noted above, educational attainment is correlated with birth outcomes; it is also correlated with health more generally. Over 30% of women with less than a high school degree reported being in fair or poor health, a proportion three times greater than women with a high school degree or some college and 15 times greater than women with a college degree. From 2005 to 2007, over 60% of births in the Healthy Start area were to women with a high school diploma or less; in suburban Monroe County, 50% of births were to women with some college or higher education. Educational attainment for all racial/ethnic groups is less for those residing in the city than for those residing in the suburbs.
6. African American/non-Latino women and Latinas and city residents and Healthy Start ZIP Code residents were significantly more likely to report a functional limitation due to physical health than were White/non-Latino women and

- suburban and non-Healthy Start ZIP Code residents. The limitation most often identified was “accomplished less than they would have liked at work or daily activities because of physical health all or most of the time in the past four weeks.” Women with less than a high school degree were significantly more likely than other women to report every type of limitation.
7. Violence contributes to stress and constrains the ability of residents to access the potentially healthful resources of their neighborhoods. The 2006 violent crime rate of the city of Rochester exceeded that of the U.S. as a whole for murders, rapes, robberies, and aggravated assaults. Violent crime rate data for 2007 for the city of Rochester indicates a geographic concentration of violent crime in the Healthy Start neighborhoods.
 8. The prevalence of violence has a corollary in the incarceration rates, which contribute to social instability. In 2008, approximately 90% of the Monroe County Sheriff’s Department inmates and 96% of the NYS Department of Correctional Services inmates were male. Inmates are also disproportionately African American – roughly 2 to 1 in the jail population and nearly 4 to 1 in the state prison population. Although men who are incarcerated are less likely to be married than their peers, they are just as likely as other men to have children. Their social and sexual behaviors, both while incarcerated and when released, impact the health of the women and children in their lives.

Physical Environment Determinants of Health Trajectory

The physical environment can affect health directly through such vehicles as lead paint and toxic emissions and indirectly through such vehicles as barriers to physical activity and relative ease of access to healthful foods and alcohol and tobacco.

1. New York State and Monroe County communities determine who can sell alcohol, when and where it can be sold, and how densely places that sell alcohol can be situated within a neighborhood. The Healthy Start area has some of the highest density of liquor stores-to- population in the city of Rochester and Monroe County as a whole.
2. Conversely, there are few traditional grocery stores within the city of Rochester. Limited availability of fresh produce and healthful foods in small stores and the higher prices, combined with the ready availability of cigarettes and alcohol produces an environment in which making healthful choices is much more difficult than making unhealthful choices.
3. Lead poisoning, which results in central nervous system damage, is most often the result of ingesting deteriorated lead-based paint that is found in houses built before 1950. Within the city of Rochester, pre-1950 houses are overwhelmingly located in six of the nine Healthy Start zip codes. They are among the 36 identified ZIP Codes within New York State to have been identified as having the highest percentage of confirmed cases $>10 \mu\text{g/dL}$ (micrograms per deciliter).

Behavioral Contributors to Health Trajectory

While biology drives the propensity for a potential health trajectory, and the social and physical environments shape the available pathways for health development, individual behavior is often the proximate determinant of health status.

1. Unhealthy behaviors were endemic among women with less than a high school degree and significantly more prevalent when compared with women with high school degrees/some college, and those women were in turn almost always in poorer health and had fewer healthy behaviors than women with a college degree.
2. Two-thirds of women without a high school degree smoked, and they were significantly more likely to be current smokers than women with a high school degree/some college. Latinas (the group most likely to be without a high school diploma) and city residents were significantly more likely to be current smokers than whites and suburban residents.
3. According to the 2006 Monroe County Adult Health Survey, 18% of women 18-44 were at risk of an alcohol use disorder. Younger women (18-29) and non-Healthy Start area residents were significantly more likely than older women and residents of Healthy Start zip codes to be at risk; the majority of African American and Latinas said they never drank.
4. Sixteen percent of Monroe County women 18-44 reported no leisure time physical activities in the past month. Half of women without a high school diploma reported none, significantly higher than the 21% among women with a high school degree/some college. Latinas and African American women were significantly more likely than white women to report no leisure time physical activity.
5. Among Monroe County women 18-44, 22% were obese and an additional 23% were overweight. African American women, women without a high school degree, and residents of the Healthy Start zip codes had the highest rates of overweight/obesity. However, Latinas and women with high school/some college were significantly more likely than white women and women with a college degree to be obese.
6. Across every measure of nutrition, women with college degrees were significantly more likely than women without a high school diploma to report that they had a healthy diet. On the majority of measures, white/non-Latino women were significantly more likely to report good nutrition than African American women; they were significantly more likely than Latinas to report good nutrition in half the categories considered.
7. Sixteen percent of Monroe County women 18-44 reported that they had at some time been a victim of intimate partner violence. Women with less than a college degree and residents of Healthy Start zip codes were significantly likely to report have been a victim.
8. Ten percent of Monroe County females 18-44 (19% of younger women) had sexual intercourse with two or more people in the past year. There were no significant differences by race/ethnicity, education, or residence.
9. Our community's pattern of discontinuous health insurance coverage by subgroup is similar to the pattern of lack of coverage. Latinas and women without a high school degree were most likely to have been discontinuously covered. Younger women (18-29) were significantly more likely than older women (30-44) to have been discontinuously covered. Of Monroe Plan for Medical Care enrollees (the dominant provider for Medicaid managed care in our community), less than two-thirds (61%) were enrolled for the entire year.

10. According to the 2006 Monroe County Adult Health Survey, 9% of Monroe County women 18-44 reported they did not have a personal health care provider. As with discontinuity of insurance coverage, younger women (18-29) were significantly more likely than older women to be without a provider. Almost one-quarter of women with less than a high school education reported that they lacked a personal doctor or health care provider.
11. According to Monroe Plan data, female enrollees 15-44 who live in the Healthy Start area utilize primary care-related services differently. African American females (73%) were less likely than White (82%) females – and slightly less likely than Latinas (77%) to have seen a primary care provider in a 12-month period.
12. From 2005 to 2007, African American and Latina birth mothers living in the Healthy Start area were more likely than their White counterparts to receive inadequate prenatal care. African American birth mothers, however, were the most likely to receive inadequate prenatal care in both study areas. The likelihood that birth mothers received adequate prenatal care from 2005 to 2007 increased with their level of educational attainment.
13. Women 15 to 44 years old living in the Healthy Start neighborhood are 3.3 times as likely as suburban women to have a non-emergent or primary care treatable/preventable ED visit. Almost half of the primary care-related visits in the Healthy Start area are for non-emergent medical issues for which medical care was not required within 12 hours.
14. Ambulatory care-sensitive hospital admission rates for women in the Healthy Start area are four times the rates for suburban women and have increased almost 30 percent over the last eight years. Within the Healthy Start area, African American women are almost twice as likely as White women to be hospitalized for an ambulatory care sensitive condition.

Perinatal Network Conclusions

As FLHSA analyses show, when adjusted for race and educational attainment, the difference between the Healthy Start area and suburban Monroe in low birth weight rates virtually disappeared. In other words, the majority of the difference between low birth weight rates for these study areas is explained by mother's race and educational attainment. Low birth weight is a telling proxy for life course health. If we are to improve perinatal health (and by extension, life-long health) we must learn how to mitigate the mechanisms by which race and educational attainment affect health.

Educational attainment is the easier factor to understand and to address, and is also associated with race/ethnicity – Latinas and African Americans living in the city are least likely to have a high school diploma. Women without a high school diploma exhibit the least healthful behavior in every category except alcohol use and experience the worst health status on virtually every measure; these women who give birth are the least likely to have had adequate prenatal care and have the worst birth outcomes (except infant mortality, which is slightly higher among African Americans). Not coincidentally, women without a high school diploma are least likely to have a primary care provider and nearly the most likely to be uninsured or discontinuously insured (Latinas exceed the undereducated in these categories).

Individuals who lack health insurance receive less medical care and have poorer health outcomes. Uninsured individuals with chronic illnesses are far less likely to receive care and necessary prescriptions than the insured.⁷⁶ Over the course of their lives, these individuals are generally in poorer health when first diagnosed with an illness, and the combination of late diagnosis and less consistent care leads to poorer outcomes.⁷⁷

Education leads to healthier lives. It's not just access to health insurance that yields better outcomes for better-educated people. Education has other important effects on people's lives: it improves earning power and social status, and it also affects cognitive ability.⁷⁸ These factors influence lifestyle choices, knowledge and understanding of health issues, and the health-related decisions that people make.

We cannot wait for universal high school graduation. Our challenge is to engage parents, schools, medical providers, and the human service community in the life course health development discussion so that they address the environmental, behavioral, and biological determinants of our children's health trajectory.

- All need to understand the life-long and trans-generational consequences of poor health.
- Schools need to engage with community organizations so that every young woman who drops out of school is identified and referred for support services including facilitated enrollment in health insurance, choice of primary care physician, family planning services, and other needs.
- Pediatricians need to understand their role in preparing girls to have a healthy pregnancy, including understanding the risk factors operating during each child's own gestation and creating a reproductive health plan with the child and parents.
- Primary Care Physicians need to provide a comprehensive medical home with links to psychosocial services as well as medical specialty services; rigorous Self Management Support programs offered either by the medical practice or by an independent agency would significantly shift the burden of chronic disease from care to prevention.
- Obstetricians need to conduct a thorough risk analysis for every patient (or partner with a perinatal support service to do so) and ensure that environmental (social and physical) and behavioral risks are addressed along side the medical risks.
- Perinatal support service programs need to engage participants with a sense of urgency, recognizing the importance of adequate prenatal care, healthful behavior, and stress management, as well as parenting education.
- The community needs to ensure that there are adequate support services available; the cost of such services is miniscule compared to the cost of multi-generational low birth weight and related chronic disease.

Perinatal Network of Monroe County

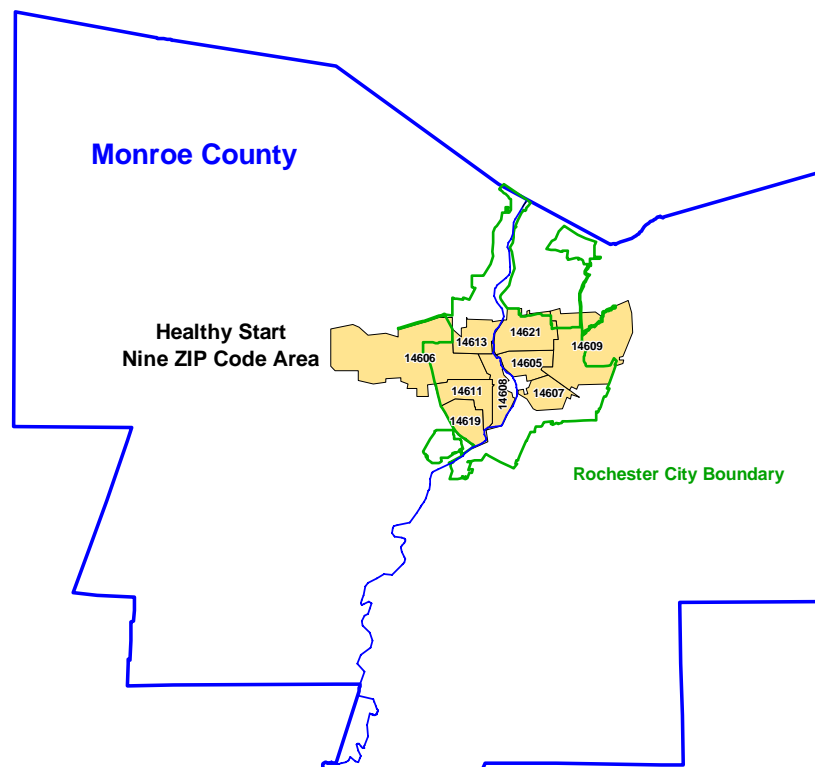
Monroe County Perinatal Health Status Chart Book

Data Collection and Analyses by Finger Lakes Health Systems Agency

Demographics

Geography and Population Distribution

Monroe County comprises 659.3 square miles and lies in the center of the Rochester, New York Metropolitan Statistical Area (MSA).^a The city of Rochester anchors the MSA and spans an area of 37.1 square miles. In 2000, it was the third most populous city in New York State. The target Healthy Start area constitutes nine ZIP Codes in the heart of Rochester, and overlaps with an area known as “the Crescent,” declining neighborhoods in the city center with the highest rates of poverty and violence in Rochester.^b



^a The Rochester NY MSA comprises five counties: Livingston, Monroe, Ontario, Orleans, and Wayne.

^b The Healthy Start ZIP Codes include: 14605, 14606, 14607, 14608, 14609, 14611, 14613, 14619, and 14621.

In 2000, approximately 30% of the population of Monroe County lived in the city of Rochester and 27% lived in the Healthy Start area. From 2000 to 2008, the populations of the Healthy Start area, Rochester, and Monroe County as a whole are projected to have decreased (HS -7%, R -6%, MC -1%). Suburban Monroe County, however, experienced a 1% increase in population.

Male/Female Distribution

The overall population of the Healthy Start area, suburban Monroe County, and Monroe County is skewed toward females. Although it is estimated that the proportion of males to females has changed from 2000 to 2008 in all study areas, the changes are not substantively significant.

Total Population by Sex, All Study Areas, 2000 and 2008																
	HS				City				Suburbs				MC			
	2000		2008		2000		2008		2000		2008		2000		2008	
	count	%	count	%	count	%	count	%	count	%	count	%	count	%	count	%
Total Population	201,958		187,825		219,766		206,261		515,577		521,505		735,343		728,499	
Males	94,963	47%	89,333	48%	104,892	48%	99,451	48%	249,593	48%	253,552	49%	354,485	48%	353,362	49%
Females	106,995	53%	98,492	52%	114,874	52%	106,810	52%	265,984	52%	267,953	51%	380,858	52%	375,137	51%

Note: HS = Healthy Start; City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County
 Note: Yellow highlighted field denotes statistically significant difference between years at p<0.01 level
 Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates

Within the 15-44 year old target population in 2008, the Healthy Start area has the lowest male to female ratio (92.3 males per 100 females), followed by the city of Rochester (96.9 males per 100 females). The ratio is more balanced in the suburbs of Monroe County and in the county as a whole. In these areas, the number of males slightly exceeds the number of females in the 15-44 age group (suburbs: 102.4 males per 100 females; Monroe County: 100.7 males per 100 females).

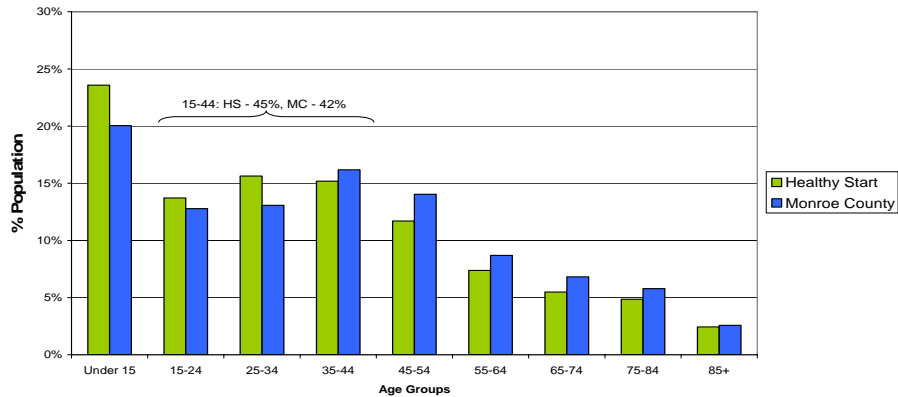
Male to Female Ratio for Population Ages 15-44, All Study Areas, 2008



Data Source: 2008 Nielsen Claritas Demographic Update Estimates

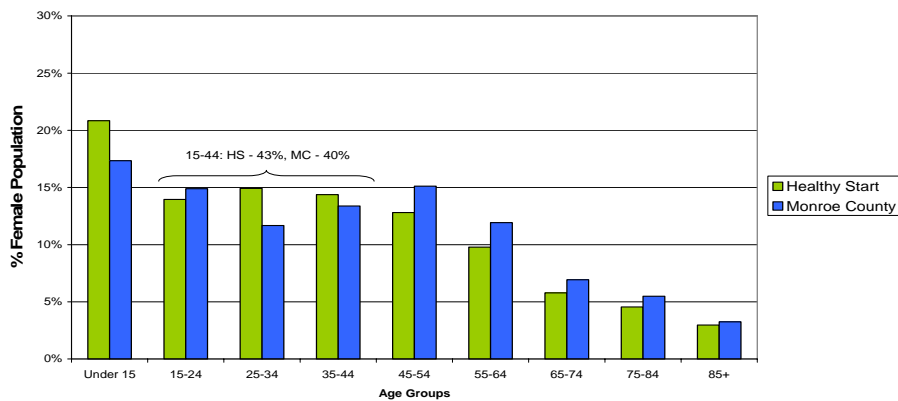
From 2000 to 2008, the number of females ages 15-44 declined in both the Healthy Start area and Monroe County. The female population of the Healthy Start area is younger than that of Monroe County as a whole.

**Female Population by Age Group,
Healthy Start Target Area & Monroe County, 2000**



Data Source: 2000 U.S. Census

**Female Population by Age Group,
Healthy Start Target Area & Monroe County, 2008**

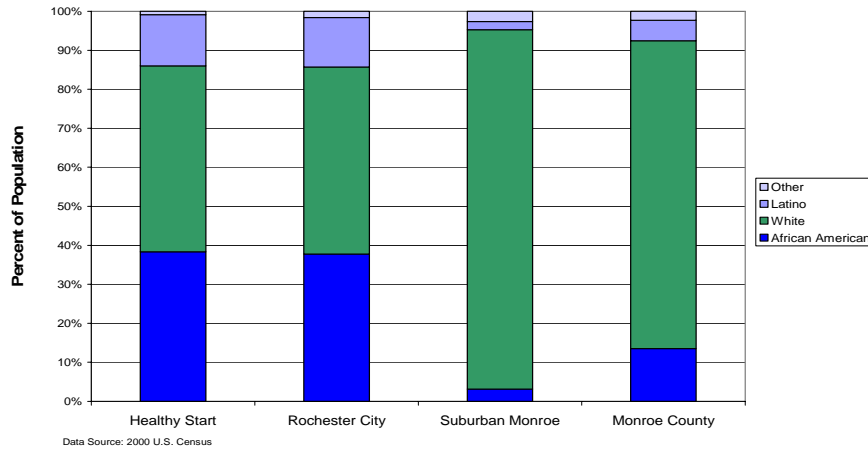


Data Source: 2008 Nielsen Claritas Demographic Update Estimates

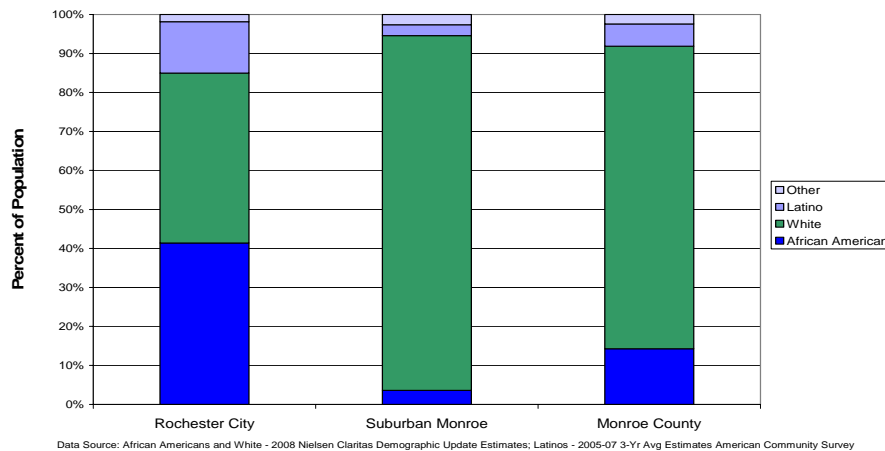
Race/Ethnicity

Although Whites constitute the majority population in Monroe County, the county has become more diverse since 2000. Projections to 2035 show continued growth in diversity. Despite this overall diversity, there is a very high level of residential segregation by race in the county. The African American and Latino populations of Monroe County predominately live in the Healthy Start area within the city of Rochester. This leads to a more racially diverse population in Rochester and the Healthy Start area, than the suburbs, where approximately 90% of the population is White.

Race/Ethnicity by Study Area, 2000



Race/Ethnicity by Study Area, 2008



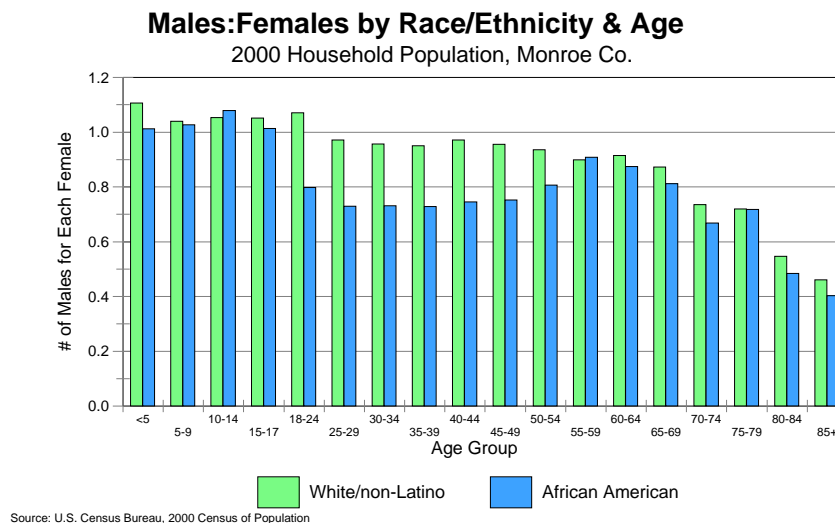
From 2000 to 2008, there was a substantial increase in the African American male suburban population (+2,415 males), although no corresponding decrease was recorded in the Healthy Start or Rochester populations.^c

^c Although the 2008 Nielsen Claritas estimates for Monroe County aligns with that of the 2005-2007 3-Year Average Estimate calculated by the American Community Survey, there is disagreement between sources on the direction of change in the African American male Rochester population. Caution should be exercised in interpreting these data.

Total Population by Race/Ethnicity by Sex, All Study Areas, 2000, 2008, and 2005-2007																
	HS				City				Suburbs				MC			
	2000		2008		2000		2008		2000		2008		2000		2008	
	count	%	count	%	count	%	count	%	count	%	count	%	count	%	count	%
African American	77,420		79,055		82,980		85,357		16,203		18,729		99,183		104,087	
Male	35,419	46%	36,323	46%	38,335	46%	39,696	47%	7,986	49%	10,401	56%	46,321	47%	50,098	48%
Female	42,001	54%	42,732	54%	44,645	54%	45,661	53%	8,217	51%	8,328	44%	52,862	53%	53,989	52%
White	96,290		81,401		105,391		89,925		475,022		474,359		580,413		565,003	
Male	45,950	46%	40,922	46%	51,368	46%	45,781	46%	229,340	46%	228,280	46%	280,708	46%	272,401	46%
Female	50,340	54%	42,487	54%	54,023	54%	46,152	54%	245,682	54%	250,095	54%	299,705	54%	296,618	54%
Latino	26,467		--	--	27,869		27,088		10,677		14,615		38,546		41,703	
Male	12,801	48%	--	--	13,462	48%	12,812	47%	5,484	51%	7,629	52%	18,946	49%	20,441	49%
Female	13,666	52%	--	--	14,407	52%	14,276	53%	5,193	49%	6,986	48%	19,600	51%	21,262	51%

Note: HS = Healthy Start; City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County
Note: Yellow highlighted field denotes statistically significant difference at p<0.01 level; green highlighted field statistically significant at p<0.05 level
Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates; 2005-2007 3-Yr Avg Estimates American Community Survey

In 2000, the male to female ratio was particularly unbalanced in the African American community between the ages of 18 to 44. Two main reasons for the skewed male to female ratios within the African American community have been identified: a higher mortality rate for young African American males and a higher incarceration rate among African American males than other segments of the population (see later discussion in Incarceration).¹ Further, to the extent that they are transient and do not live in traditional households, they may be missed in population estimates.



In 2008, this trend appears to have continued. Males ages 15-44 appear to be considerably outnumbered by females in the African American and Latino communities, particularly in the Healthy Start area (African American: 79.7 males per 100 females; Latino: 86.0 males per 100 females). Within the White community, however, males slightly outnumber females in the Healthy Start area (102.3 males per 100 females) and are approximately even in Monroe County as a whole. African American males living in the Healthy Start area and Rochester in 2000 and 2008 began to disappear at age 18, with the sharpest decline between the ages of 21-24 and 25-34. The trend appears to have

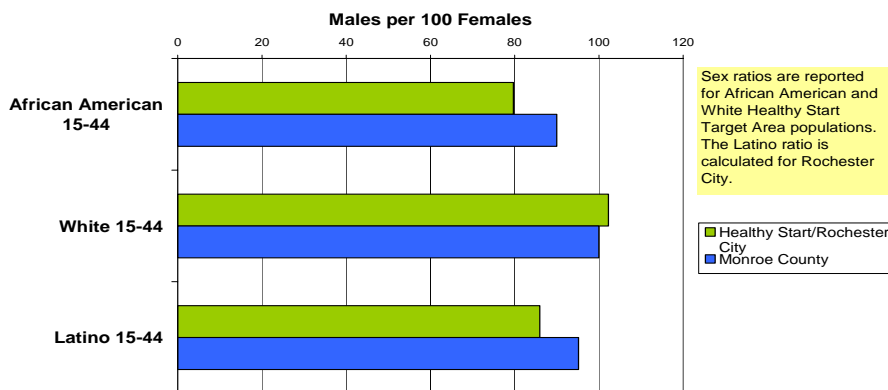
mitigated since 2000, with fewer males missing from the community. The imbalance, however, remains pronounced.

African American Males per 100 Females by Age, 2000 & 2008				
	Healthy Start		City	
	2000	2008	2000	2008
15-17	101.0	99.8	101.1	101.2
18-20	91.6	93.4	89.6	96.3
21-24	67.4	85.4	71.6	90.5
25-34	69.3	71.0	76.6	74.1
35-44	70.5	74.6	73.1	77.3

Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates

The disproportionate ratio of African American males to females affects the number of female-headed households, may depress incomes in these households, reduces the number of available male role models for young African Americans, reduces the pool of potential sex partners, and increases the risk of sexually transmitted diseases (STD) for members of a community.

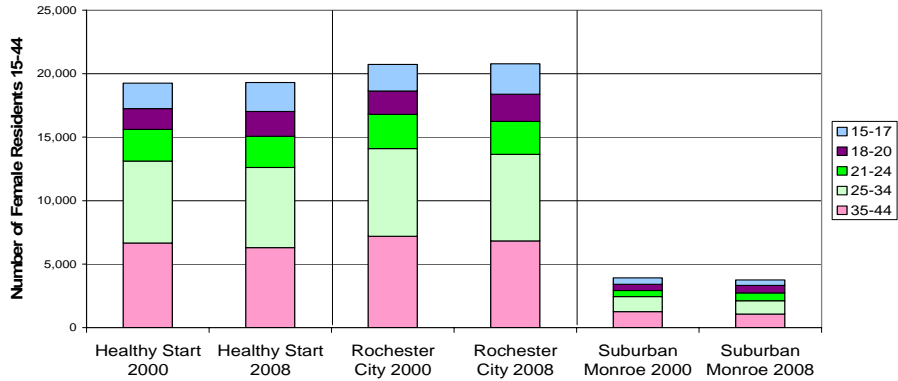
Male to Female Ratio by Race/Ethnicity, Healthy Start & Monroe County, 2008 or 2005-07



Data Source: African American and White - 2008 Nielsen Claritas Demographic Update Estimates; Latino - 2005-07 3-Yr Avg Estimates American Community Survey

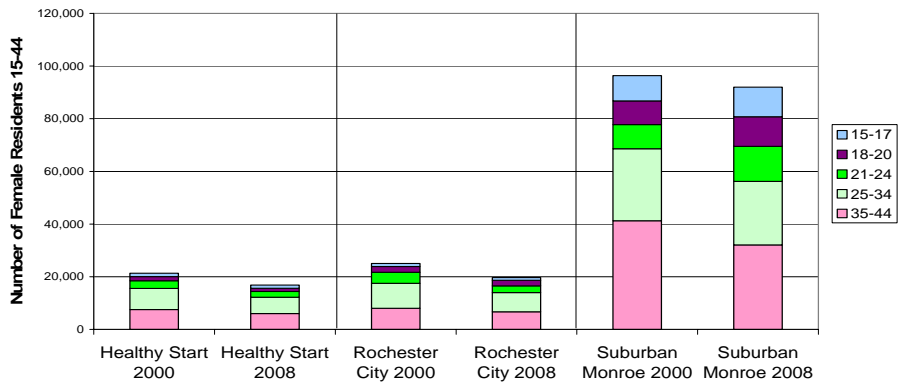
From 2000 to 2008, the populations of African American and White females aged 15-44 have decreased slightly. While Latinas comprise the smallest racial/ethnic group in all study areas in this age range, their population has grown substantially from 2000 to 2008.

African American Women Ages 15-44, Select Study Areas, 2000 and 2008



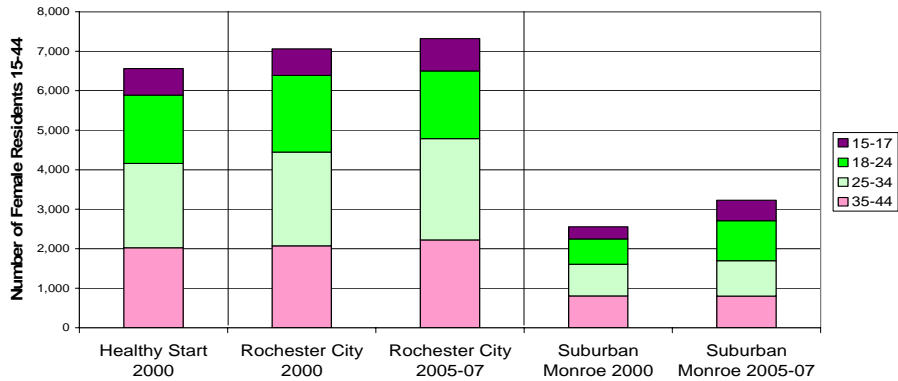
Data Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates

White Women Ages 15-44, Select Study Areas, 2000 and 2008



Data Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates

Latina Women Ages 15-44, Select Study Areas, 2000 and 2005-07



Data Source: 2000 U.S. Census; 2005-07 3-Yr Avg Estimates American Community Survey

Language Spoken at Home

In 2008, the percent of the population five years or older who speak Spanish at home was considerably higher in the Healthy Start area and the city of Rochester than in suburban Monroe County. There were no significant changes in this trend from 2000 to 2008.

	HS		City		Suburbs		MC	
	count	%	count	%	count	%	count	%
English only	142,335	82%	157,896	82%	445,669	90%	604,221	88%
Spanish	19,050	11%	20,674	11%	9,677	2%	30,374	4%

Note: HS = Healthy Start; City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County
Source: 2008 Nielsen Claritas Demographic Update Estimates

Families and Households

There are substantial differences in family type among the study areas. From 2000 to 2008, over 25% of suburban Monroe County families consisted of married couples with children, compared to approximately 12% of Healthy Start area and Rochester families. Approximately 16% of all households in the Healthy Start area and in the city of Rochester were headed by single females with children, compared to approximately 5% in suburban Monroe County and 8% in Monroe County.

Family type suggests the amount of resources available to women and their children. Raising children without support or assistance from another adult in the household increases women's likelihood of social, emotional and financial stress. As noted earlier, however, young African American males may have not been accurately accounted for in the demographic estimates, which might overstate the proportion of female-headed families to some extent in 2008.

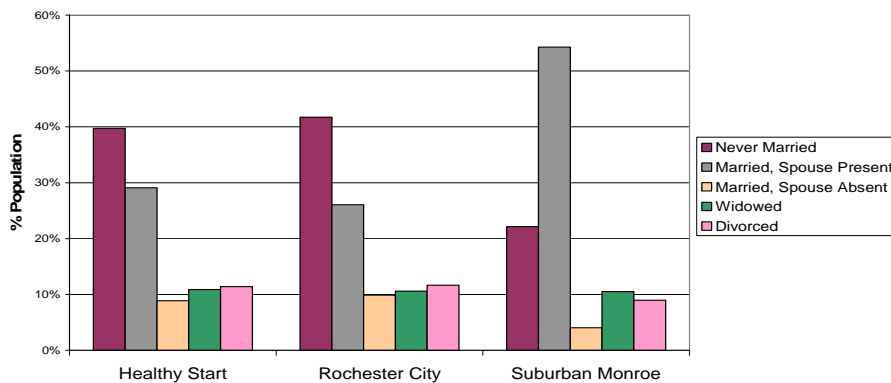
	HS				City				Suburbs				MC			
	2000		2008		2000		2008		2000		2008		2000		2008	
	count	%	count	%	count	%	count	%	count	%	count	%	count	%	count	%
1-P, MHH	12,974	16%	12,578	17%	15,814	18%	15,159	18%	18,241	9%	19,884	10%	34,055	12%	35,087	12%
1-P, FHH	14,993	18%	14,348	19%	17,109	19%	16,462	20%	30,842	16%	32,238	16%	47,951	17%	48,750	17%
Family Households	46,803	58%	42,707	56%	47,713	54%	43,368	52%	138,105	70%	140,015	69%	185,818	65%	183,595	64%
2+ P, MCL, OC	10,946	13%	9,409	12%	10,929	12%	9,273	11%	52,610	27%	52,754	26%	63,539	22%	62,096	22%
2+ P, MCL, NC	12,618	16%	11,817	16%	11,987	13%	11,388	14%	62,603	32%	63,497	32%	74,590	26%	74,995	26%
Other, MHH, OC	2,054	3%	1,816	2%	2,230	3%	1,930	2%	3,310	2%	3,127	2%	5,540	2%	5,063	2%
Other, MHH, NC	1,834	2%	1,780	2%	1,986	2%	1,879	2%	2,726	1%	2,918	1%	4,712	2%	4,803	2%
Other, FHH, OC	13,370	16%	12,478	16%	14,338	16%	13,269	16%	9,483	5%	10,244	5%	23,821	8%	23,522	8%
Other, FHH, NC	5,981	7%	5,407	7%	6,243	7%	5,629	7%	7,373	4%	7,475	4%	13,616	5%	13,116	5%
NFHH, 2+ P, MHH	3,598	4%	3,489	5%	4,749	5%	4,640	6%	6,066	3%	5,358	3%	10,815	4%	10,009	4%
NF, 2+ P, FHH	2,816	3%	2,839	4%	3,708	4%	3,682	4%	4,473	2%	4,009	2%	8,181	3%	7,698	3%
Total	81,184	100%	75,961	100%	89,093	100%	83,311	100%	197,727	100%	201,504	100%	286,820	100%	285,139	100%

Note: HH = household; 1-P = 1-person; M = Male; F = Female; 2+ P = Two or more people; MCL = Married couple; OC = Own children; NC = No children; Other = Other family household; NF = Non family household
Note: HS = Healthy Start; City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County
Note: Yellow highlighted field denotes statistically significant difference at p<0.01 level
Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates

Substantially more females ages 15 and over are married in suburban Monroe County than in the Healthy Start area or Rochester as a whole. In 2008, approximately 54% of the female population ages 15 and older in suburban Monroe County was married and their spouse was present, compared to 29% of females in this age group living in the Healthy

Start area and 26% of those in Rochester. As noted earlier, the male to female ratio among African Americans between the ages of 18 and 44 living in the Healthy Start area and Rochester is skewed towards females. Consequently, heterosexual, monogamous marriage not an option for many African American women in this age group, should they prefer a spouse near their age and of their race. According to Lane, the difficulty of establishing and maintaining relationships leads many women to accommodate sexual arrangements (e.g., non-monogamous partnerships) they might not accept if the sex ratio were different.² Because of the imbalance in the sex ratio of males to females, women of color admit that “some women would prefer to have part of a man, than no man.”³ Women who are willing to accept the possibility that their sex partner has other sex partners, with no assurance that he is practicing “safer sex” in these relationships, and are subsequently at higher risk of acquiring STDs, including HIV/AIDS.

Female Population Ages 15+ by Marital Status, Select Study Areas, 2008



Data Source: 2008 Nielsen Claritas Demographic Update

Incarceration

In 2007, more than 7.3 million people in the U.S. were on probation, in jail or prison, or on parole at yearend, representing 3.2% of all adult residents or 1 in every 31 adults.⁴ In New York State, there were 62,599 prison inmates under custody of the New York State Department of Correctional Services (NYSDOCS) on January 1, 2008.⁵ Nearly the same number (62,950) of individuals was under jail custody^d across New York State by mid-year 2006.⁶ Incarceration has a profoundly negative effect on prisoners, their partners and children, and destabilizes the community at large.⁷ Most people in prisons who enter the criminal justice system come from economically disadvantaged communities, and more often than not, they return to the same community or a similar one upon release.⁸

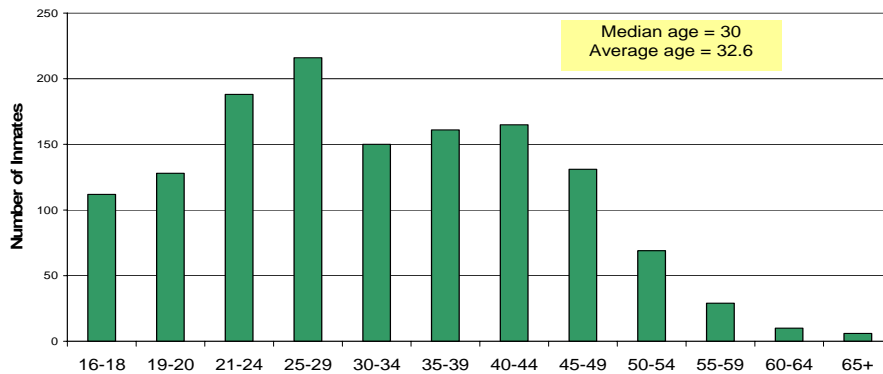
There are significant public health risks related to incarceration. According to a Department of Justice report, entering prisoners bring with them “infectious diseases

^d A key distinction between jails and prisons is that while prison inmates have been tried, convicted of crimes, and sentenced to prison; those in jail may be awaiting trial. Furthermore, a prison is under the jurisdiction of either federal or state governments, while a jail is under jurisdiction of a county. The turnover at a jail is much faster, as usually only persons sentenced to one year or less are held in county jails.

from impoverished home environments that are breeding grounds for HIV/AIDS, hepatitis C, and tuberculosis.”⁹ Furthermore, according to a Rand Corporation research brief, inmates in 2003 had a fourfold greater prevalence of active tuberculosis, a nine- to tenfold higher prevalence of hepatitis C, a fivefold greater prevalence of AIDS, and an eight- to ninefold greater prevalence of HIV/AIDS infection than the general U.S. population.¹⁰ This same study found that the prevalence of asthma, psychotic disorders such as schizophrenia, bipolar disorder, major depression, and substance abuse/dependence was greater among inmates than the general population. Since jails and prisons house a high proportion of individuals with infectious and chronic diseases, substance abuse, and mental health problems, and reentry policies often aggravate these problems, the experiences of inmates returning to the community may exacerbate health inequities in the low-income communities to which they return.¹¹

In an effort to assess the impact of incarceration on women of childbearing age living in Monroe County, data were solicited from the Monroe County Sheriff’s Department (MCSD) and NYSDOCS.^e MCSD reported housing 1,363 inmates at its Brighton and downtown Rochester facilities on August 22, 2008. On December 31, 2008, NYSDOCS facilities around the state had custody of 3,026 inmates who were indicted for crimes in Monroe County.^f Approximately 90% of the MCSD inmates and 96% of the NYSDOCS inmates indicted in Monroe County were male.^g The median age of the MCSD inmates was approximately 30 years, while that of the NYSDOCS inmates was approximately 32 years.

Inmates under MCSD Custody 8/22/08 by Age, Monroe County



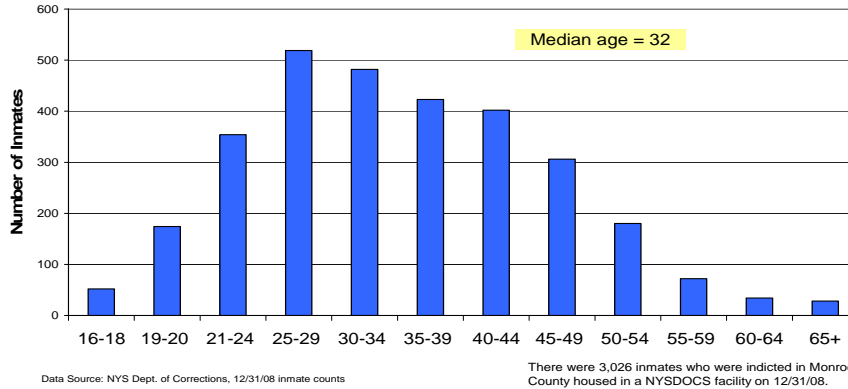
Data Source: Monroe County Sheriff’s Dept., 8/22/08 jail records
 There were 1,363 inmates housed in the Monroe County Henrietta and downtown Rochester facilities on 8/22/08.

^e Monroe Correctional Facility in Brighton and the Monroe County Jail in downtown Rochester are jails operated by the county, while the NYSDOCS facilities are prisons primarily outside Monroe County. There is only one NYSDOCS facility in Monroe County, and it is a minimum security institution.

^f The county of indictment refers to the county in which the crime was committed. In some cases, this may differ from the inmate’s original county of residence.

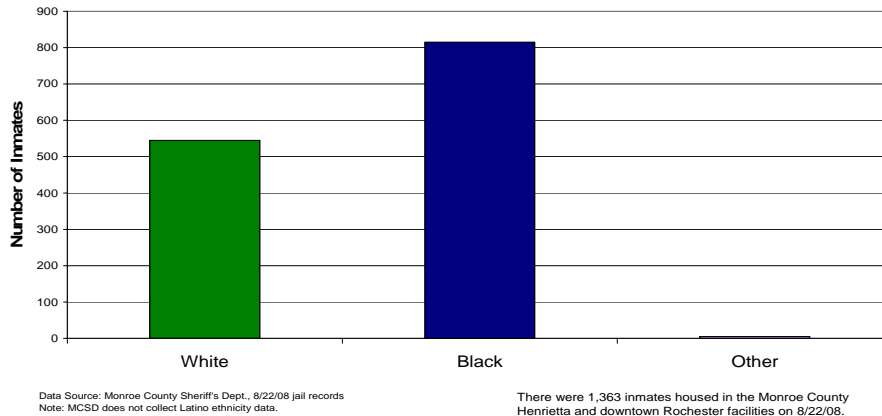
^g All data reported on inmates include both males and females. However, since males constituted 90% of the jail inmate population and 96% of the prison inmate population, we feel comfortable generalizing these trends to just male inmates.

**Inmates under NYSDOCS Custody 12/31/08
by Subarea of Indictment by Current Age,
Monroe County**

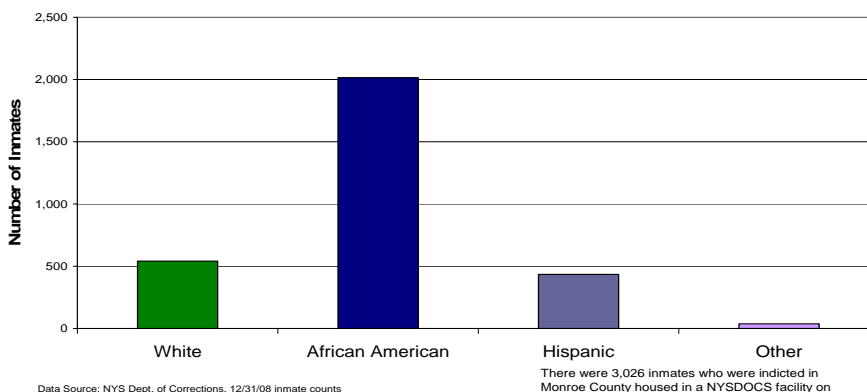


Both the MCSJD and NYSDOCS inmate populations were predominantly African American. For the MCSJD population, the African American to White ratio was roughly 2 to 1, while it was nearly 4 to 1 in the NYSDOCS population. These data align with national trends. In 2000, the incarceration rate for African American males was approximately eightfold greater than for White males, and approximately sevenfold in 2007.¹²

**Inmates under MCSJD Custody 8/22/08 by Race,
Monroe County**



**Inmates under NYSDOCS Custody 12/31/08
by Subarea of Indictment by Race/Ethnicity,
Monroe County**



Among the NYSDOCS inmates, 64% had never married, 23% were married, and 11% were separated or divorced. Although marriage has been documented to be rare among male inmates, they are just as likely as other men to have children.¹³ Approximately 32% of the NYSDOCS inmates reported having no children, while 68% reported having one or more children. Inmates who were parents had an average of two children.

Often, individuals who serve time in prison also spend time in jail before the beginning of their prison sentence. According to NYSDOCS, the average “total time served” (i.e., state time plus jail time) for first releases in 2007 was 43 months and the median was 30 months.¹⁴ These data suggest that an average NYSDOCS inmate is incarcerated, either in jail or prison, for over two years. Additionally, incarceration may not be a single event in an individual’s life. Among 2003 releases from NYSDOCS facilities, three year post release follow up studies discovered that 39% of inmates returned to custody within three years.¹⁵ The percentage of inmates who were committed in Monroe County who returned to custody was even higher, at 45%. Of these, 12% returned as a new commitment, while 33% returned after violating parole.

These data indicate that women of childbearing age in Monroe County are more likely than men to be “left behind” because of a partner’s incarceration. Many of these women are mothers. Moreover, they are likely to be without their partner for a significant amount of time, and nearly half will be separated by incarceration more than once. These forced separations, as well as the associated stress, loss of income, and stigma of incarceration, weakens the couple’s bond as well as that of the father with his children. Furthermore, women’s health is endangered by their partners’ repeat incarceration because of the high prevalence of infectious diseases, including STDs and HIV/AIDS, in the incarcerated population. According to the Bureau of Justice Statistics, at yearend 2006, 1.6% of male inmates and 2.4% of female inmates in state and federal prisons were known to be HIV-positive or to have confirmed AIDS.¹⁶ Furthermore, New York housed approximately 18% (4,000) of all inmates known to be infected with HIV or to have confirmed AIDS in state prisons at yearend 2006 – the highest percentage nationwide.

Research demonstrates marriage can offer a way out of crime for men with histories of delinquency. As noted earlier, however, heterosexual, monogamous marriage for African American women of reproductive age may be arithmetically impossible, due to the reduced numbers of African American men of their same age. Furthermore, incarceration greatly reduces the likelihood that men and women will marry. Huebner found that incarceration was associated with a 59% decrease in likelihood of marriage among White males, compared to 30% among African American males and 41% among Latino males.¹⁷ Western and McLanahan found that former inmates are less likely than men who have never been incarcerated to be involved with their child's mother one year after their child's birth.¹⁸ They also reported incarceration also decreases the odds of cohabitation by 70% per self-reports from interviewed women, particularly for African American families. Only 8% of African American men with a prior incarceration in their study were married to their partner a year after the birth of their child. In another study, Western and McLanahan estimated incarceration accounts for 15% of absentee African American fathers.¹⁹ Local research is needed to assess the impact of partners' incarceration on the lives of women of childbearing age living in the Healthy Start service area.

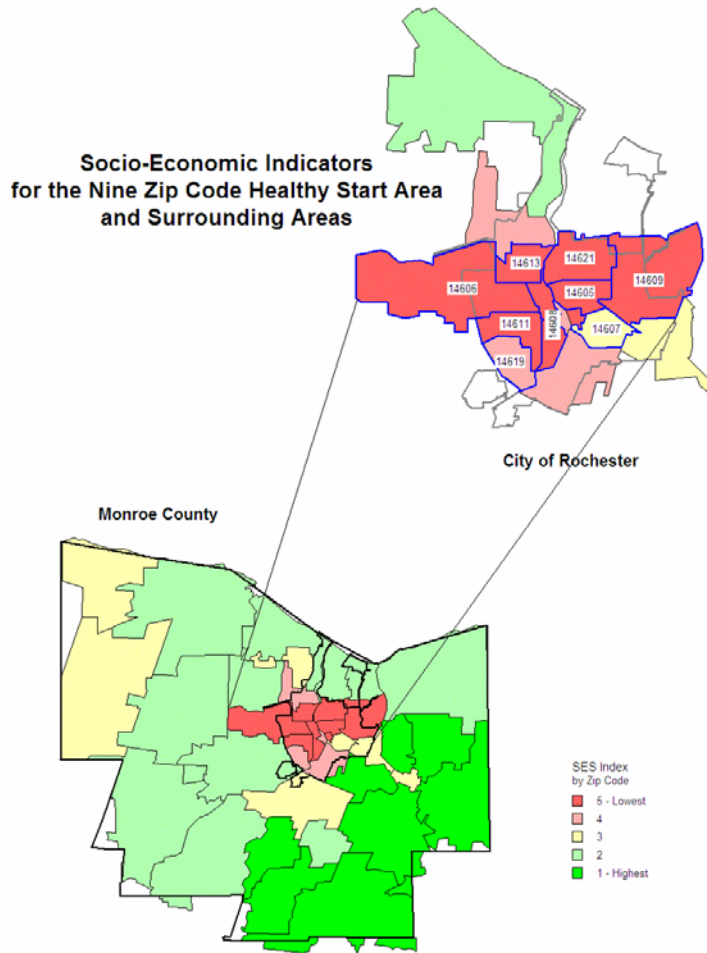
Finally, although female inmates constitute a fraction of the incarcerated population – approximately 7% of inmates serving sentences in U.S. Federal or State prison in 2005 – they are the fastest growing segment of the general incarcerated population and differ considerably from male offenders in key characteristics, including their health and socioeconomic status.²⁰ Current literature devoted to the analysis of women offenders proposes four themes to describe the etiology of female criminal behaviors: 1) poor and violent neighborhoods; 2) high prevalence of serious physical and/or sexual abuse; 3) high prevalence of physical and mental health problems; and 4) higher likelihood of women being the sole support and primary caregivers of children.²¹

According to the U.S. Bureau of Justice Statistics, approximately 7 in 10 women under correctional sanction in 1998 had minor children.²² These women reported having an average of 2.1 children under the age of 18, translating into more than 1.3 million children who had an incarcerated mother. While male inmates in state prisons were estimated to have been fathers to approximately 1.1 million minor children in 1998, they were less likely to have resided with their children prior to incarceration than female inmates (44% and 64%, respectively). Furthermore, approximately 90% of children whose fathers are incarcerated live with their mothers; in contrast, grandparents, not a parent, are most likely to be the caregivers of female offenders' children.²³ Approximately 10% of women inmates' children are placed in foster care or group homes. The dramatic rise in the rate of female incarceration significantly threatens the structure and functioning of families, as well as increases children's risk of poor outcomes, such as truancy and incarceration.²⁴

Socioeconomic Factors

Socio-economic status (SES) is a multivariate measure of an individual's or group's position in society, typically using criteria such as education, occupation, income, and place of residence. The links between health and SES have been studied in a number of populations, with the general finding that higher SES is associated with better health and longer life.²⁵ While behavioral, social, environmental, physiological, and genetic factors affect health outcomes, SES is a significant determinant of health in its own right.²⁶ The association holds for a variety of health variables, including prevalence of disease, mortality, self-rated health status and self-reports of psychological well-being.²⁷ Generally, persons living in neighborhoods with high levels of social disorder, poverty, crime and other socio-economic problems are more likely to report poor health and higher rates of disability than those with similar incomes living in more stable neighborhoods.²⁸ Additionally, the chronic stress and environmental stressors associated with low SES can increase morbidity and exacerbate early initiation of unhealthy behaviors.

As the map illustrates, overall, residents of the Healthy Start area have among the lowest SES status in Monroe County. Educational attainment and income are lower, on average, while unemployment and poverty are higher in the Healthy Start area than in suburban Monroe County. These data suggest that females of childbearing age living in the Healthy Start area may have worse health status and birth outcomes.



Educational Attainment

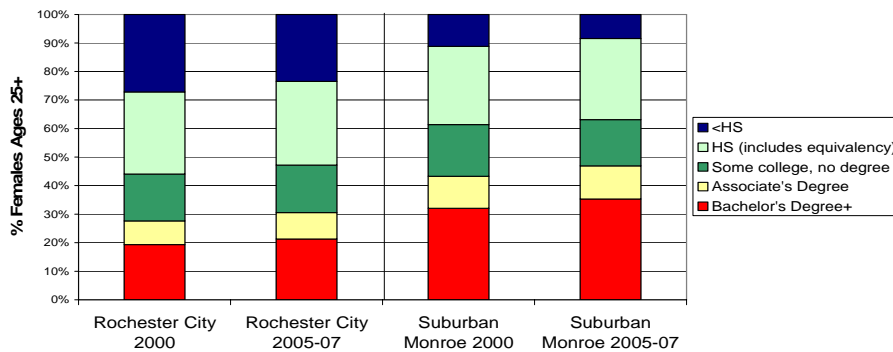
Educational status is one of the strongest predictors of health – in general, as educational attainment increases, so does the likelihood that one will have better health.²⁹ Educational attainment, particularly high school graduation, is estimated to have increased from 2000 to 2007 in Rochester, suburban Monroe County, and Monroe County as a whole. Educational attainment is higher in suburban Monroe County than in Rochester, with more individuals earning high school, four-year and professional/graduate degrees.

Total Population 25+ Years Old by Sex by Educational Attainment, Select Study Areas, 2000 and 2005-2007												
	City				Suburbs				MC			
	2000		2005-07		2000		2005-07		2000		2005-07	
	count	%	count	%	count	%	count	%	count	%	count	%
Total Population 25+												
<9th grade	10,048	8%	9,257	8%	10,288	3%	9,087	3%	20,336	4%	18,344	4%
9th to 12th grade, no diploma	25,748	19%	18,516	15%	26,326	8%	20,225	6%	52,074	11%	38,741	8%
High school graduate (includes equivalency)	38,008	29%	36,330	30%	86,919	25%	94,950	27%	124,927	26%	131,280	28%
Some college, no degree	21,946	17%	20,935	17%	63,309	18%	58,524	17%	85,255	18%	79,459	17%
Associate degree	10,234	8%	10,725	9%	36,178	10%	39,176	11%	46,412	10%	49,901	10%
Bachelor's degree	16,104	12%	15,075	12%	72,087	21%	75,113	21%	88,191	18%	90,188	19%
Graduate or professional degree	10,619	8%	11,263	9%	50,143	15%	56,716	16%	60,762	13%	67,979	14%
Total	132,707	100%	122,101	100%	345,250	100%	353,791	100%	477,957	100%	475,892	100%

Note: City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County
Note: Yellow highlighted field denotes statistically significant difference at p<0.01 level
Source: 2000 U.S. Census; 2005-2007 3-Yr Avg Estimates American Community Survey

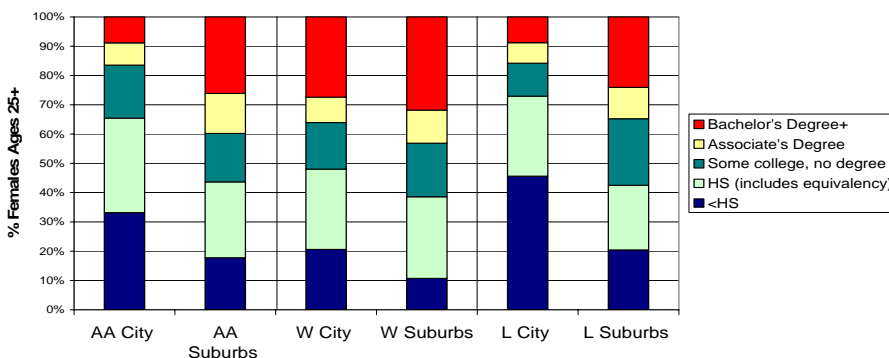
Overall, educational attainment among African American women and Latinas ages 25 and older is lower than among White women. Within each racial/ethnic group, the level of educational attainment is higher in suburban Monroe County than in the city of Rochester. However this gap is starker for African American women and Latinas than for White women.

Females Ages 25+ by Educational Attainment, Rochester City & Suburban Monroe, 2000 and 2005-07 3-Yr Estimates



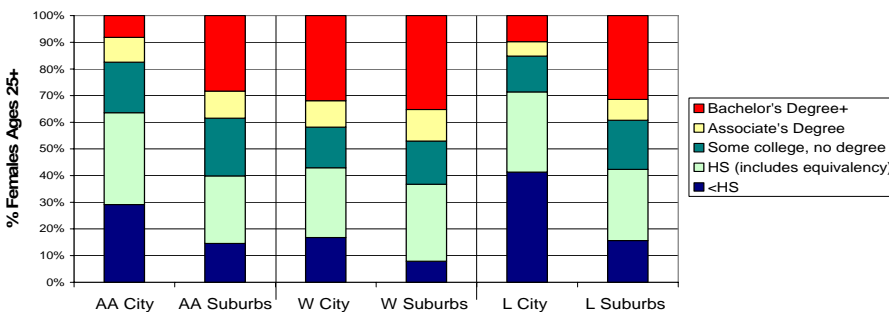
Data Source: 2000 U.S. Census; 2005-07 3-Yr Avg Estimates American Community

**Females Ages 25+ Educational Attainment
by Race/Ethnicity,
Rochester City & Suburban Monroe, 2000**



Data Source: 2000 U.S. Census Survey

**Females Ages 25+ Educational Attainment
by Race/Ethnicity,
Rochester City & Suburban Monroe,
2005-07 3-Yr Estimates**



Data Source: 2005-07 3-Yr Avg Estimates American Community Survey

Income

Income is associated with health status, morbidity, and mortality. Less healthy environments, less healthy diets, less physical activity, less access to health care, and greater stress have all been linked to higher rates of illness and/or death in lower-income populations.

The per capita income in the Healthy Start area is estimated to have grown from 2000 to 2008. Nonetheless, it is still much lower than that of suburban Monroe County and Monroe County as a whole. There are no official definitions of “middle class” or “upper class,” although such distinctions usually include both assets and income. Middle- or upper-class status often indicates access to health insurance and preventive health services.

Per Capita Income for Total Population, All Study Areas, 2000 and 2008								
	2000				2008			
	HS	City	SM	MC	HS	City	SM	MC
Per capita income	\$15,169	\$15,588	NA	\$22,821	\$16,437	\$16,305	\$29,644	\$25,872
Note: HS = Healthy Start; City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County								
Note: 2000 income reported in 1999 dollars; 2008 income reported in 2007 dollars								
Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates								

Similarly, the median household income in Rochester is considerably lower than in Monroe County as a whole. White households have the highest median household income and enjoyed the highest increase from 2000 to 2005-07 in both Rochester and Monroe County. The median household income increased the least for African American households in this period in both study areas.

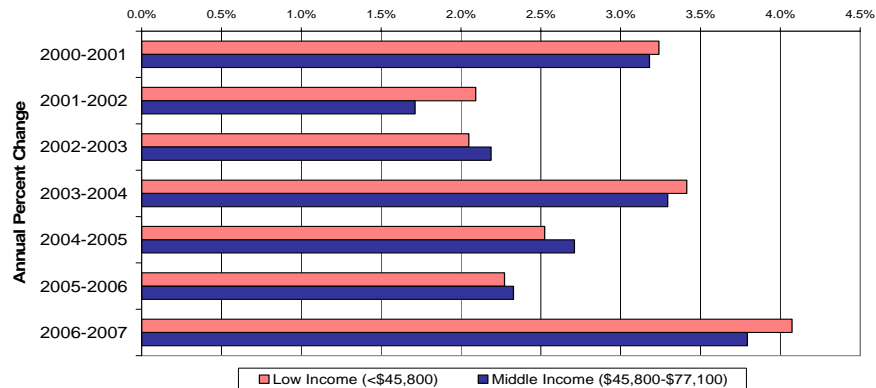
Median Household Income by Race/Ethnicity, Select Study Areas, 2000 and 2005-07 3-Yr Avg Estimates					
	City		MC		
	2000	2005-07	2000	2005-07	
Total Household Population					
Median HH Income	\$27,123	\$28,677	\$44,891	\$49,824	
African American Households					
Median HH Income	\$22,320	\$25,020	\$25,319	\$27,055	
White Households					
Median HH Income	\$31,510	\$34,573	\$49,047	\$54,140	
Latino Households					
Median HH Income	\$19,164	\$21,185	\$24,157	\$27,932	
Note: City = City of Rochester; MC = Monroe County					
Source: 2000 U.S. Census; 2005-07 3-Yr Avg Estimates American Community Survey					

Food Costs

For families at all income levels, housing and food account for the largest share of child-rearing expenses.³⁰ According to the USDA Center for Nutrition Policy and Promotion, the average family of four with children 11 years old or younger in the lowest income bracket spent \$2,810 on food in 2007, and those in the middle income bracket spent \$3,420.^h Family expenditures on children for food have increased every year from 2000 to 2007.

^h In 2007, the lowest income bracket comprised families with before-tax income of <\$45,800 (Avg = \$28,600). That year, the middle income bracket comprised families with before-tax income of \$45,800 to \$77,100 (Avg = \$61,000). For more information, visit <http://www.cnpp.usda.gov/ExpendituresonChildrenbyFamilies.htm>.

Annual Percent Change in Food Costs for a Family of Four, Kids Ages 0-11



Data Source: United States Department of Agriculture, Center for Nutrition Policy and Promotion. Expenditures on Children by

Rising food costs may lead to families experiencing food insecurity.ⁱ According to the USDA Economic Research Service, 11% (13.0 million) of U.S. households were food insecure at some time during 2007. Households headed by single females with children, African American households, and low income households were among the most likely to experience food insecurity in 2007. In Rochester, food choice for families is increasingly governed by what is affordable. As unemployment in the city enters double-digits, government food programs play an important role in access to healthy foods, but can be confusing to access. Options such as community gardens are hampered by a short growing season and soil contaminated by lead. Unfortunately, convenience stores are often the most easily accessed source of food and may offer customers services such as check-cashing and credit that are a draw for cash-strapped customers (see later discussion in Environment).

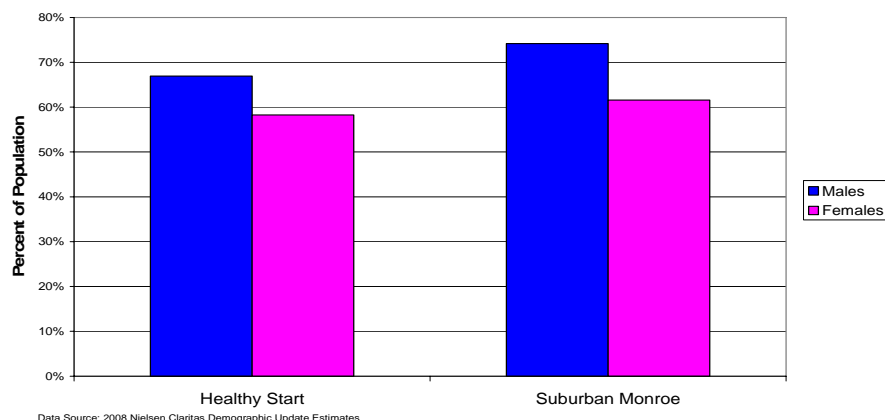
Labor Force

Employment can mean adequate income and, often, access to employer-sponsored health insurance. (Even being employed full-time is not a guarantee to having health insurance. Nationally, approximately two-thirds of the uninsured work full-time.) From 2000 to 2008, approximately 62% of the population 16 and older living in the Healthy Start area was in the labor force^j, compared to 68% of the suburban Monroe County population. Males living in either study area were more likely than females to be part of the labor force.

ⁱ According to the USDA, food insecurity is the uncertainty of having, or being unable to acquire, enough food to meet the needs of all family members because families had insufficient money or other resources for food. Food-insecure households include those with low food security and very low food security.

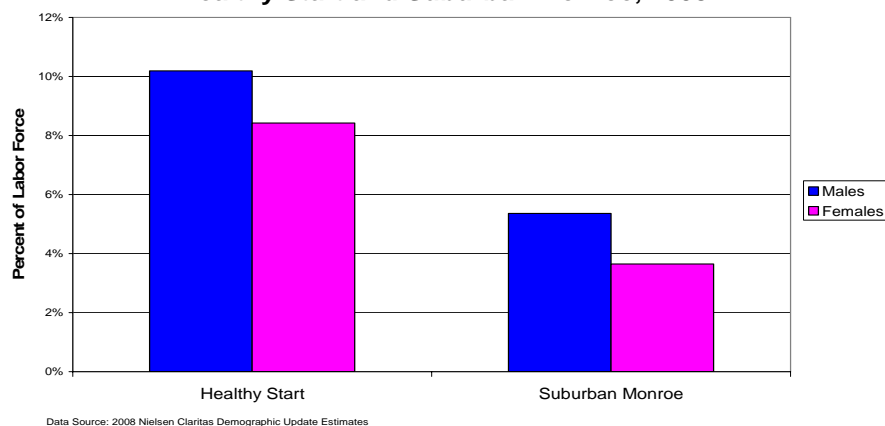
^j According to the U.S. Census Bureau, the labor force constitutes the population 16 years old and over that contributes to the production of goods and services in the country. The term includes those who are either employed or unemployed. Those who are neither employed nor unemployed are considered not in the labor force, e.g. persons who are not working and are not available for work. Examples of individuals not in the labor force are housewives, students, disabled or retired persons, and seasonal workers.

**Percent Pop. Ages 16+ in the Labor Force by Sex,
Healthy Start and Suburban Monroe, 2008**



From 2000 to 2008, approximately 9% of the labor force living in the Healthy Start area was unemployed, compared to 5% of the suburban Monroe County labor force. Males in both study areas were more likely to be unemployed than females.

**Percent of Pop. Ages 16+ in Labor Force Unemployed
by Sex,
Healthy Start and Suburban Monroe, 2008**



Poverty Status

In Monroe County, poverty is concentrated in the Healthy Start area and in the city of Rochester as a whole. In 2008, roughly one in five families in the Healthy Start area lived below the poverty level.^k The percent of households living below the poverty threshold has not changed significantly since 2000. In 2008, poverty disproportionately affected female householders with children, particularly in the Healthy Start area. In fact, over two thirds of female-headed households with children in this area were below the poverty

^k In 2008, the Census Bureau poverty threshold was \$11,201 for a single person under age 65 (\$933 per month). For the traditional two-parent two-children family, the 2008 poverty threshold was \$21,834 (approximately \$1,820 per month); the threshold for a single parent with two children was \$17,346 (\$1,446 per month).

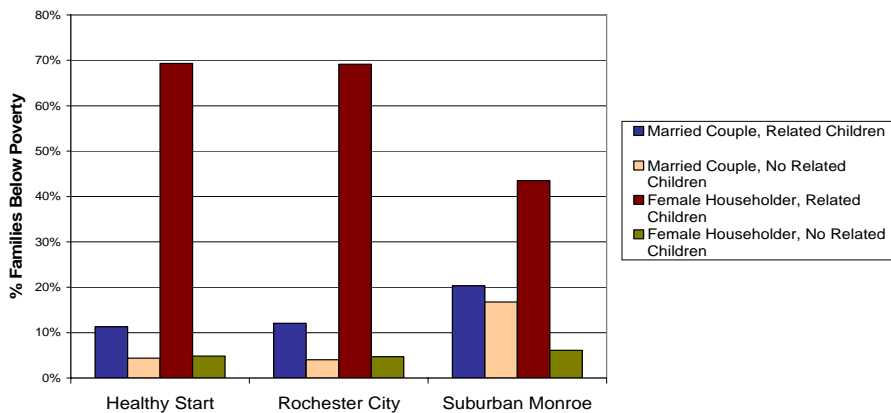
line. The prevalence of poverty among married couples is higher in the suburbs than in the city, probably reflecting the fact that marriage is more common throughout the income spectrum in this population.

Poverty Status of Families, All Study Areas, 2008									
	HS		City		Suburbs		MC		
	count	%	count	%	count	%	count	%	
Below Poverty	9,457	22%	10,158	23%	4,507	3%	14,663	8%	
At or Above Poverty	33,250	78%	33,210	77%	135,509	97%	168,932	92%	

Note: HS = Healthy Start; City = City of Rochester; Suburbs = Suburban Monroe County; MC = Monroe County

Source: 2008 Nielsen Claritas Demographic Update Estimates

Families Below Poverty by Family Type, Select Study Areas, 2008



Data Source: 2008 Nielsen Claritas Demographic Update Estimates

Public Assistance

From 2007 to 2008, the average monthly cases for temporary assistance in Monroe County increased less than 1%, but annual expenditures increased 8%. Part of the reason for this discrepancy may be related to the cyclical payments of childcare subsidies. Monroe County Department of Health and Human Services officials expect that the rate will remain at 2008 levels for two more years, and then will readjust downward.³¹

Temporary Assistance Year to Year Comparison of Monthly Average Cases and Recipients, and Annual Expenditures, New York State and Monroe County, 2007-08			
	Cases	Recipients	Expenditures
<u>2007</u>			
New York State	272,560	530,916	\$1,815,294,683
NYS (excluding New York City)	86,757	171,491	\$614,966,683
Monroe County	14,371	29,470	\$88,717,958
<u>2008</u>			
New York State	266,451	510,160	\$1,941,923,689
NYS (excluding New York City)	87,076	170,020	\$649,513,689
Monroe County	14,394	29,040	\$96,175,637
<u>Percent change 2007 to 2008</u>			
New York State	-2%	-4%	+7%
NYS (excluding New York City)	+0.37%	-1%	+6%
Monroe County	+0.16%	-1%	+8%
Source: NYS Office of Temporary and Disability Assistance, Temporary & Disability Assistance Statistics Dec. 2008 Report			

In an average month in 2007, 10,775 children and 3,826 adults received Family Assistance in Monroe County. These numbers decreased slightly in 2008 to 10,665 children and 3,839 adults.

Family Assistance Monthly Average Cases, Recipients, Children and Adults, and Annual Expenditures, New York State and Monroe County, 2007-08					
	Cases	Recipients	Children	Adults	Total Expenditures
<u>2007</u>					
New York State	113,020	251,904	191,133	60,771	\$781,485,505
NYS (excluding New York City)	40,618	92,972	70,295	22,677	\$300,613,505
Monroe County	6,199	14,601	10,775	3,826	\$41,236,062
<u>2008</u>					
New York State	108,972	242,214	184,169	58,046	\$841,281,817
NYS (excluding New York City)	40,362	91,444	69,171	22,273	\$315,979,817
Monroe County	6,189	14,504	10,665	3,839	\$46,631,563
Note: Family Assistance provides cash assistance to needy families that include a minor child living with a parent or a caretaker relative. This also includes pregnant women whose pregnancy is medically verified. FA operates under federal Temporary Assistance for Needy Families (TANF) guidelines.					
Source: NYS Office of Temporary and Disability Assistance, Temporary & Disability Assistance Statistics December 2007 and 2008 reports					

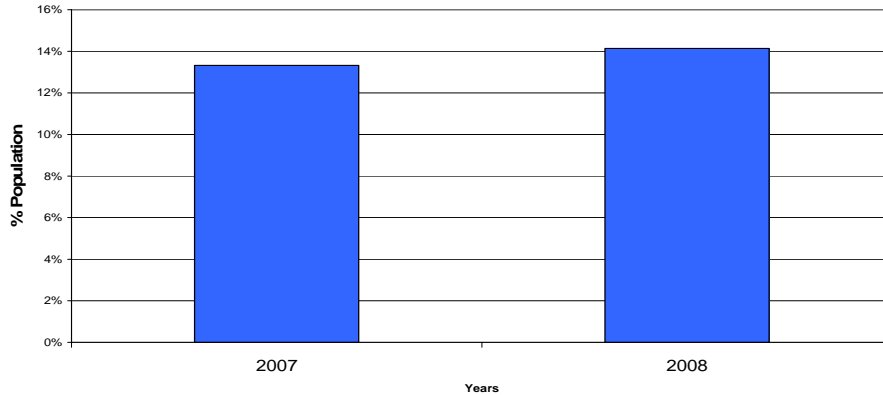
In an average month in 2007, 6,542 children and 8,328 adults living in Monroe County received Safety Net funding. The number of children receiving Safety Net funding in 2008 decreased to 6,147, while the number of adults increased slightly to 8,362.

Safety Net Assistance Monthly Average Cases, Recipients, Children and Adults, and Annual Expenditures, New York State and Monroe County, 2007-08					
	Cases	Recipients	Children	Adults	Total Expenditures
<u>2007</u>					
New York State	159,540	279,012	114,202	164,810	\$1,033,809,178
NYS (excluding New York City)	46,139	78,519	30,982	47,537	\$314,353,178
Monroe County	8,172	14,869	6,542	8,328	\$47,481,896
<u>2008</u>					
New York State	157,479	267,946	104,804	163,142	\$1,100,614,872
NYS (excluding New York City)	46,714	78,576	30,286	48,290	\$333,533,872
Monroe County	8,206	14,536	6,147	8,362	\$49,544,074
Note: Safety Net Assistance covers single adults, childless couples, children living apart from any relative, families of persons abusing drugs/alcohol, families of persons refusing drug/alcohol screening, assessment, or treatment, persons who have exceeded the 60-month limit on assistance, and aliens who are eligible for temporary assistance, but who are not eligible for federal reimbursement.					
Source: NYS Office of Temporary and Disability Assistance, Temporary & Disability Assistance Statistics December 2007 and 2008 reports					

The percent of households in Monroe County receiving food stamps increased 7% from 2007 to 2008. These households represented approximately 14% of all Monroe County households.

Food Stamp Benefits Year to Year Comparison of Monthly Average Households and Persons, and Annual Expenditures, New York State and Monroe County, 2007-08			
	Households	Recipients	Expenditures
<u>2007</u>			
New York State	959,030	1,812,878	\$2,377,956,820
NYS (excluding New York City)	356,669	706,898	\$828,195,161
Monroe County	37,832	76,565	\$91,752,166
<u>2008</u>			
New York State	1,076,649	2,029,589	\$2,801,699,099
NYS (excluding New York City)	388,805	769,834	\$910,402,683
Monroe County	40,317	80,704	\$103,363,321
<u>Percent change 2007 to 2008</u>			
New York State	+12%	+12%	+18%
NYS (excluding New York City)	+9%	+9%	+17%
Monroe County	+7%	+5%	+13%
Source: NYS Office of Temporary and Disability Assistance, Temporary & Disability Assistance Statistics Dec. 2008 Report			

**Percent of Households Receiving Food Stamps,
Monroe County, 2007-2008**



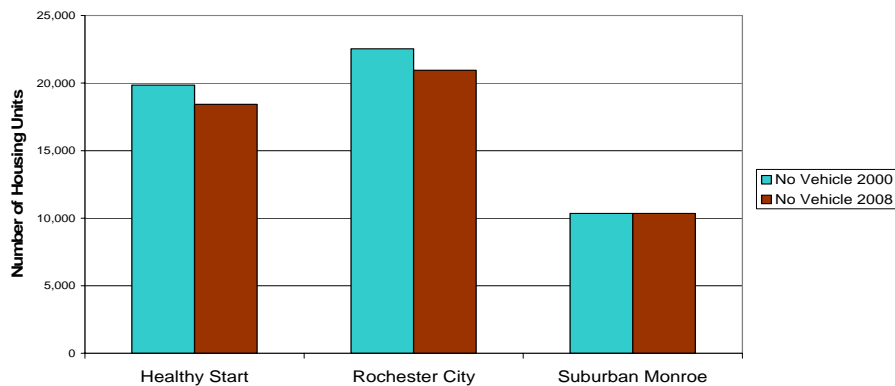
Data Source: NYS Office of Temporary and Disability Assistance, Temporary and Disability Assistance Statistics, Dec. 2008 Report

Vehicle Ownership

Considerably more homes lacked a vehicle in the Healthy Start area compared to suburban Monroe County in both 2000 and 2008. However, there was a small increase in vehicle ownership in the Healthy Start area during this period.

Using public transportation can be challenging, especially with children in tow. To go from the Maplewood area to the Eastman Dental Center on Elmwood Avenue, for example, can require an 18-minute walk to a bus stop, a 12-minute bus ride to center city, a four-minute wait for another bus, a 13-minute bus ride to Mt. Hope and Elmwood Avenues, and a five-minute walk to the Dental Center (a total of 52 minutes). By contrast, this trip would take 20 minutes by car.

**Number of Occupied Housing Units Lacking a Vehicle,
Select Study Areas, 2000 and 2008**



Data Source: 2000 U.S. Census; 2008 Nielsen Claritas Demographic Update Estimates

Environment

Research indicates that community socioeconomic status, social structures, and the quality of the environment are associated with health outcomes and health behaviors.^{32 33} Indeed, the 1999 Institute of Medicine report expands the definition of a “toxic environment” beyond proximity to toxic substances (e.g., air pollution, older housing stock, exposure to lead, etc.) to the environment where people live, work, and play.³⁴ In this vein, factors that compromise healthy lifestyles, such as barriers to physical activity and healthy eating and environmental factors that encourage tobacco use or excess alcohol consumption are detriments to health.³⁵

Availability of Green Space in the Healthy Start Area

Research has linked exposure to green landscapes with health improvements. Among adults, greenness is associated with less stress and lower BMI, improved self-reported health and shorter post-operative recovery periods. Among children and youth, the positive health effects of green landscapes include improved cognitive functioning and reduced attention deficit hyperactivity disorder symptoms.³⁶

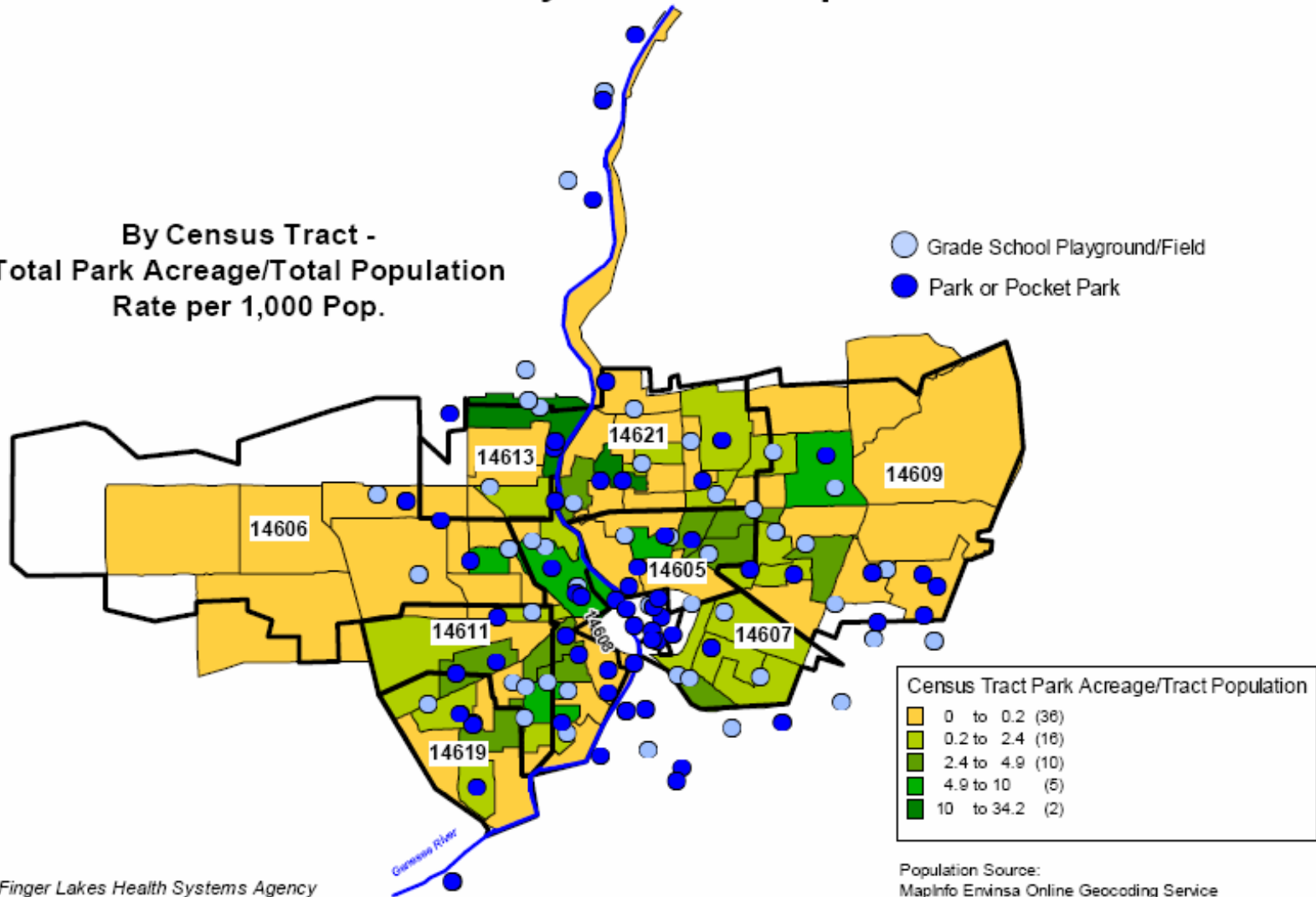
While a substantial amount of recreation takes place in backyards, on the street, and in other miscellaneous sites, the presence/absence of accessible recreational areas either promotes or creates barriers to essential exercise and relaxation. Public open spaces also promote social equity because they provide a range of recreational opportunities and facilities – including recreation fields, water features and trail ways – not able to be owned or maintained by most individuals.

In 2002, the New York State Office of Parks, Recreation and Historic Preservation published an assessment of recreation resources and needs comparing current services to current needs and projected needs in 2020.³⁷ In Monroe County, many available sites are heavily used and crowded and there is a relatively small availability compared to demand.

Such assessments of the “greenness” of urban environments foster an understanding of the proximity of children and youth to parks, playfields or other open spaces. These green spaces support either physical activity or increased time spent outdoors in active play. The following map represents the green space available within the Healthy Start area and calculates a rate of park acreage per population at the census block level. Access to green space varies greatly on place of residence.

Parks In PNMA Healthy Start Nine Zipcode Area

By Census Tract -
Total Park Acreage/Total Population
Rate per 1,000 Pop.



Density of Alcohol Outlets

Alcohol is a legal and widely consumed commodity, but it is also a commodity that can create a variety of serious health and social problems. Alcohol policies are an important tool for preventing these problems. Every day, New York State and Monroe County communities make decisions about the sale of alcohol: who can sell it, when and where it can be sold, and how densely places that sell alcohol can be situated within a neighborhood.

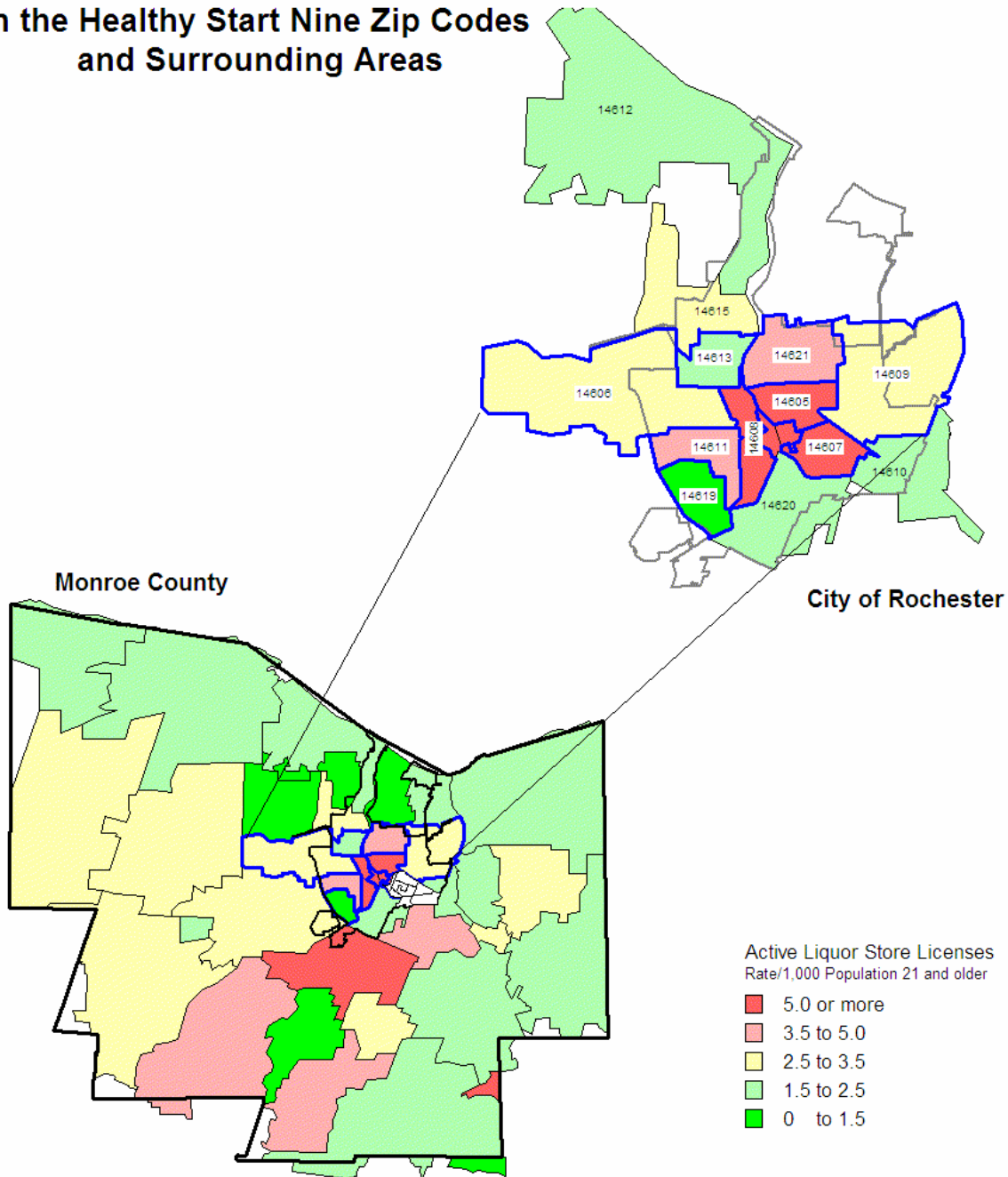
Excess alcohol consumption and substance abuse have been identified as characteristics of an unhealthy environment. Nationally, neighborhoods that are predominately African American have higher densities of liquor stores than neighborhoods comprised primarily of White/non-Latinos.³⁸ Furthermore, minority populations in both lower- and higher-income neighborhoods tend to have more liquor stores in their neighborhoods than White/non-Latinos of lower- and higher-income neighborhoods. These and related findings indicate there is a disproportionate supply of alcohol outlets in the areas where African Americans live. Our community is no different: the city of Rochester has the highest density of alcohol licenses in Monroe County.

A number of studies have found that in and near neighborhoods where there is a high density of places that sell alcohol, there is a higher rate of violence. In one such study, focused on Camden, New Jersey, neighborhoods with alcohol outlet density had more violent crime (including homicide, rape, assault, and robbery). This association was strong even when other neighborhood characteristics such as poverty and age of residents were taken into account.³⁹

Although the relationships are complex, the high concentration of liquor stores in the inner cities, the ready availability of beer and hard liquor, and the high incidence of alcohol abuse are deeply implicated in the troubled homes, disorderly neighborhoods, and dangerous streets there.⁴⁰ The evidence suggests that alcohol, like drugs, acts as a multiplier of crime. Aggressive behavior or criminality often occurs before involvement with drugs or alcohol, but the onset of use increases aggressive or criminal behavior.

The following map displays the rate liquor store licenses per 1,000 population over the age of 21 in the Healthy Start area and Monroe County. The Healthy Start area has some of the highest density of liquor stores to population in the city of Rochester and Monroe County as a whole.

**Number of Liquor Store Licenses
Rate/1,000 Population Over Age 21
in the Healthy Start Nine Zip Codes
and Surrounding Areas**



Density of Grocery Stores

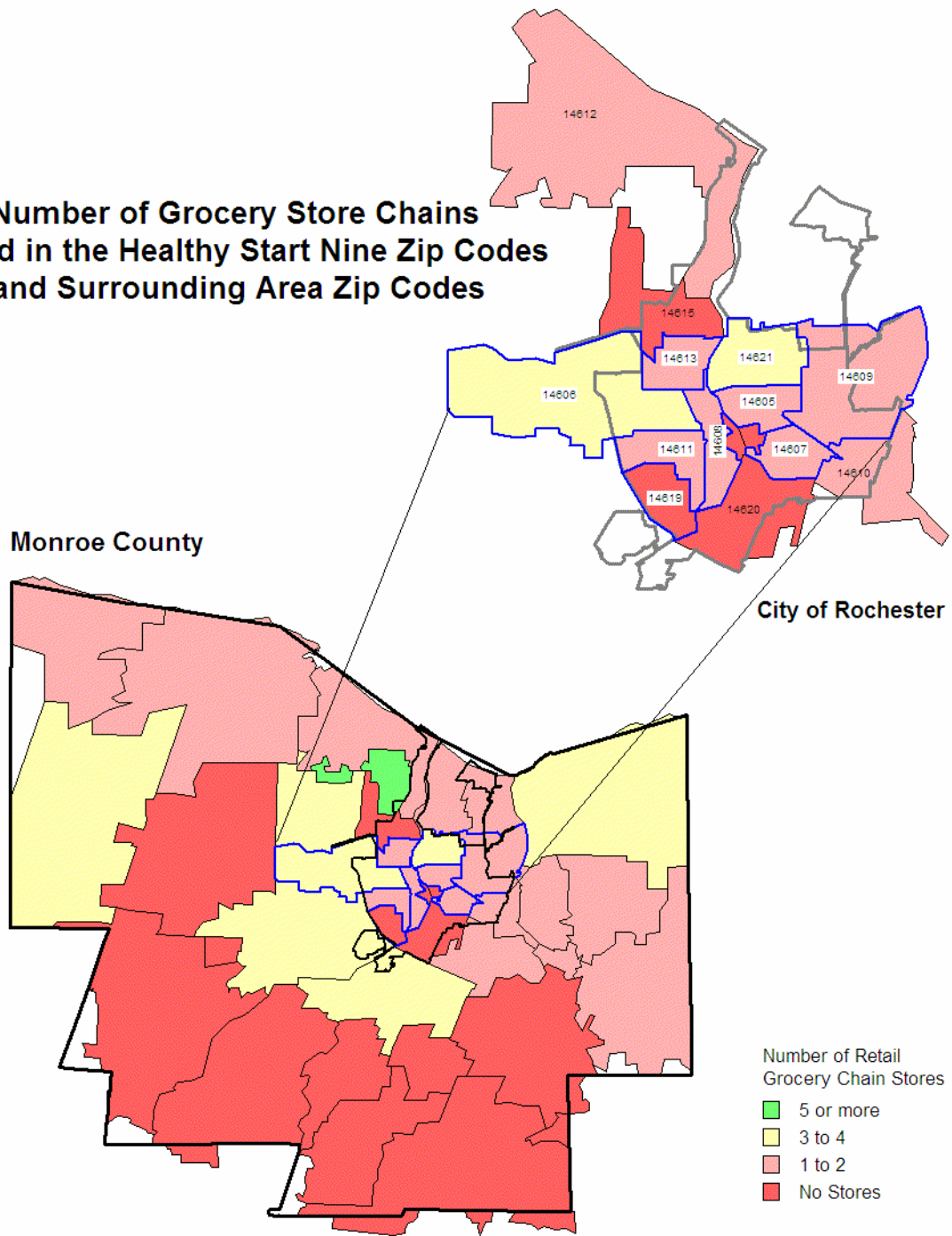
A 2007 study by the University of Rochester Medical School and Rochester's Southwest Area Neighborhood Association concluded that "access [to healthy foods] is a critical issue in urban environments where socio-economic factors and transportation issues are barriers to frequent visits to a supermarket. Without healthy food options close at hand, the advice of a physician to adopt a healthier lifestyle becomes difficult if not infeasible."⁴¹

The food environment in Rochester is characterized more by too-ready access to unhealthy food, than by lack of access to supermarkets and healthy alternatives. By far, the most readily available sources of food in the city are convenience stores, which are ubiquitous in low-income neighborhoods. The limited availability of fresh produce and healthy foods in these stores and the higher prices, combined with the availability of tobacco and alcohol products, leads to a concern for the health of people who frequent these stores. However, Rochester has successfully brought new supermarket chains to some low-income neighborhoods. The city gained national attention when, as major supermarkets fled the inner city, it negotiated with the Tops chain to open new stores.^{42 43} In the last two years, Rochester repeated its success; two new Price Rite stores now serve city neighborhoods. Several major supermarkets are located just beyond the city limits and are accessible by bus. Thus, the "food deserts" of many large urban areas are not as pronounced in Rochester.

Furthermore, a year-round Public Market, located in the heart of the Crescent neighborhoods, has become a significant community asset, providing fresh, locally grown foods and hosting well-attended community events on many weekends. The Public Market leads New York State farmers markets in Food Stamp purchases, indicating that it is increasingly a source of fresh, healthy food for low-income households. Its popularity has spawned a growing number of small farmers markets in urban neighborhoods. Foodlink, the area's regional food bank, provides fresh produce from its hydroponic greenhouse year-round and has been instrumental in setting up meals for after school programs (Kid's Cafes) and Summer Meals Programs.

The following map was created in the fall of 2008 and it displays the number of grocery chain stores found in the Healthy Start area and surrounding areas.

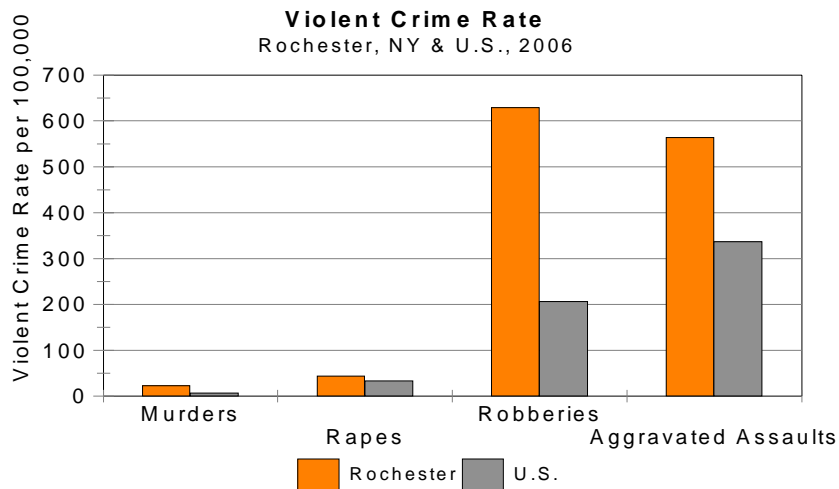
**Number of Grocery Store Chains
Found in the Healthy Start Nine Zip Codes
and Surrounding Area Zip Codes**

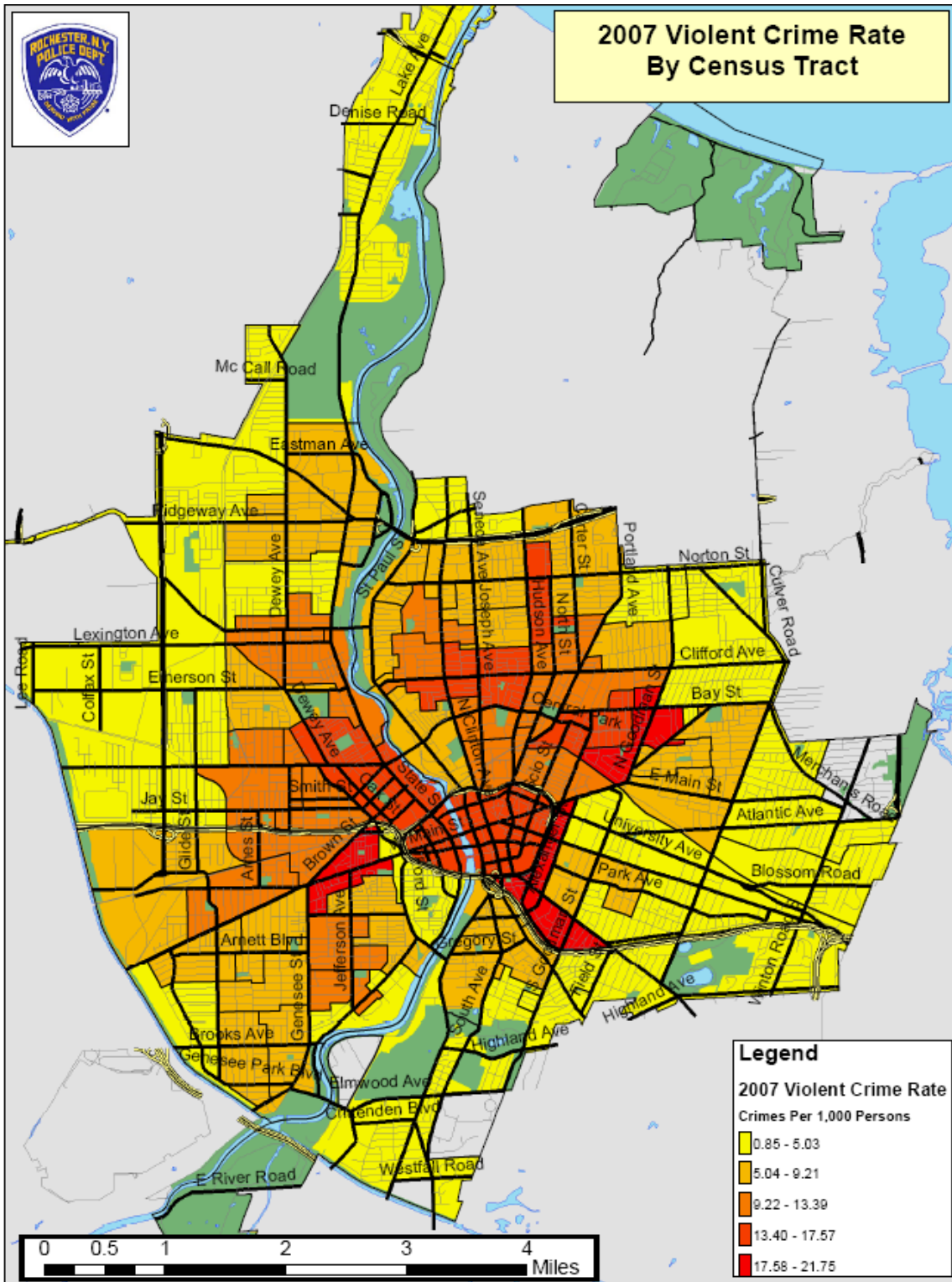


Violent Crime

Under the broader definition of a toxic environment, violence is a public health issue. Do and colleagues (2008) found that place of residence explains as much as 76% of the Black/White health gap at age 25 for males and 34% of the gap for females.⁴⁴ These statistics may be explained in part by the fact that Black men are at higher risk than White men for unemployment and exposure to violence.⁴⁵ Violent crime and active street-level drug markets exacerbate the difficulties of using public space and organizing effective support networks in blighted neighborhoods.⁴⁶ Moreover, living in a climate of fear can isolate people and reduce their freedom to carry on their normal routines (e.g., visiting with neighbors, going to a local store, walking in a park). Research has shown that violent crime in urban areas can be a barrier to outdoor physical activity.⁴⁷

The 2007 violent crime rate for Monroe County was 405 per 100,000, compared to 413 per 100,000 for New York State.⁴⁸ The 2006 violent crime rate of the city of Rochester, however, exceeded that of the U.S. as a whole for murders, rapes, robberies, and aggravated assaults. The map of the 2007 violent crime rate by census tract for the city of Rochester demonstrates that there is geographic variation of violent crime within the city of Rochester itself, with the highest rates occurring in the central city. These areas are also the neighborhoods where Healthy Start residents live.



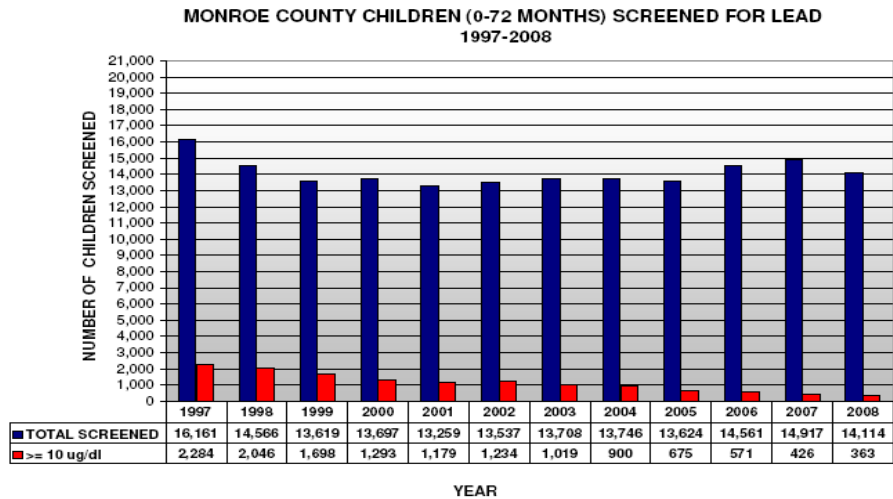


Lead Hazards

Lead is highly toxic to many organs and system and is a confirmed neurotoxin. Lead poisoning causes irreversible health effects and there is no cure. Multiple studies have documented the impact of lead on both cognitive ability and behavioral functioning stemming from central nervous system damage. The manner in which lead toxicity is expressed depends on many factors, including the magnitude, timing, and chronicity of exposure. Furthermore, expectant mothers poisoned by even low to moderate exposure to lead are at increased risk for miscarriage and can transfer that lead to a developing fetus, resulting in adverse developmental effects once the baby is born. This issue is particularly salient to the Healthy Start area because of the high rate of teen pregnancies in those neighborhoods.

Within the city of Rochester, pre-1950 homes are overwhelmingly located in the 14605, 14608, 14609, 14611, 14619 and 14621 ZIP Codes – all of which are located in the Healthy Start area. They are among the 36 identified ZIP Codes within New York State to have:

- incidence rates more than three times the statewide average, which collectively account for over 40% of elevated blood lead level reports in the state;
- been identified as having the highest percentage of confirmed cases >10 µg/dL (micrograms per deciliter);
- a high percentage of families with children below the age of five living in poverty.



Source: Monroe County Government, Childhood Lead Poisoning Prevention Program

Health Status

Most of the data in this section are based on information gathered as part of the Monroe County Department of Public Health's (MCDPH) Adult Health Survey (AHS), 2006. This survey collects data on the prevalence of health behaviors and health status indicators among adult residents (18+) of Monroe County.

For the purpose of this review, MCDPH extracted information for Monroe County women of childbearing age (18-44) and provided data on this subset of the population by age (18-29 and 30-44), by race/ethnicity (White/non-Latino, African American/non-Latino, and Latino), by education (less than high school; high school, GED, or some college; college degree or higher); and by residence (city and suburbs and Healthy Start and all other county ZIP Codes).

Poorer health status and fewer healthy behaviors were endemic among women with less than a high school degree when compared with women with high school degrees/some college. In turn women with high school degrees/some college were almost always in poorer health status and had fewer healthy behaviors than women with a college degree. African American/non Latina and Latinas were more likely than White/non-Latino women to experience poor health status and fewer healthy behaviors. Women residing in the city and Healthy Start ZIP Codes had poorer health indicators than women from suburban Monroe County and non-Healthy Start ZIP Codes.

Self-Reported Health Status

Self-reported health status has been found to be a predictor of morbidity and mortality.⁴⁹ Survey respondents were asked whether they considered their health status as excellent, very good, good, fair, or poor. Nine percent of Monroe County females 18-44 described their health status as "fair or poor."

Over 30% of women with less than a high school degree reported being in fair or poor health, a proportion three times greater than women with a high school degree or some college and 15 times greater than women with a college degree.

Older women (30-44), African American/non-Latino women and Latinas, city residents and Healthy Start ZIP Code residents were significantly more likely to report fair or poor health than were younger women, White/non-Latino women, and suburban and non-Healthy ZIP Code residents.

The pattern of women reporting physical or emotional problems interfering with social activities all or most of the time during the last four weeks was similar to that of women reporting fair or poor health with the exception of the difference between younger and older women.

Overall Health Status, 2006
Percent of Females ages 18-44, Monroe County


	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Fair or poor health	9	6	11	5	19	18	31	11	2	16	5	21	4
Physical health or emotional problems interfered with social activities <u>all or most of</u> <u>the time</u> during last 4 wks.	8	6	9	3	20	22	30	10	2	14	4	14	5

Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.

Source: Monroe County Adult Health Survey, 2000 and 2006

**Overall Health Status, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

	Females	Ages 18-64	White	African American	Latino	Non-Latino	City	Suburbs
Fair or poor health								
Source: Monroe County Adult Health Survey, 2000 and 2006								



Statistically significant increase, $p < .05$
Negative indicator

Physical Health Status

Depending on the limitation, between 7% and 12% of Monroe County women 18-44 reported a functional limitation due to physical health. The limitation most often identified was “accomplished less than they would have liked at work or daily activities because of physical health all or most of the time in the past four weeks.”

Between 20% and 35% of women with less than a high school degree reported experiencing each limitation; 35% reported accomplishing less and 35% reported “pain interfering extremely/quite a bit with normal work during the past four weeks.” By contrast two percent of college-educated women and 14% of women with a high school degree or some college reported pain interfering with work. Women with less than a high school degree were significantly more likely than other women to report every type of limitation.












African American/non-Latino women and Latinas and city residents and Healthy Start ZIP Code residents were significantly more likely to report each limitation than were White/non-Latino women and suburban and non-Healthy Start ZIP Code residents.

**Physical Health Status, 2006
Percent of Females ages 18-44, Monroe County**

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non-Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Because of health													
Limited <u>a lot</u> in doing moderate activities like moving a table, pushing a vacuum, bowling, or playing golf	8	7	8	4	20	21	25	9	4	11	5	14	5
Limited <u>a lot</u> in climbing several flights of stairs	7	6	7	2	17	26	31	8	1	11	4	16	3
During the past 4 weeks													
Accomplished less than they would have liked at work or daily activities because of physical health <u>all or most of the time</u>	12	9	14	7	19	24	35	14	5	17	8	22	8
Limited in the kind of work or other activities because of physical health <u>all of most of the time</u>	8	7	9	5	15	15	20	11	1	12	4	16	5
Pain interfered <u>extremely/quite a bit</u> with normal work	11	11	11	7	22	21	35	14	2	16	7	20	7
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

Percent of Females ages 18-44, Monroe County

Significant Change, 2000-2006 All Adults, Monroe County

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino			City	Suburbs
Limited a <u>lot</u> in doing moderate activities like moving a table, pushing a vacuum, bowling, or playing golf										
Accomplished less than they would have liked at work or daily activities because of physical health <u>all or most of the time</u>										
Limited in the kind of work or other activities because of physical health <u>all of most of the time</u>	No Significant Changes									
Pain interfered <u>extremely/quite a bit</u> with normal work										

Source: Monroe County Adult Health Survey, 2000 and 2006



Statistically significant increase, $p < .05$
Negative indicator

Mental Health Problems

Frequent Mental Distress

Poor mental health is a major source of distress and disability. To identify differences in mental health status among populations and factors contributing to poor mental health, the Centers for Disease Control and Prevention uses the concept of frequent mental distress (FMD). FMD is identified by a self-report of mental health that was not good (including stress, depression, and problems with emotions) for at least 14 of the past 30 days; the 14-day marker was selected because physicians commonly use a 14-day period as a distinguishing characteristic of clinical depression and anxiety disorders.⁵⁰

Among Monroe County women 18-44, 9% reported FMD.

Among Latinas and women with less than a high school education, at least 30% reported FMD, and they were significantly more likely to report FMD than were African American/non-Latino women and women with a high school degree/some college.

In addition, African American women, women with a high school degree/some college, and city and Healthy Starts ZIP Code residents were significantly more likely to report FMD than White/non-Latino women, women with a college degree, and suburban and non-Healthy Start ZIP Code residents.

Functional Limitations Due to Emotional/Mental Health Issues

Depending on the specific limitation, between 4% and 16% of Monroe County women 18-44 reported functional limitations due to issues of emotional health.

Women without a high school degree were significantly more likely to report every functional limitation than other women; women with a high school degree/some college were significantly more likely than women with a college degree to report every limitation. More than 40% of women without a high school degree reported having “little energy most or all of the time in the past four weeks.” By contrast, 21% of women with a high school degree/some college and 6% of women with a college degree reported little energy most or all of the time.

Almost one-third of Latinas said they had little or no energy, compared with 14% of White/non-Latinos and 18% of African American/non-Latinos. Latinas were significantly more likely than White/non-Latinos to report each limitation. African American/non-Latinos were significantly more likely than White/non-Latinos to report more than half of the limitations.

Residents of Healthy Start ZIP Codes were significantly more likely to report every limitation than residents of non-Healthy Start ZIP Codes, and city residents were significantly more likely to report most limitations than were suburban residents.

Mental Health Diagnosis

Women with FMD may not have a mental health diagnosis, and women with a mental health diagnosis may not report experiencing FMD.

One-third of women age 18-44 living in the Healthy Start area and continuously enrolled in the Monroe Plan for Medical Care (MPMC), a Medicaid HMO, for 12 months from 2005 to 2007 had a mental health diagnosis. This proportion compares to 15% of all women age 18-44 living in the Healthy Start area reporting FMD.

Among the continuously enrolled MPMC women ages 15-44, the proportion with a mental health diagnosis increased by age from 17% among 15-17 year olds to 42% among 35-44 year olds. More than half of White women and Latinas ages 35-44 enrolled continuously in MPMC and living in the Healthy Start area had a mental health diagnosis. In every age group, White women were more likely to have a mental health diagnosis (43% overall), while Latinas (33%) and African American women (25%) were less likely to have a diagnosis.

Cultural differences in perceptions and management of mental illness may influence the diagnosis of depression and other mental illnesses. According to Kleinman, “Culture not only shapes illness, but also determines the way one conceives of illness.”⁵¹ As Escobar notes, “Even in similar countries such as those of the western hemisphere (Europe and North America), dramatic differences can be documented in areas such as the way patients present, how medical tests are interpreted, and type and formulation of treatments provided.”⁵² For example, it is been shown that African Americans may present symptoms differently than most clinicians are trained to expect, perhaps resulting in diagnostic and treatment problems.⁵³ Other research has noted that many Latinos express symptoms of mental illness or distress somatically in terms of bodily ailments unrelated to psychological distress. Somatization has different meanings for different individuals (e.g., disease, psychopathology, intrapsychic conflict, distress, social discontent). Gaining an understanding of the meaning of this phenomenon for Latinos could lead to more accurate diagnoses and appropriate treatments.⁵⁴ Participants in focus groups have stated they believe many depressed Puerto Rican women do not begin to deal with their symptoms by seeking professional help, but may instead look to *curanderos* [native curers] and *espiritismo* [spiritism or religious ritual].⁵⁵

Use of Medications for Mental Health Problems

Fifteen percent of Monroe County women 18-44 reported they were currently taking prescription medication for mental health problems, such as personal or family problems, depression, anxiety, or stress. There were no significant differences among the subgroups studied.

Preventive Counseling for Mental Health Problems

The U.S. Preventive Services Task Force (USPSTF) recommends screening adults for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up.

The USPSTF found good evidence that screening improves the accurate identification of depressed patients in primary care settings and that treatment of depressed adults identified in primary care settings decreases clinical morbidity. Trials that have directly evaluated the effect of screening on clinical outcomes have shown mixed results...

The optimal interval for screening is unknown. Recurrent screening may be most productive in patients with a history of depression, unexplained somatic symptoms, comorbid psychological conditions (e.g., panic disorder or generalized anxiety), substance abuse, or chronic pain.⁵⁶

Of Monroe County women 18-44 who reported they visited a health care provider for a routine check-up within the past year, 49% said the provider talked with them about whether they experienced depression, anxiety, or stress. There were no significant differences among the subgroups studied. Only 35% of all Monroe County adults reported being counseled about mental health problems; thus women 18-44 were counseled more often than adults as a whole.

Emotional Health Status, 2006
Percent of Females ages 18-44, Monroe County







	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Experienced stress, depression and/or problems with emotions on 14+ of past 30 days	9	10	9	6	12	30	31	10	4	14	6	15	7
During the past 4 weeks													
Accomplished less than they would have liked because of emotional problems <u>all or most of the time</u>	8	4	11	4	15	24	27	10	2	12	6	13	6
Worked less carefully because of emotional problems <u>all or most of the time</u>	4	2	6	2	8	14	16	6	1	8	3	8	3
Felt calm and peaceful <u>none or a little of the time</u>	14	15	14	13	16	26	37	17	7	20	11	23	11
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

Emotional Health Status, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
During the past 4 weeks													
Had lot of energy <u>none or a little of the time</u>	16	15	17	14	18	32	42	21	6	16	16	23	13
Felt downhearted and depressed <u>all or most of the time</u>	7	6	8	5	10	21	26	8	2	9	5	11	5
Take prescription medication for mental health problems	15	No significant differences between subgroups											
Health care provider spoke with them in past yr. about whether or not they experienced mental health problems (of those visiting MD for a check-up in past yr.)	49	No significant differences between subgroups											
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

**Emotional Health Status, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64		White	African American	Latino	Non-Latino			City	Suburbs
		Experienced stress, depression and/or problems with emotions on 14+ of past 30 days									
Accomplished less than they would have liked because of emotional problems <u>all or most of the time</u>											
Worked less carefully because of emotional problems <u>all or most of the time</u>											
Felt calm and peaceful none or a little of the <u>time</u>											
Source: Monroe County Adult Health Survey, 2000 and 2006											



Statistically sig. increase, p<.05
Negative indicator










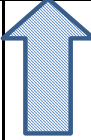
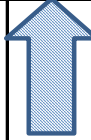
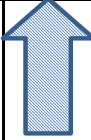


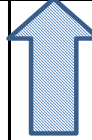
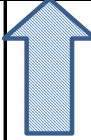
Statistically sig. decrease, p<.05
Negative indicator



Statistically sig. increase, p<.05
Positive indicator

Emotional Health Status, 2006
Percent of Females ages 18-44, Monroe County

Significant Change, 2000-2006
All Adults, Monroe County

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino			City	Suburbs
Felt downhearted and depressed <u>all or most</u> of the time	No Significant Changes									
Take prescription medication for mental health problems										
Health care provider spoke with them in past yr. about whether or not they experienced mental health problems (of those visiting MD for a check-up in past yr.)										

Source: Monroe County Adult Health Survey, 2000 and 2006



Statistically sig. increase, $p < .05$
Negative indicator



Statistically sig. decrease, $p < .05$
Negative indicator



Statistically sig. increase, $p < .05$
Positive indicator

Chronic Disease

Asthma

Fifteen percent of Monroe County women 18-44 reported they were ever told they had asthma. One-third of women with less than a high school degree had been told they had asthma, more than double the proportions of women with a high school degree/some college and women with a college degree. Similar differences were found with regard to current asthma, though there was not a significant difference in asthma prevalence between women without a high school degree and women with a high school degree/some college.

There were no significant differences in asthma by age, race/ethnicity, or residence.

Diabetes

Three percent of Monroe County women 18-44 have ever been told they have diabetes. Nine percent of African American/non-Latino women have been told they have diabetes, a proportion significantly greater than White/non-Latino women (3%) and Latinas (1%).

The prevalence of diabetes increases with age, and older women (30-44) were significantly more likely than younger women to have been told they had diabetes.

There were no significant differences by education or residence.

High Blood Pressure

Of Monroe County women 18-44 who had had their blood pressure checked, 14% had been told it was high. One-third of African American/Latino women indicated they had been told their blood pressure was high, a proportion three times greater than for White/non-Latino women and four times greater than for Latinas.

Women with less than a high school degree and women with a high school degree/some college and residents of the Healthy Start ZIP Codes were significantly more likely to have been told they had high blood pressure than women with college degrees and residents of non-Healthy ZIP Codes.

Elevated Levels of Cholesterol

Approximately one-fifth of Monroe County women 18-44 who had ever been tested for cholesterol reported they had been told they had high cholesterol. Interestingly, women with a high school degree/some college were significantly more likely to have been told they had high cholesterol than women with a college degree, but there were no other significant differences among the subgroups studied (age, race/ethnicity, and residence).

Chronic Disease, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Ever been told they have asthma	15	16	14	15	10	21	32	14	13	17	14	20	13
Have asthma now	11	12	10	11	9	14	22	12	8	11	11	14	10
Ever been told they have diabetes	3	1	5	3	9	1	6	3	3	4	3	4	3
Ever been told they have high blood pressure (of those who ever had blood pressure checked)	14	10	17	11	33	8	27	18	7	16	13	20	12
Ever been told they have high cholesterol (of those who ever tested)	19	15	21	21	17	16	19	25	13	17	21	15	21

Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.

Source: Monroe County Adult Health Survey, 2000 and 2006

Chronic Disease, 2006
Percent of Females ages 18-44, Monroe County

Significant Change, 2000-2006
All Adults, Monroe County

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs
Ever been told they have diabetes		↑	↑	↑		↑		↑	↑
Ever been told they have high blood pressure (of those who ever had blood pressure checked)	↑	↑	↑			↑		↑	↑
Ever been told they have high cholesterol (of those who ever tested)	↑			↑				↑	

Source: Monroe County Adult Health Survey, 2000 and 2006



Statistically significant increase, $p < .05$
Negative indicator

Health Behaviors

Tobacco Use

Ever Smoked¹

More than one-third of Monroe County women 18-44 reported they had smoked 100+ cigarettes in their lifetime (had ever smoked). Two-thirds of women without a high school degree had ever smoked, significantly more than the approximately 39% of women with a high school degree/some college. In turn, women with a high school degree/some college were significantly more likely to have ever smoked than women with a college degree. Older women (30-44) were significantly more likely to have smoked than younger women. There were no significant differences by race/ethnicity or residence.

Current Smoker

The national Healthy People 2010 target for tobacco use by adults is to reduce use from 24% (1993) to 12%.

More than a quarter of Monroe County women 18-44 were current smokers. As with ever smoked, two-thirds of women without a high school degree smoked, and they were significantly more likely to be current smokers than women with a high school degree/some college, and these women were significantly more likely to be current smokers than women with a college degree.

Latinas and city and Healthy Start ZIP Code residents were significantly more likely to be current smokers than White/non-Latinos and suburban and non-Healthy Start ZIP Code residents. African American/non-Latino women 18-44 were not significantly different from either White/non-Latino women or Latinas in proportion of current smokers.

Tried to Quit Smoking in the Past Year

The national Healthy People 2010 target is to increase smoking cessation attempts by adult smokers from 41% (1998) to 75%.

About half of the female current smokers 18-44 in Monroe County (47%) did not try to quit smoking in the past year (i.e., quit for one or more days). The number of respondents was too small to show any differences by the subgroups studied.

Preventive Counseling for Smoking

The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products.

The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke.

In nonpregnant adults, the USPSTF found convincing evidence that smoking cessation interventions, including brief behavioral counseling sessions (<10 minutes) and

¹“Smoked 100+ cigarettes in your entire life” has been used as the basis for the definition of a smoker, in part to be able to calculate the proportion of smokers who have quit.

pharmacotherapy delivered in primary care settings, are effective in increasing the proportion of smokers who successfully quit and remain abstinent for 1 year.

The USPSTF found convincing evidence that smoking cessation decreases the risk for heart disease, stroke, and lung disease.

In pregnant women, the USPSTF found convincing evidence that smoking cessation counseling sessions, augmented with messages and self-help materials tailored for pregnant smokers, increases abstinence rates during pregnancy compared with brief, generic counseling interventions alone. Tobacco cessation at any point during pregnancy yields substantial health benefits for the expectant mother and baby. The USPSTF found inadequate evidence to evaluate the safety or efficacy of pharmacotherapy during pregnancy.⁵⁷

About half of the Monroe County women 18-44 visiting a health care provider for a routine check-up within the past year reported the provider spoke with them about smoking. Two-thirds of women without a high school degree reported such a conversation, a proportion significantly higher than for women with a college degree. Although providers should be talking to all patients about smoking, the fact two-thirds of women without a high school degree both were current smokers and discussed smoking with a provider is complementary. There were no significant differences by age, race/ethnicity, or residence.

Tobacco Use, 2006
Percent of Females ages 18-44, Monroe County





	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non-Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Smoked 100+ cigarettes in entire life	36	28	42	35	34	51	65	39	27	40	34	40	35
Current smoker	22	20	23	19	28	40	63	27	8	29	17	32	18
Did not tried to quit in past yr. (if current smoker)	47	Number of respondents too small to show any differences											
Health care provider spoke with them in past yr. about whether or not they smoked (of those visiting MD for a check-up in past yr.)	48	48	48	49	47	58	67	48	45	47	49	51	47

Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.

Source: Monroe County Adult Health Survey, 2000 and 2006

Tobacco Use, 2006
Percent of Females ages 18-44, Monroe County

Significant Change, 2000-2006
All Adults, Monroe County

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		
							City	Suburbs
Current smoker								
Source: Monroe County Adult Health Survey, 2000 and 2006								



Statistically significant decrease, $p < .05$
 Positive indicator

Alcohol Use

Alcohol Use Disorder

The 2006 Monroe County Adult Health Survey (AHS) estimates the number of adults at risk of an alcohol use disorder based on responses to questions about how often in the past year individual have a drink containing alcohol, how many drinks they have on a typical day when drinking, and how often they have had six or more drinks on one occasion.

Eighteen percent of Monroe County women 18-44 were at risk of an alcohol use disorder. Younger women (18-29) and residents of non-Healthy Start ZIP Codes were significantly more likely than older women and residents of Healthy Start ZIP Codes to be at risk.

Thirty percent of Monroe County women 18-44 said they never drank, and thirty percent said they drank monthly. The majority of African American/non-Latino women and Latinas and women with less than a high school degree said they never drank.

Preventive Counseling for Alcohol Use

The USPSTF recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings.

The USPSTF found good evidence that screening in primary care settings can accurately identify patients whose levels or patterns of alcohol consumption do not meet criteria for alcohol dependence, but place them at risk for increased morbidity and mortality, and found good evidence that brief behavioral counseling interventions with follow-up produce small to moderate reductions in alcohol consumption that are sustained over 6- to 12-month periods or longer. The USPSTF found some evidence that interventions lead to positive health outcomes 4 or more years post-intervention, but found limited evidence that screening and behavioral counseling reduce alcohol-related morbidity. The evidence on the effectiveness of counseling to reduce alcohol consumption during pregnancy is limited; however, studies in the general adult population show that behavioral counseling interventions are effective among women of childbearing age.⁵⁸


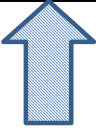



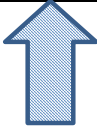


Of Monroe County women 18-44 who visited a health care provider in the past year for a check-up, 32% reported the health care provider spoke with them about alcohol use. There were no significant differences among the subgroups studied. Only 25% of all Monroe County adults reported being counseled about alcohol use.

Alcohol Consumption, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
At risk for alcohol use disorder*	18	26	12	19	12	22	18	19	17	15	20	12	20
Health care provider spoke with them in past yr. about alcohol use (of those visiting dr. for a check-up in past yr.)	32	No significant differences between subgroups											
*Based on, in the last year, how often respondent had a drink containing alcohol, how many drinks respondent had on a typical day when drinking, and how often respondent had 6+ drinks on one occasion													
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

**Alcohol Consumption, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs	
At risk for alcohol use disorder*	No Significant Changes									
Health care provider spoke with them in past yr. about alcohol use (of those visiting MD for a check-up in past yr.)										
*Based on, in the last year, how often respondent had a drink containing alcohol, how many drinks respondent had on a typical day when drinking, and how often respondent had 6+ drinks on one occasion										
Source: Monroe County Adult Health Survey, 2000 and 2006										



Statistically significant increase, $p < .05$
Positive Indicator

Physical Activity

The AHS notes that the survey was conducted during the summer months, when residents tend to be more active.

No-Leisure-Time Physical Activity

Leisure-time physical activity was described to include running, calisthenics, golf, gardening, and walking for exercise outside of an individual's regular job. The national Healthy People 2010 target is to reduce the proportion of adults who engage in no leisure-time physical activity from 40% to 20%.

Sixteen percent of Monroe County women 18-44 reported no leisure-time physical activities in the past month. Half of women without a high school degree reported none, a proportion that was significantly higher than the 21% among women with a high school degree/some college. Women with a high school degree/some college were in turn significantly more likely to report none than women with a college degree (6%).

Latinas and African American/non-Latino women and city and Healthy Start ZIP Code residents were significantly more likely than White/non-Latino women and suburban and non-Healthy Start ZIP Codes to report no leisure-time physical activity.

Meeting Physical Activity Guidelines

The physical activity guidelines cited in the AHS were based on Centers for Disease and Prevention (CDC) recommendations for adults to engage in moderate-intensity physical activity for 30 or more minutes on five or more days of the week and/or vigorous activity for 20 minutes on three or more days a week. The AHS cites the 2010 Goal for the Nation as increasing the proportion of adults who engage in recommended regular physical activity to 50%.^m

More than half of Monroe County women 18-44 usually met these guidelines; 48% did not. Latinas and residents of Healthy Start ZIP Codes were significantly less likely usually to meet the guidelines than White/non-Latinos and non-Healthy Start area residents.

Preventive Counseling Related to Physical Activity

The USPSTF has concluded "the evidence is insufficient to recommend for or against behavioral counseling in primary care settings to promote physical activity."⁵⁹

Of Monroe County women 18-44 who reported they visited a health care provider for a routine check-up within the past year, 38% reported their provider spoke with them about physical activity.

Women with at least a high school degree and suburban residents were significantly more likely to report a provider had spoken to them about exercise than women with less than a high school and city residents. There were no differences by age or race/ethnicity.

^m The Healthy People 2010 goal is based on regular, preferably daily, moderate physical activity for at least 30 minutes each day and aims to increase the proportion of active adults engaging from 15% (1997) to 30%.








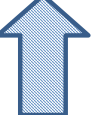


In October 2008, the United States Department of Health and Human Services published *2008 Physical Health Guidelines for Americans* recommending 150 minutes of moderate-intensity aerobic activity per week or 75 minutes of vigorous-intensity aerobic activity per week (or an equivalent mix) **and** muscle-strengthening activities on two or more days a week. Pregnant women are advised to discuss with their health care provider engaging in vigorous (rather than moderate) aerobic activity. (www.health.gov/paguidelines).

Physical Activity and Exercise, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Did <u>not</u> participate in any leisure-time physical activities in past month	16	19	15	8	36	45	50	21	6	26	10	32	11
Usually did <u>not</u> meet recommended physical activities guidelines*	48	16	49	44	53	65	61	49	45	52	45	58	45
Health care provider spoke with them in past yr. about physical activity (of those visiting MD for a check-up in past yr.)	38	33	42	43	29	27	18	39	39	28	44	30	41
*Recommended guidelines from the CDC: moderate-intensity physical activity for 30+ minutes on 5+ days/wk and/or vigorous-intensity activity for 20+ minutes on 3+ days/wk													
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

**Physical Activity and Exercise, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs
Did <u>not</u> participate in any leisure-time physical activities in past month									
Health care provider spoke with them in past yr. about physical activity (of those visiting dr. for a check-up in past yr.)									

Source: Monroe County Adult Health Survey, 2000 and 2006



Statistically significant increase, $p < .05$
Positive indicator



Statistically significant decrease, $p < .05$
Positive indicator

Weight Control

Overweight and Obesity

The national Healthy People 2010 target is to reduce the proportion of adults who are obese from 23% (1988-94) to 15%.

Among Monroe County women 18-44, 22% were obese; an additional 23% were overweight for a total of 45% (close to half the population) being overweight or obese. There were no significant differences in overweight status by the subgroups studied, but there were significant differences in obese and overweight/obese status.

Older women (30-44), African American/non-Latino women, women with less than a high school degree, and residents of Healthy Start ZIP Codes were significantly more likely than younger women, White/non-Latino women, women with a college degree, and residents of non-Healthy Start ZIP Codes to be overweight/obese. Among the subgroups studied, African American/non-Latino women (59%), women without a high school degree (59%), and residents of the Healthy Start ZIP Codes (56%) had the highest rates of overweight/obesity.

The differences between subgroups in overweight/obesity rates were also found in obesity rates. There were additional significant differences in obesity status: Latinas and women with high school/some college were significantly more likely than White/non-Latinos and women with a college degree to be obese.

Trying to Lose Weight

Thirty percent of overweight/obese Monroe County women 18-44 were not trying to lose weight. Overweight/obese women most likely not to be attempting weight loss were younger (18-29). (Younger women were also the least likely to be obese and overweight/obese.)

Preventive Counseling about Weight

The USPSTF recommends that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults.

There is fair to good evidence that high-intensity counseling—about diet, exercise, or both— together with behavioral interventions aimed at skill development, motivation, and support strategies produces modest, sustained weight loss (typically 3–5 kg for 1 year or more) in adults who are obese (as defined by BMI \geq 30 kg/m²).

The USPSTF concludes that the evidence is insufficient to recommend for or against the use of moderate- or low-intensity counseling together with behavioral interventions to promote sustained weight loss in obese adults. The USPSTF concludes that the evidence is insufficient to recommend for or against the use of counseling of any intensity and behavioral interventions to promote sustained weight loss in overweight adults.⁶⁰














Among overweight or obese Monroe County women 18-44 who visited their doctor in the past year for a routine checkup, 42% reported their doctor advised them to lose or maintain their weight. There were no differences between the subgroups studied.

Weight Control, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Overweight	23	No significant differences between subgroups											
Obese	22	16	27	18	39	38	38	28	12	25	21	32	19
Overweight or obese	45	38	51	43	59	53	59	49	38	47	45	56	41
Not trying to lose weight (of those obese or overweight)	30	37	26	29	33	30	28	30	30	28	31	26	32
Health care provider advised them to lose or maintain weight (of those obese/overweight who visited MD for a check-up in past yr.)	42	No significant differences between subgroups											
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

**Weight Control, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs
Overweight	No Significant Changes								
Obese									
Overweight or obese									
Health care provider advised them to lose or maintain weight (of those obese/overweight who visited MD for a check-up in past yr.)									
Source: Monroe County Adult Health Survey, 2000 and 2006									



Statistically significant increase, $p < .05$
Negative indicator



Statistically significant increase, $p < .05$
Positive indicator

Nutrition

The Adult Health Survey notes that the survey was conducted in the summer when consumption of fruits and vegetables might be higher than at other times of the year.

Across every measure of nutrition women with college degrees were significantly more likely than women without a high school degree to report they had a healthy diet; most often they were significantly more likely than women with a high school degree/some college to have a healthy diet. In turn in most nutrition measures women with a high school degree/some college were significantly more likely than women with less than a high school degree to report good nutritional behavior. On the vast majority of measures White/non-Latino women were significantly more likely to report good nutrition than African American/non-Latino women; they were significantly more likely than Latinas to report good nutrition in half the categories considered. Residents of suburban Monroe County and non-Healthy Start ZIP Codes were significantly more likely than women residing in the city and Healthy Start ZIP Codes to report good nutrition on most measures.

Intake of Fruits and Vegetables

Two national Healthy People 2010 targets address the consumption of fruits and vegetables: to increase the proportion of persons aged two years and older who consume at least two daily servings of fruit from 28% (1994-96) to 75% and to increase the proportion of persons aged two years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables from 3% (1994-96) to 50%.

Among Monroe County women 18-44, 22% reported they consumed five or more servings of fruits and vegetables on the day prior to the survey. African American/non-Latino women, women without a high school degree, and residents of Healthy Start ZIP Codes were significantly less likely than White/non-Latinos, women with a high school degree, and residents of non-Healthy Start ZIP Codes to have consumed the recommended servings. Only 8% of women without a high school degree consumed five servings of fruits and vegetables.

Calcium Intake

The Institute of Medicine⁶¹ recommends that adequate calcium for individuals 19-50 years of age is 1,000 mg per day. The US Department of Health and Human Services and Department of Agriculture⁶² dietary guidelines recommend consuming three cups per day of fat-free or low-fat milk or equivalent milk products; depending on the specific product, three cups may meet the full calcium recommendation. Although dairy products constitute the main source of calcium in the US diet, other foods (for example, dark green vegetables) also provide calcium. Some people may find it necessary to take supplements in order to meet the recommended calcium intake.

Per the Adult Health Survey, 71% of Monroe County women 18-44 reported they consumed two or more servings of milk and/or dairy products on the day prior to the survey. African American/non-Latino women and Latinas, women with less than a college degree, city residents, and residents of Healthy Start ZIP Codes were significantly less likely than White/non-Latinos, women with a college degree, suburban residents, and residents of non-Healthy Start ZIP Codes to have consumed at least two servings of dairy products.

About a fifth of Monroe County women 18-44 consumed calcium supplements. White/non-Latino women and college graduates were significantly more likely to take supplements than Latinas and women without a high school.

Considering the proportions of women eating the recommended servings of fruits and vegetables, consuming two or more servings of dairy products, and/or consuming calcium supplements, it is unlikely women were obtaining adequate calcium. African American/non-Latino women, Latinas, women with less than a high school degree, and residents of Healthy Start ZIP Codes are particularly at risk of inadequate calcium intake.

Intake of Foods High in Fat, Saturated Fat and/or Trans Fat

Although fats and oils are parts of a healthy diet, the total amount of fat consumed can contribute to excess caloric intake. The type of fat consumed can make a difference in health; high intake of saturated fats and *trans* fats increases unhealthy blood lipid levels, which in turn may increase the risk of coronary heart disease.⁶³ Use of soy, 1%, or skim milk; use of non-stick spray, vegetable oil, or tub margarine; choosing low-fat foods when eating away from home; not choosing fast food when eating away from home; and buying lean or low-fat meat are behaviors related to avoiding a diet high in fat, saturated fat, and *trans* fat.

Almost 90% Monroe County women 18-44 reported the use of “healthy fat” (in particular, olive and canola oils and non-stick spray). Women with less than a high school degree were least likely to report using healthy fat (80%).

In all other questions related to fat intake (with one exception), White/non-Latino women, women with a college degree, suburban residents, and residents of non-Healthy Start ZIP Codes were significantly more likely to report purchasing and consuming foods lower in fat, saturated fat, and *trans* fat than African American/non-Latino women and Latinas, women with less than a college degree, suburban residents, and residents of non-Healthy Start ZIP Codes. (Latinas were significantly more likely to use skim, soy, or 1% milk than African American/non-Latino women.) In all cases, despite using less healthy fat than women with a college degree, women with a high school degree/some college were significantly more likely than women without a high school degree to use lower fat foods.

Only one-third of Monroe County women 18-44 almost always or always chose low fat foods when eating away from home. In terms of healthy eating habits with regard to fat, this behavior was reported least often by all the subgroups studied with the exception of African American/non-Latino women. Only 9% of women with less than a high school degree reported choosing low fat foods when away from home.

African American/non-Latino women (11%) and women with less than a high school degree (13%) were least likely to report using soy, 1%, or skim milk; more than half of all women 18-44 reported using these low-fat milks. The two milks used most frequently by White/non-Latino women, women with a college degree, suburban residents, and non-Healthy Start ZIP Code residents were skim milk and 1% milk. The two milks used most often by African American/non-Latino women, Latinas, women with less than a high school degree, city residents, and Healthy Start ZIP Code residents were 2% milk and whole milk.

There was one significant difference between younger and older women; younger women were significantly more likely than older women to choose fast food when eating away from home.

Preventive Counseling Related to Diet and Eating Habits

The USPSTF concluded that the evidence is insufficient to recommend for or against routine behavioral counseling to promote a healthy diet in unselected patients in primary care settings.

The USPSTF recommends intensive behavioral dietary counseling for adult patients with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease. Intensive counseling can be delivered by primary care clinicians or by referral to other specialists, such as nutritionists or dietitians.

Among Monroe County women 18-44 who visited their doctor for a routine checkup in the past year, 31% reported the doctor spoke with them about diet and eating habits. There were no significant differences among the subgroups studied.

Diet and Nutrition, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Consumed 5+ servings of fruits and vegetables on the day prior to the survey	22	25	20	25	12	13	8	21	26	17	25	15	25
Consumed 2+ milk and/ or dairy products on the day prior to the survey	71	74	70	79	50	53	51	68	79	59	79	60	75
Consume daily calcium supplements	19	17	21	22	12	9	7	19	21	15	21	16	20
Use skim, 1% or soy milk	59	56	62	73	11	31	13	50	79	37	72	29	70
Most often use non-stick spray, vegetable oil, or tub margarine	88	86	90	89	87	88	80	86	92	92	86	88	88

Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.


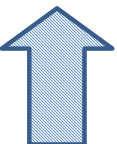









Source: Monroe County Adult Health Survey, 2000 and 2006

Diet and Nutrition, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Almost always or usually choose low-fat foods when eating away from home	33	32	34	38	20	23	9	34	36	25	39	21	38
Sometimes, seldom or never choose fast food when eating away from home	80	71	86	85	61	62	48	75	91	70	85	65	85
Almost always or usually buy lean or low-fat meat	70	65	73	81	41	36	38	61	86	60	70	50	77
Health care provider spoke with them about diet and eating habits in the past yr. (of those visiting a MD for a check-up in past yr.)	31	No significant differences between subgroups											
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

**Diet and Nutrition, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs
Consumed 5+ servings of fruits and vegetables on the day prior to the survey									
Consumed 2+ milk and/ or dairy products on the day prior to the survey									
Consume daily calcium supplements	No Significant Changes								
Use skim, 1% or soy milk									
Source: Monroe County Adult Health Survey, 2000 and 2006									



Statistically significant increase, $p < .05$
Positive indicator

**Diet and Nutrition, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs
Almost always or usually choose low-fat foods when eating away from home	↑	↑	↑	↑				↑	↑
Sometimes, seldom or never choose fast food when eating away from home	↑	↑	↑					↑	↑
Almost always or usually buy lean or low-fat meat			↑						
Health care provider spoke with them about diet and eating habits in the past yr. (of those visiting a MD for a check-up in past yr.)	↑	↑	↑	↑					↑

Source: Monroe County Adult Health Survey, 2000 and 2006



Statistically significant increase, $p < .05$
Positive indicator

Relationships and Sexual Behavior

Intimate Partner Violence

Intimate Partner Violence (IPV) can affect health in many ways. Many victims suffer physical injuries. IPV can cause emotional harm. The anger and stress victims feel may lead to eating disorders and depression. IPV is linked to harmful health behaviors; victims are more likely to smoke, abuse alcohol, use drugs, and engage in risky sexual activity. The cost of IPV was an estimated \$5.8 billion in 1995 (almost 15 years ago); this cost includes medical care, mental health services, and lost productivity (e.g., time away from work).⁶⁴

Among women of Monroe County 18-44 16% reported they were ever hit, slapped, pushed, kicked, or physically hurt by an intimate partner. Women with less than a college degree and residents of Healthy Start ZIP Codes were significantly more likely to report having been a victim of IPV than women with a college degree and residents of non-Healthy Start ZIP Codes.

There were no differences by age or age/ethnicity.

Forced to Have Unwanted Sex

Eleven percent of Monroe County women 18-44 reported they were ever forced to have unwanted sex. White/non-Latino women and women with less than a high school degree were significantly more likely to report they had been forced to have sex than African American/non-Latino women and women a college degree.

There were no significant differences by age or residence.

Multiple Sexual Partners

According to the Centers for Disease Control and Prevention (CDC), although African Americans made up only 13% of the population in 33 states, they accounted for nearly half of the estimated number of HIV/AIDS diagnoses made in 2006.⁶⁵ As of 2006 in the U.S., the primary mode of HIV/AIDS transmission and risk factor regardless of ethnicity is men who have sex with men (MSM), followed by intravenous drug use (IDU); for women, the primary mode of transmission regardless of ethnicity is heterosexual contact, followed by IDU.⁶⁶ Among African American men diagnosed with HIV/AIDS in 2005, nearly half (48%) had acquired the disease through male-to-male sexual contact. National research indicates that within the MSM of color population, there are a significant number of men who have sex with both men and women and do not identify as either bisexual or gay. Due to its secretive nature, this population experiences much greater HIV risk.⁶⁷ Furthermore, as noted earlier, an additional HIV/AIDS risk factor for African American women is the high rate of incarceration among African American males, given the prevalence of the disease in the incarcerated population. It has been estimated that approximately 25% of all HIV-infected persons in the U.S. spend time in a correctional facility each year, as do 33% of people infected with hepatitis C and 40% of those with active tuberculosis.⁶⁸

Unequal sex ratios among African Americans have been found to be related to increased HIV/AIDS infection, as single status increases the chance of infection.⁶⁹ Research indicates that for many African American women, consistent condom usage is negatively related with a relationship's duration.⁷⁰ Consequently, emotional attachment – or lack of choice in sexual partners – may act as a barrier to safer sexual practice when partner promiscuity is evident.⁷¹ Because of the high prevalence of HIV/AIDS in the African American community, as well as the prevalence of men who may be at increased risk of contracting the disease due to unsafe sexual practices, African American women are at significant risk of becoming infected themselves.

The AHS notes that adults who have multiple sexual partners are at a high risk of contracting STDs and HIV/AIDS compared to monogamous adults. Ten percent of Monroe County females 18-44 reported they had had sexual intercourse with two or more people in the past year. Younger women (18-29) were significantly more likely than older women to report they had had two or more partners; 19% of younger women had had multiple sexual partners.

There were no significant differences by race/ethnicity, education, or residence.

At High Risk for Contracting HIV/AIDS

The AHS asked respondents about four situations they might have experienced in the past year to estimate the percentage of individuals at high risk of HIV/AIDS: use of intravenous drugs, treatment for a sexually transmitted or venereal disease, having given or received money or drugs in exchange for sex, and having had anal sex without a condom. Three percent of Monroe County women 18-44 reported behaviors that put them at high risk of HIV/AIDS. There were no significant differences between the subgroups.

Preventive Counseling about Sexual Risks

The USPSTF recommends high-intensity behavioral counseling to prevent sexually transmitted infections (STIs) for all sexually active adolescents and for adults at increased risk for STIs.

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of behavioral counseling to prevent STIs in non-sexually active adolescents and in adults not at increased risk for STIs.⁷²

Of Monroe County women 18-44 who visited their doctor for a routine checkup in the past year, almost half (48%) reported their doctor talked with them about sexual practices including sexually transmitted diseases, AIDS, or condom use. Younger women (18-29) were significantly more likely than older women to report their doctor had talked with them; 60% of younger women reported such a discussion compared to 38% of older women. There were no significant differences by race/ethnicity, education, or residence.

Relationship and Sexual Behavior, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Ever physically hurt by an intimate partner	16	16	16	15	19	27	27	20	10	18	15	24	13
Ever forced to have unwanted sex	11	14	8	12	5	10	23	12	7	10	11	10	11
Had sexual intercourse with 2+ people in past yr.	10	19	4	9	15	14	18	12	8	13	9	12	10
Condom <u>not</u> used last time they had intercourse (of those who had intercourse in past yr.)	76	60	86	78	66	69	74	69	84	70	79	67	79

Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.

Source: Monroe County Adult Health Survey, 2000 and 2006

Relationship and Sexual Behavior, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Not doing something to keep from getting pregnant (of those who had sex with member of opposite sex in past yr.)	25	No significant differences between subgroups											
At high risk for HIV*	3	No significant differences between subgroups											
Health care provider spoke with them in past yr. about sexual practices (of those visiting MD for a check-up in past yr.)	48	60	38	44	49	63	52	48	46	52	44	51	46
*In past year, used intravenous drugs, was treated for a sexually transmitted or venereal disease, had given or received money for sex, or had anal sex without a condom													
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

Access to Care & Health Care Service Utilization

Health Insurance Coverage

In the U.S., having access to health care services is closely linked to having health insurance coverage. Having health insurance greatly explains the racial/ethnic disparities in having a regular source of medical care.⁷³ In 2005, people of color made up 34% of the U.S. population, but they accounted for 52% of the uninsured – in other words, 23 million of the 45 million uninsured people living in the U.S. in 2003.⁷⁴ Having health insurance improves entry into the healthcare system. Overall, people who lack health insurance are more likely to have poor health status^{75 76} and die prematurely.^{77 78 79} Nationally, uninsured individuals report more problems getting care,^{80 81} are diagnosed at later disease stages, and get less therapeutic care.^{82 83} They are also sicker when hospitalized and more likely to die during their stay.⁸⁴ Over time, the consequences of being uninsured accumulate, resulting in a population at higher risk for poor healthcare and health status.⁸⁵ In light of the deleterious effect not having health insurance has on Americans' health, the national Healthy People 2010 target is to decrease from 17% (1997) to 0% the proportion of persons without health insurance.

In 2005, approximately 11% of individuals of all income levels and 7% of those living at or below the 250% federal poverty level living in Monroe County lacked health insurance. The percent lacking health insurance was higher among female Monroe County residents ages 18-64 of all income levels (12%) and those living at or below the 250% poverty level (8%) than for males.

Health Insurance Coverage Status in New York for Age, Income, and Sex, New York State and Monroe County, 2005				
<u>Geographic Area</u>	<u>Number Insured</u>	<u>Number Uninsured</u>	<u>Number in Demographic Group¹</u>	<u>Percent Uninsured²</u>
New York State				
All Income Levels	14,043,715	2,469,697	16,513,412	15%
At or Below 250% Poverty Level	4,768,562	1,561,116	16,513,412	10%
Monroe County				
All Income Levels	546,997	69,612	616,609	11%
At or Below 250% Poverty Level	154,757	44,486	616,609	7%
Female Monroe Residents 18-64				
All Income Levels	200,982	27,848	228,830	12%
At or Below 250% Poverty Level	53,783	18,846	228,830	8%
¹ The number in a demographic group is the number of people in the poverty universe in that age, sex, and race/Hispanic origin group. This number always represents people of all income levels.				
² The percent uninsured is calculated as the proportion of the Number Uninsured to the Number in the Demographic Group. The Number Uninsured may be restricted by income level, but the Number in the Demographic Group represents people of all incomes.				
Source: Small Area Health Insurance Estimates, U.S. Census Bureau				

According to the Monroe County Adult Health Survey (AHS) 2006, more than 8% of Monroe County women 18-44 did not have health insurance coverage; 92% of women 18-44 did have coverage. African American/non-Latino and Latinas were significantly less likely than White/non-Latinos to have health insurance coverage. Women with less

education were significantly less likely to have coverage than women with a college degree. City of Rochester and Healthy Start ZIP Code residents were significantly less likely than suburban and non-Healthy Start ZIP Code residents to be covered.

Almost half the women who did not have health insurance gave one of two reasons: they could not afford the premiums (32%) or they had lost or changed a job (16%). These two reasons were fairly consistent across the subgroups studied.

Latinas, however, reported the main reasons they were without insurance were: they had become ineligible because of age or leaving school (34%) and they lost Medicaid eligibility (28%). Among women without a high school degree, ineligibility because of age or leaving school (22%) was the second reason after premium cost (27%) for not having insurance. City of Rochester and Healthy Start area residents gave the loss of Medicaid (14% and 16%) after unaffordable premiums (26% and 21%) as the reasons they lacked health insurance.

Women with a college degree gave two different job-related reasons for not having coverage: the person with the primary policy lost or changed a job (45%) and the employer did not offer or stopped offering coverage (26%).

Discontinuous Insurance Coverage

In the AHS, discontinuous insurance coverage was defined as being without health insurance at some point during the past two years. About one-quarter (22%) of women 18-44 were without health insurance at some point during the past two years.

The pattern of discontinuous coverage by subgroup was similar to the pattern of lack of coverage. Latinas and women without a high school degree were most likely to have been discontinuously covered. While Healthy Start ZIP Code residents were significantly less likely to have been discontinuously covered than residents of non-Healthy Start ZIP Codes, there was no significant difference in coverage between city and suburban residents.

Younger women (18-29) were significantly more likely than older women (30-44) to have been discontinuously covered.

Access to a Personal Doctor or Health Care Provider

One of the national Healthy People 2010 targets is to decrease the proportion of adults without a specific source of ongoing care from 15% (1998) to 4%.

According to the AHS, 9% of Monroe County women 18-44 reported they did *not* have a personal health care provider. As with discontinuity of insurance coverage, younger women (18-29) were significantly more likely than older women to be without a provider. Women without a high school degree were significantly more likely than women with at least a high school degree to be without a provider.

Visited a Doctor for a Routine Check-up in the Past Year

There are no studies comparing the efficacy of various schedules for preventive care visits. Locally, major insurers have suggested intervals based on a combination of various medical opinions and the frequency required for certain preventive services: ages 19-40 years, every five years; and ages 41-50 years, every three years.⁸⁶ Thus, it would not be expected that every women 18-44 would have been seen for a routine check-up in the past year.

According to the AHS, about one-quarter of Monroe County women 18-44 had not seen a doctor in the past year for a routine checkup. White/non-Latino women were significantly more likely than African American women not to have had a routine checkup. Women with a college degree were most likely not to have had a checkup – 31%.

Cost as a Factor in Being Able to See a Doctor

In the AHS, respondents were asked whether they had not been able to see a doctor in the past 12 months because of cost.

Among Monroe County women 18-44, 12% said cost had been a factor in seeing a doctor when they needed.

Latinas were most likely to say cost had been a factor (18%). Women with a college degree were least likely to say cost had been a factor (5%).

Dental Insurance Coverage






In the AHS, of Monroe County women 18-44, 18% did not have dental insurance coverage. Women without a college degree were significantly less likely than women with a college degree to have coverage. There were no other significant differences among the subgroups studied.

Access to Health Care, 2006
Percent of Females ages 18-44, Monroe County

	Total Females Ages 18-44	By Age Group		By Race/Ethnicity			By Education			By Residence		By Zip Code	
		18-29	30-44	White/ non-Latino	African American/ non-Latino	Latino	Less than High School	HS, GED, some college	College+	City	Suburbs	Healthy Start Zip Codes	All Other Zip Codes
Do <u>not</u> have health insurance	8	11	6	5	14	24	17	11	3	12	6	15	6
Top 2 reasons without health care coverage	premiums	premiums	premiums	premiums	premiums	age or left school	premiums	premiums	policy-holder job loss or change	premiums	premiums	premiums	premiums
	job loss or change	other	job loss or change	job loss or change	other	lost Medicaid	age or left school	job loss or change	employer doesn't offer or stopped	lost Medicaid	job loss or change	lost Medicaid	job loss or change
Discontinuously insured past 2 years	22	30	16	18	25	39	37	27	12	25	20	29	19
Do <u>not</u> have personal doctor or health care provider	9	16	4	7	11	14	23	9	6	11	7	12	8
Did <u>not</u> visit a doctor in the past year for a routine check-up	26	23	28	30	17	17	29	23	31	23	28	22	28
Could <u>not</u> afford to see doctor when needed in past 12 months	12	15	9	11	9	18	14	16	5	13	11	15	11
Do <u>not</u> have dental insurance	18	21	16	19	17	19	28	21	13	19	17	22	16
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly higher. Highlighting and shading signals one group is significantly higher than two others.													
Source: Monroe County Adult Health Survey, 2000 and 2006													

**Access to Health Care, 2006
Percent of Females ages 18-44, Monroe County**

**Significant Change, 2000-2006
All Adults, Monroe County**

Significant change 2000-06	Females	Age 18-64	White	African American	Latino	Non-Latino		City	Suburbs
Do <u>not</u> have health insurance	No Significant Changes								
Did <u>not</u> visit a doctor in the past year for a routine check-up									
Do <u>not</u> have dental insurance	No Significant Changes								
Source: Monroe County Adult Health Survey, 2000 and 2006									



Statistically significant decrease, $p < .05$
Negative indicator

City of Rochester Children's Health Insurance Status

The majority of parents whose child registered for kindergarten in the Rochester Public School District from 2004 to 2008 who lived in the Healthy Start ZIP Codes reported their child had a doctor, were insured, had seen a doctor for a routine physical in the past 12 months or less, and had seen a dentist for a routine check up or dental work within the past 12 months.

Some statistically significant differences emerged among the children of parents of different racial/ethnic groups.

- Latino parents were less likely than African American or White parents to report their child had a doctor. They were also less likely to report that their children had health insurance, that their child was insured for at least 12 months prior to registering for kindergarten, and that their child had seen a dentist for a check up or dental work within the past 12 months.
- African American parents were more likely to report their child had health insurance, particularly government-based insurance. They were more likely to report that their child had last seen a dentist for a check up or dental work within the past 12 months.
- White parents were more likely to report that their child had employer-based health insurance.

Health Information of Kindergartners Living in the Healthy Start Area Entering the Rochester City School District, 2004-2008			
	Mother's Race/Ethnicity		
	African American	White	Latino
% children have a doctor	96%	95%	92%
% children have employer-based, govt-based, or self-purchase health insurance	89%	82%	83%
% employer-based insurance	20%	25%	15%
% govt-based insurance	70%	56%	68%
% children insured <1 year	12%	13%	17%
% children insured at least 1 year	85%	85%	78%
% children last saw doctor for routine physical w/in last year	94%	95%	94%
% children last saw dentist for a check up or dental work w/in last year	76%	69%	72%
Note: Sample sizes differ for each question due to missing responses. Only questions who had 10% or less missing responses are reported.			
Note: Bolded results denote there are statistically significant differences among subsets within a grouping at p<.05 level. Highlighting signals which subset(s) is/are significantly different. Highlighting and shading signals one group is significantly different to two others.			
Source: The Children's Institute, Kindergarten PACE survey data, 2004-2008			

Medicaid HMO Enrollment

The 2000 Census reported that more than one quarter of the women 15 to 44 years old in the target area lived below poverty level and almost as many lived in households with incomes between 100% and 200% of poverty. Population estimates for 2005-2007 and 2008 suggest these trends continue to be a reality in the Healthy Start area. Subsequently, it is likely that a large proportion of the women in the target area are enrolled in Medicaid managed care. Therefore, FLHSA solicited aggregate 2005 to 2007 data from the Monroe Plan for Medical Care (MPMC)ⁿ general claims data base for women ages 15 to 44 in the target area as indicators of health status and health care utilization.^o

On an average day between 2005 and 2007, there were 6,157 females 15 to 44 years old living in the Healthy Start area who were enrolled in the Monroe Plan – approximately one out of every seven 15 to 44 year old females living in the Healthy Start area. Of those enrolled, slightly less than two-thirds 3,780 (61%) were enrolled for the entire year (continuously insured) and 2,375 were enrolled for less than 12 months during each year (discontinuously insured). It is possible that because they may be “more stable,” the continuously enrolled who have not moved out of the ZIP Code could be quite different in their health care seeking and birth rates than those who moved or had interruptions in their enrollment. However, the following analyses present data for the continuously insured population because utilization can be more accurately assessed for these clients.

Monroe Plan Continuously Enrolled Female Healthy Start Area Clients 15-44 Years Old, 2005-2007					
	<u>African American</u>	<u>White</u>	<u>Latina</u>	<u>Other/ Unknown</u>	<u>Total</u>
15-17	1,530	218	556	187	2,491
18-25	1,558	291	553	203	2,605
25-30	1,008	283	411	110	1,812
30-34	945	247	349	145	1,686
35-44	1,502	473	614	164	2,753
Total	6,543	1,512	2,483	809	11,347

Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one ZIP code to another is considered to have a break in enrollment.

Source: Monroe Plan for Medical Care, 2005-2007 claims data

ⁿ MPMC is an independent practice association with over 3,000 providers in the Rochester region. MPMC partners with Excellus BlueCross BlueShield, Rochester, to serve as Excellus's delivery system for publicly financed programs targeting underserved populations. MPMC is the dominant provider for Medicaid managed care in this region. Its products include Medicaid managed care, Child Health Plus, and Family Health Plus. For more information, visit <https://www.monroeplan.com/default.aspx>.

^o The maximum enrollment in any individual record is 12 months. Clients were classified according to enrollment status. Thus, a “continuously enrolled” client is one who has had a continuous enrollment period of 12 months from a marker date. All others, including a woman who moved from one ZIP Code to another, are considered to have a break in enrollment. Demographic data on women’s age and race/ethnicity were provided.

From 2005 to 2007, less than 6% of MPMC continuously enrolled female Healthy Start area clients between the ages of 15 to 44 gave birth – 216 women each year. African American birth mothers between the ages of 18 to 24 had the highest percent of all births in this period (25%).

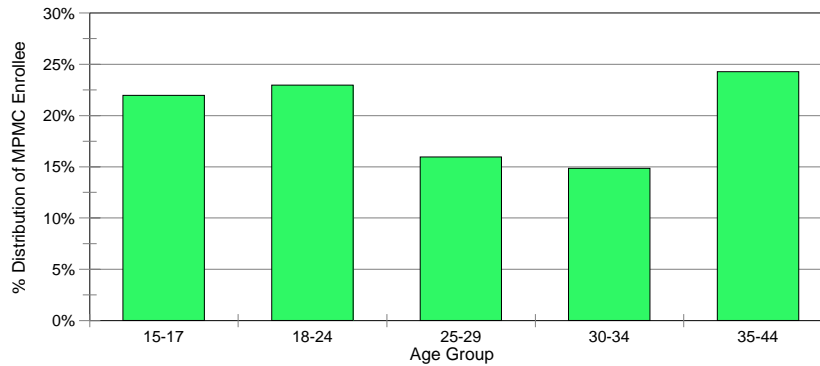
Monroe Plan Continuously Enrolled Female Healthy Start Area Clients 15-44 Years Old Who Gave Birth, 2005-2007					
	African American	White	Latina	Other/ Unknown	Total
15-17	53	8	27	6	94
18-25	162	26	70	21	279
25-30	70	33	30	9	142
30-34	55	16	15	4	90
35-44	20	7	12	4	43
Total	360	90	154	44	648

Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one ZIP code to another is considered to have a break in enrollment.

Source: Monroe Plan for Medical Care, 2005-2007 claims data

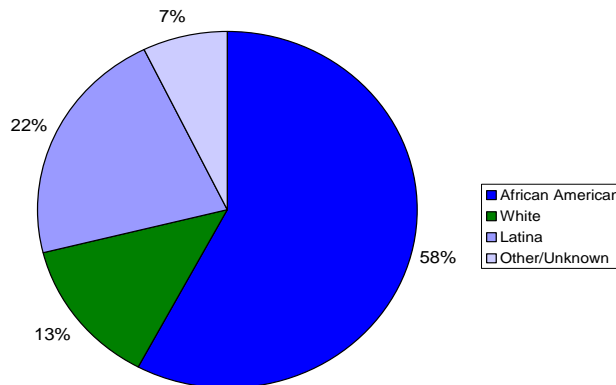
Approximately one quarter of MPMC continuously enrolled female Healthy Start area clients are 35 to 44 years old. Sizable proportions are between the ages of 15 and 17 (22%) and 18 to 24 (23%). The majority of the continuously enrolled clients in the target age groups are African American (58%), followed by Latina (22%).

Healthy Start Area MPMC Continuously Enrolled Female Clients 15-44 Years Old by Age, Annual Average 2005-2007



A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one zip code to another is considered to be discontinuously enrolled.
Data Source: 2005-2007 claims data, Monroe Plan for Medical Care

Healthy Start MPMC Continuously Enrolled Female Clients 15-44 by Race , 2005-2007



Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one zip code to another is considered to have a break in enrollment.
Data Source: Monroe Plan for Medical Care, General Claims Data Base

Differences in utilization of certain types of basic health care services vary by age and less so by race/ethnicity. Among MPMC continuously enrolled female 15-44 year old Healthy Start area clients, almost half had an OB-GYN visit during the year. However, only one-quarter (27 percent) of those in the 15 to 17 years old age group had a claim for an OB-GYN visit during the year. Not surprisingly, approximately 97% of 15 to 17 year-olds who clients who gave birth in the three-year period had an OB-GYN visit.

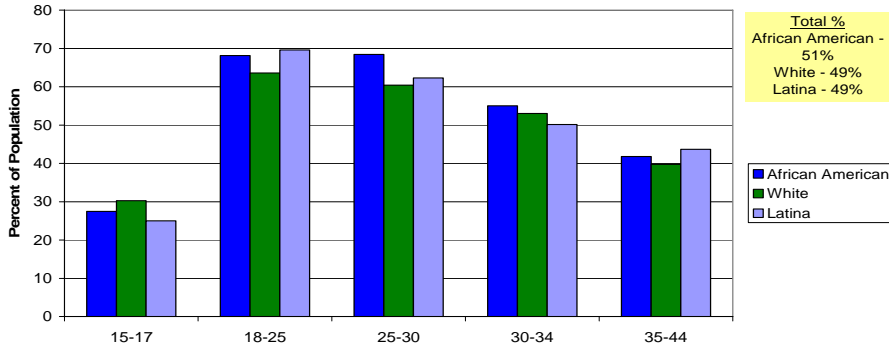
Approximately 75% of MPMC continuously enrolled female Healthy Start area clients between 15 and 44 years old had a primary care-related visit in a 12-month period. There were some differences among racial/ethnic groups' utilization of these services. African American females (73%) were less likely than White (82%) females, and slightly less likely than Latinas (77%) to have seen a primary care provider in a 12-month period.

Few MPMC continuously enrolled female Healthy Start area clients between 15 and 44 years old had a comprehensive physical exam in a 12-month period (9%). Women between the ages of 18 and 25 (15%) were the most likely to have received an exam, particularly African Americans (16%). Females ages 15 to 17 (1%), however, were extremely unlikely to have received a comprehensive exam. Part of the reason may be that these types of exams are usually performed during a routine check-up. Locally, major insurers (including Excellus) have suggested intervals based on a combination of various medical opinions and the frequency required for certain preventive services: ages 19-40 years, every five years; and ages 41-50 years, every three years.⁸⁷ Thus, it would not be expected that every women 18-44 would have been seen for a routine check-up in the past year. More study is required to ascertain whether MPMC female clients between the ages of 15 and 44 are seeing their primary care physicians for routine check-ups less than is recommended.

Despite the fact that 29% of MPMC continuously enrolled female Healthy Start area clients between 15 and 44 years old had a mental health diagnosis, as reported earlier, only 3% of this client base had an outpatient or professional behavioral health visit in a

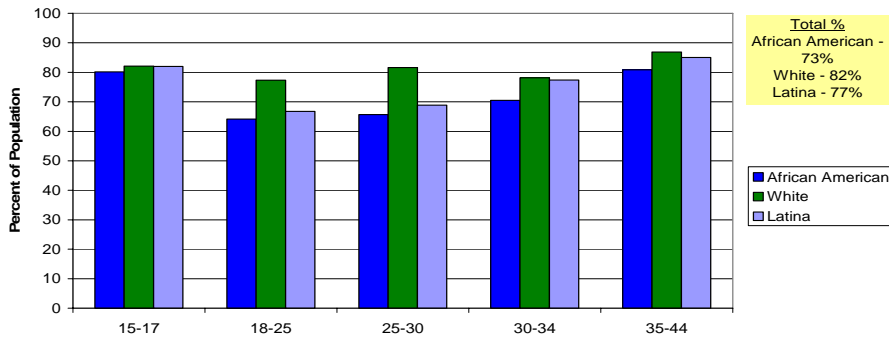
12-month period. Much of this trend can be explained by the fact that most outpatient behavioral health services are not covered by Medicaid HMOs and are instead billed to Medicaid fee-for-service in this population.

% Healthy Start MPMC Continuously Enrolled Female Clients w/ an OB/GYN Visit by Age & Race/Ethnicity, 2005-07



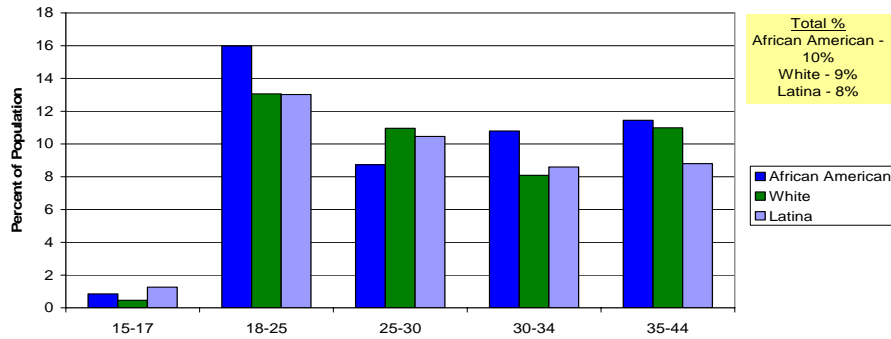
Number of observations for individual groups may be small.
Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one zip code to another is considered to have a break in enrollment.
Data Source: Monroe Plan for Medical Care, MMIS Data Warehouse

% Healthy Start MPMC Continuously Enrolled Female Clients w/ a Primary Care Visit by Age & Race/Ethnicity, 2005-07



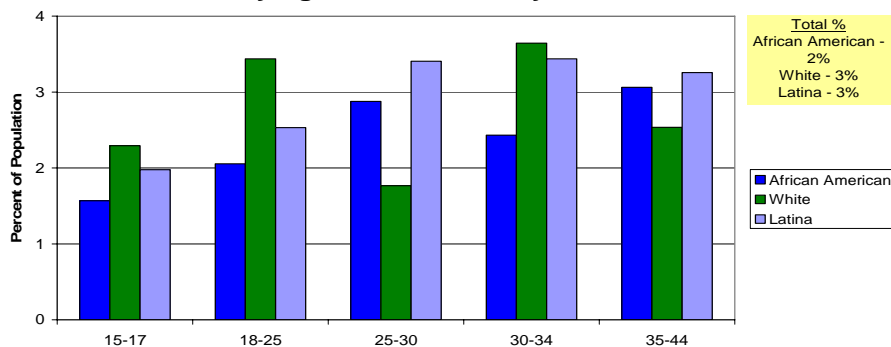
Number of observations for individual groups may be small.
Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one zip code to another is considered to have a break in enrollment.
Data Source: Monroe Plan for Medical Care, MMIS Data Warehouse

**% Healthy Start MPMC Continuously Enrolled Female
Clients w/ a Comprehensive Exam
by Age & Race/Ethnicity, 2005-07**



Number of observations for individual groups may be small.
 Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one zip code to another is considered to have a break in enrollment.
 Data Source: Monroe Plan for Medical Care, MMIS Data Warehouse

**% Healthy Start MPMC Continuously Enrolled Female
Clients w/ a Behav Health Visit
by Age & Race/Ethnicity, 2005-07**



Number of observations for individual groups may be small.
 Note: The maximum enrollment in any individual record is 12 months. A continuously enrolled woman is one who had a continuous enrollment period of 12 months from a marker date. A woman who moves from one zip code to another is considered to have a break in enrollment.
 Data Source: Monroe Plan for Medical Care, MMIS Data Warehouse

Medicaid Fee-For-Service (FFS) – Behavioral Claims Analysis

Many behavioral health services used by women in Medicaid Managed Care are in fact “carve out” services that are paid as Medicaid fee-for-service claims. Therefore, FLHSA contracted Coordinated Care Services, Inc. (CCSI)^p to analyze its 2007 Medicaid fee-for-service (FFS) claims data to describe trends in utilization patterns among behavioral health care recipients. The data reported in this section are for the female population ages 15 to 44 living in Monroe County or the Healthy Start area that made a behavioral health (i.e., mental health and/or chemical dependency treatment) Medicaid FFS claim in 2007.

^p Coordinated Care Services, Inc. is a non-profit management services organization based in Rochester, NY, that provides a range of services designed to meet the needs of the behavioral health and human services community. For more information, visit <http://www.ccsi.org/Default.aspx>.

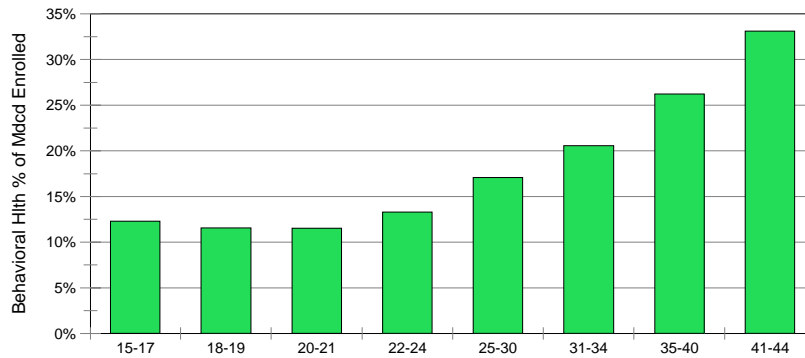
Overall, approximately 23% of the women between the ages of 15 and 44 living in Monroe County in 2007 were enrolled in Medicaid at some point during the year. Approximately 17% of these women submitted a Medicaid FFS behavioral health claim in 2007. Within the Healthy Start neighborhood just under half (47 percent) of the women of child bearing age were enrolled in Medicaid during the year and 18% of them received behavioral health services paid by Medicaid FFS.

In the Healthy Start area, half of the women submitting behavioral health claims were African American which is disproportionately low compared to their overall proportion of women enrolled in Medicaid – 55 percent. In contrast, White women represented a disproportionately high percentage of those with behavioral health claims (23 percent) compared to their proportion in the overall Medicaid population (18 percent). As women age the proportion receiving behavioral health services increases, from 12% of 18 to 21 year old Medicaid enrollees in Healthy Start area, to 25% of women in their late 30s and 33% of those in their early 40s.

Demographics for Women 15-44 Who Live in Monroe County or the Healthy Start Area and Have Submitted a Mental Health or Substance Abuse Claim, 2007 Medicaid Data								
Race/Ethnicity	Monroe County				Healthy Start Area			
	Freq.	Percent	Cum. Freq.	Cum. %	Freq.	Percent	Cum. Freq.	Cum. %
Other	457	7.96	457	7.96	279	7.64	279	7.64
White	2,133	37.13	2,590	45.09	843	23.09	1,122	30.73
Black	2,314	40.29	4,904	85.38	1,842	50.45	2,964	81.18
Hispanic	840	14.62	5,744	100.00	687	18.82	3,651	100.00
<u>Age</u>								
15-17	485	8.44	485	8.44	276	7.56	276	7.56
18-19	302	5.26	787	13.70	212	5.81	488	13.37
20-21	292	5.08	1,079	18.78	209	5.72	697	19.09
22-24	541	9.42	1,620	28.20	331	9.07	1,028	28.16
25-30	1,147	19.97	2,767	48.17	733	20.08	1,761	48.23
31-34	717	12.48	3,484	60.65	467	12.79	2,228	61.02
35-40	1,351	23.52	4,835	84.17	852	23.34	3,080	84.36
41-44	909	15.83	5,744	100.00	571	15.64	3,651	100.00

Source: 2007 Medicaid fee-for-service claims data. Analysis by Coordinated Care Services, Inc.

% with Behavioral Health Claim
Healthy Start Area Women with Medicaid



Data Source: 2007 Medicaid fee-for-service claims data, analysis by Coordinated Care Services Inc.

Demographics for Women 15-44 Who Live in the Healthy Start Area and Have Submitted a Mental Health or Substance Abuse Claim, 2007 Medicaid Data		
	Total Claims	Claims Per Person
<u>Mental Health Services</u>		
Inpatient	722	0.20
Emergency and Outpatient	75,760	20.75
Case Management	2,048	0.56
Residential	687	0.19
Total	79,217	21.70
<u>Alcohol/Substance Abuse Services</u>		
Inpatient	745	0.20
Emergency and Outpatient	50,292	13.77
Residential	190	0.05
Total	51,227	14.03
<u>MR/DD Services</u>		
Inpatient	0	0.00
Outpatient Treatment	433	0.12
Residential	6,263	1.72
Total	6,696	1.83
<u>Physical Health Services</u>		
Pharmacy	106,090	29.06
Non-Pharmacy	144,300	39.52
Total	250,390	68.58
Source: 2007 Medicaid fee-for-service claims data. Analysis by Coordinated Care Services, Inc.		

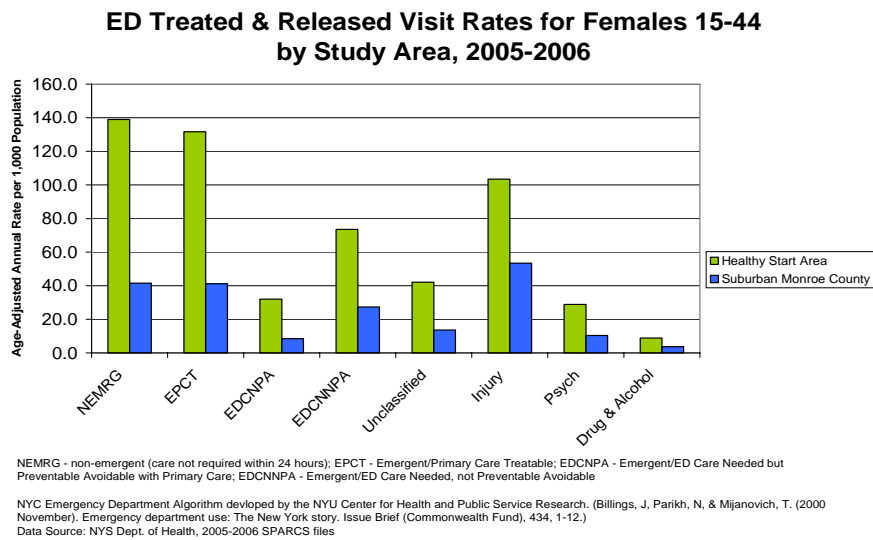
Access to Primary Care

The data provided by the Monroe Plan for Medical Care appears to indicate that women living in the Healthy Start area do have access to primary care. However, they also appear to be more likely than their suburban counter parts to receive their “primary care” services through the hospital emergency departments. From 2005 to 2006, child bearing age women in the Healthy Start area were 2.8 times more likely than women in the suburbs to visit the emergency department (and not be admitted to the hospital).

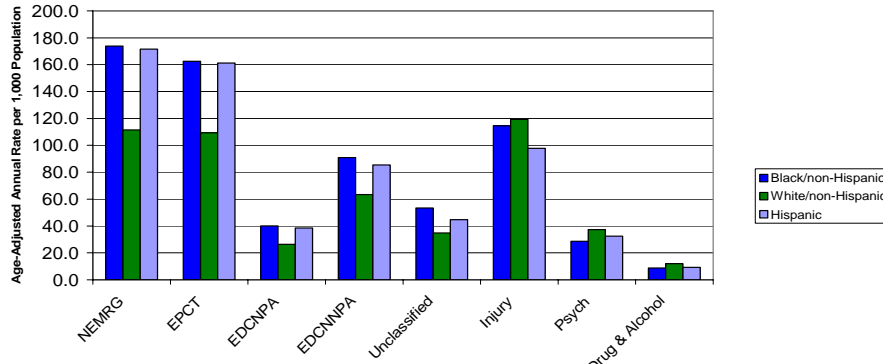
Analysis of Primary Care-Related Treated and Released ED Visits – the ED Algorithm

To identify the proportion of Treated and Released ED visits Healthy Start area residents made in 2005 and 2006 that were primary care-related, FLHSA used an algorithm developed by researchers at the NYU Center for Health and Public Service Research.⁸⁸ The algorithm breaks the visits into four groups:

1. **Non-emergent:** Medical care was not required within 12 hours.
2. **Emergent/Primary Care Treatable:** Treatment was required in 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests).
3. **Emergent – ED Care Needed – Preventable/Avoidable:** ED care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable with timely and effective ambulatory care.
4. **Emergent – ED Care Needed – Not Preventable/Avoidable:** ED care was required and ambulatory care treatment could not have prevented the condition.



**ED Treated & Released Visit Rates for Healthy Start
Females 15-44 by Race/Ethnicity, 2005-2006**



NEMRG - non-emergent (care not required within 24 hours); EPCT - Emergent/Primary Care Treatable; EDCNPA - Emergent/ED Care Needed but Preventable Avoidable with Primary Care; EDCNNPA - Emergent/ED Care Needed, not Preventable Avoidable
 NYC Emergency Department Algorithm developed by the NYU Center for Health and Public Service Research. (Billings, J, Parikh, N, & Mijanovich, T. (2000 November). Emergency department use: The New York story. Issue Brief (Commonwealth Fund), 434, 1-12.)
 Data Source: NYS Dept. of Health, 2005-2006 SPARCS files

More than two-thirds (67%) of the Treated and Released ED visits for Healthy Start women 15 to 44 years old were classified into one of the four categories described above compared to 59% for suburban women and constitute the subject of our analysis.

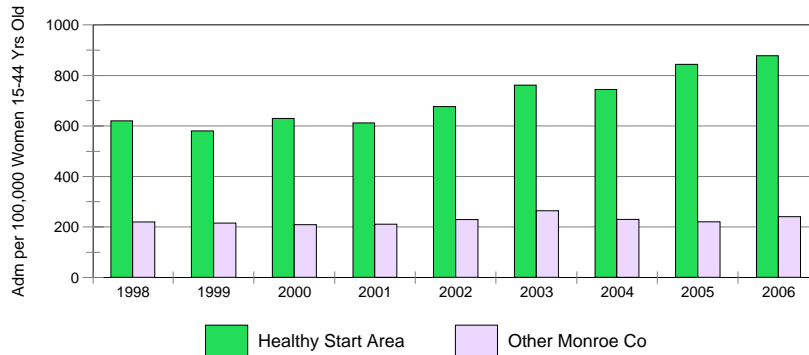
Approximately 81% of the visits for Healthy Start area women 15 to 44 years old that were classified were primary care-related compared to 77% of visits for suburban women. Women 15 to 44 years old living in the Healthy Start neighborhood are 3.3 times as likely as suburban women to have a non-emergent or primary care treatable/preventable ED visit. Almost half of the primary care-related visits in the Healthy Start area are for non-emergent medical issues for which medical care was not required within 12 hours. This high rate of ED use for non-emergency care indicates a lack of access to and/or utilization of primary care services. Within the Healthy Start area African American and Latina women are 1.5 times more likely than White women to have primary care related ED visit.

Prevention Quality Indicators-Analysis of Ambulatory Care Sensitive hospitalizations

The PQIs are a set of measures that are used with hospital inpatient discharge data to identify "ambulatory care sensitive conditions (ACSCs). ACSCs are conditions for which good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease. Even though these indicators are based on hospital inpatient data, they provide insight into the quality of [and access to] the health care system outside the hospital setting.

Prevention Quality Indicators

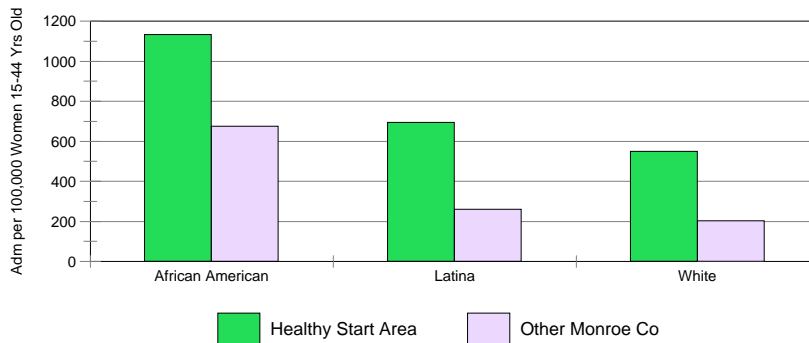
Women 15-44 Years Old



Rates are age adjusted to 2000 age distribution for women 15-44; The PQI is a measure of access to primary care. PQIs are hospital admission rates for conditions (such as diabetes or asthma) for which good outpatient care can potentially prevent the need for hospitalization.
Data Source: NYS DOH SPARCS files

Prevention Quality Indicator 2004-2006

Women 15-44 Yrs Old by Race/Ethnicity



Rates are age adjusted to 2000 age distribution for women 15-44; The PQI is a measure of access to primary care. PQIs are hospital admission rates for conditions (such as diabetes or asthma) for which good outpatient care can potentially prevent the need for hospitalization.
Data Source: NYS DOH SPARCS files

PQI rates for women in the Healthy Start area are four times the rates for suburban women and have increased almost 30 percent over the last eight years. Within the Healthy Start area African American women are almost twice as likely as White women to be hospitalized for an ambulatory care sensitive condition.

Responses to the Adult Health Survey indicated that 12% of the women living in the Healthy Start Area did not have a personal doctor or health care provider – 1.5 times the rate reported for all other women. Moreover, almost one-quarter of women with less than a high school education reported that they lacked a personal doctor or health care provider. The PQI rates and primary care related ED rates indicate that many of these women use are not receiving or using continuous primary care and that many Healthy Start women may very well prefer or view the ED as an appropriate source of primary care. This discrepancy between self-report and actual utilization is a finding that merits further investigation.

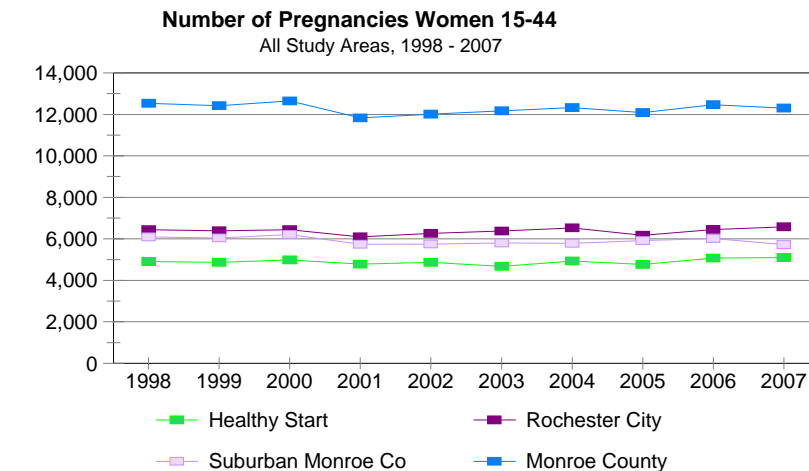
Pregnancies & Birth Outcomes

In this report, the data related to birth outcomes and infant mortality were provided by the Monroe County Department of Public Health (MCDPH). FLHSA completed analysis of these data for the Department's Community Health Assessment and for the **HEALTH ACTION** Maternal and Child Health Report Card. **HEALTH ACTION**, lead by the MCDPH, is a community collaborative that works to improve the health of Monroe County residents by selecting priority goals identified in community health report cards, and developing and implementing action plans to address the goals.

Overall Pregnancies

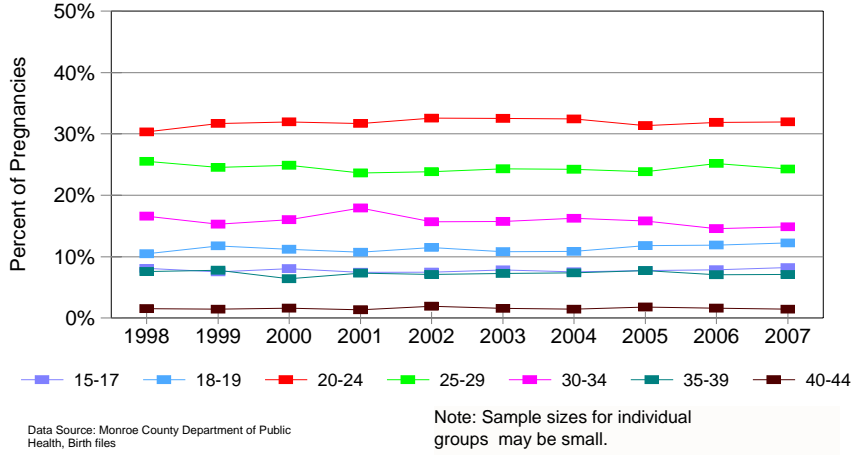
Pregnancy rates for Monroe County have mirrored national trends since 1990. From 1990-2000, the annual number of pregnancies declined. The trend then stabilized over the next five years, and since 2005, the number of pregnancies has been increasing slightly. The increase in the early 1990's reflects the baby boom echo that occurred when boomer children formed their own families. It may well be that the most recent increase reflects a beginning of a second "echo" – the grandchildren of baby boomers.

From 1998 to 2007, the highest percent of pregnancies within the Healthy Start area were to women between the ages of 20 and 24 and African American women. In contrast, the highest percent of pregnancies in suburban Monroe County were to women between the ages of 30 and 34, and over 80% were to White women.

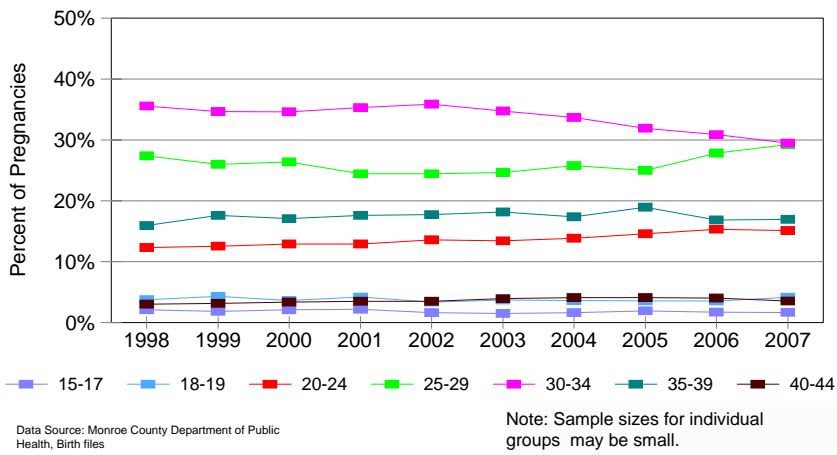


Data Source: Monroe County Department of Public Health, Birth files

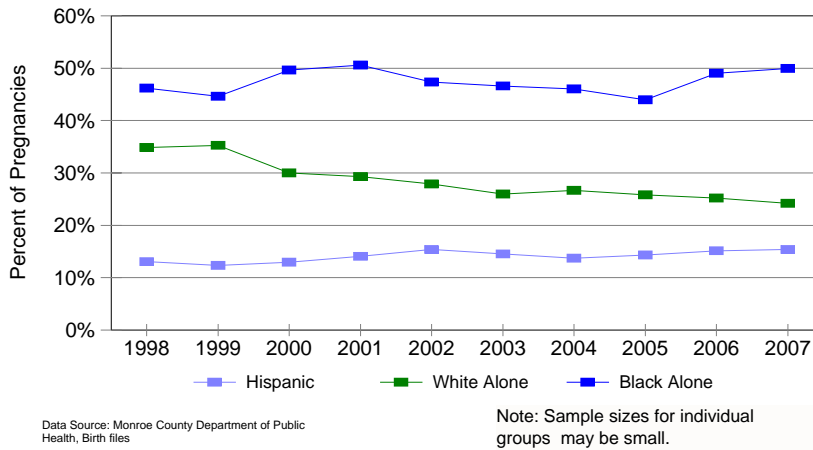
Percent of Pregnancies by Age Group
Healthy Start Area, 1998-2007



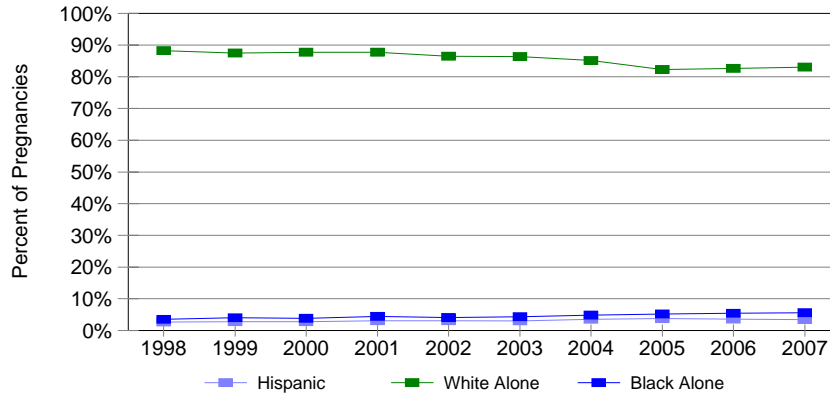
Percent of Pregnancies by Age Group
Suburban Monroe County, 1998-2007



% of Pregnancies 15-44 by Race/Ethn.
Healthy Start Area, 1998-2007



% of Pregnancies 15-44 by Race/Ethn.
Suburban Monroe County, 1998-2007



Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Overall Births

Notes on Small Numbers

Caution must be exercised when interpreting certain demographic and socioeconomic characteristics of birth mothers due to small sample sizes. For example, births to African American women comprise only 5% of births in suburban Monroe County from 2005 to 2007, or 850 births. As a result, it is difficult to make meaningful statements or comparisons by race/ethnicity, either within suburban Monroe County or to the Healthy Start area. The table below identifies the groups for which the sample sizes comprise 6% or fewer of births born in each subgroup. While we show results for mother's age, race/ethnicity, level of educational attainment, and other key variables, we highlight differences between study areas wherever sample sizes permit.

Key Characteristics of Birth Mothers that Represent 6% or Fewer of Births (Rounded to Nearest %), Healthy Start Area and Suburban Monroe County, 2005-07	
Healthy Start Area	Suburban Monroe County
Race/ethnicity: <i>All subgroups greater than 6%</i>	Race/ethnicity: African American (5%) Latina (4%)
Age: 10-14 (0%) 40-44 (2%) 45+ (0%)	Age: 10-14 (0%) 15-17 (1%) 18-19 (3%) 40-44 (4%) 45+ (0%)
Education: <i>All subgroups greater than 6%</i>	Education: < HS degree (6%)
Care Provider: <i>All subgroups greater than 6%</i>	Care Provider: Clinic (6%)

Paternity: <i>All subgroups greater than 6%</i>	Paternity: Single, No PA (6%)
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Demographic & Socioeconomic Characteristics

From 1998 to 2007, there were approximately 63 births in the Healthy Start area for every 100 births in suburban Monroe. The trend has been fairly stable throughout this period. The percent of births that were multiples from 1998 to 2007 has been higher in suburban Monroe County than in the Healthy Start area, although in 2007, approximately 4.5% of all births were multiples in both areas.

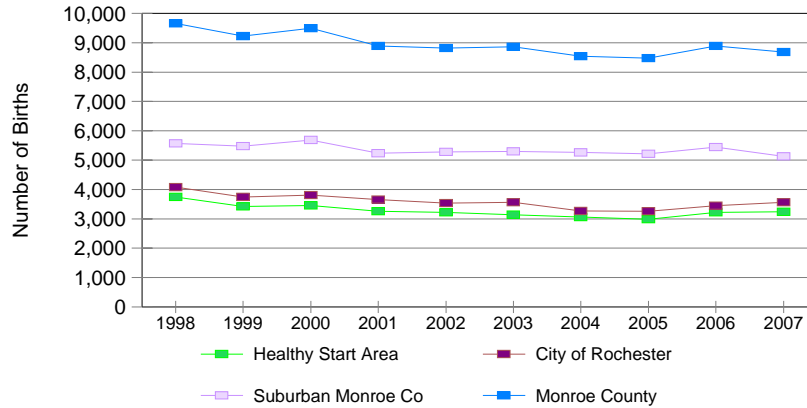
From 2005 to 2007, birth mothers living in the Healthy Start area were overall younger than those living in suburban Monroe. The highest percent of births in the Healthy Start area were to women ages 20 to 24, while in suburban Monroe they were to women between the ages of 30 and 34. These trends reflect the overall age distribution of females living in the Healthy Start area and suburban Monroe County. When looking at births by mother’s age and birth order, it becomes clear that the majority of birth mothers ages 20 to 29 in the Healthy Start area are having their second or later child. In suburban Monroe County, however, there are more first-time birth mothers in these age groups. The number of births born to teenage mothers is much higher in the Healthy Start area than in suburban Monroe County.

During this period, in the Healthy Start area, approximately 45% of births were to African American mothers, 30% to White mothers, and 20% to Latina mothers. As expected due to the overwhelming numbers of White residents in suburban Monroe County, over 80% of births there during this period were to White mothers. Approximately 22% of all births in the Healthy Start area were born to African American women between the ages of 18 and 24. In contrast, over half of the births occurring in suburban Monroe were born to White women between 25 and 34 years old.

From 2005 to 2007, over 60% of births in the Healthy Start area were born to women with a high school diploma or less. In comparison, 50% of births in suburban Monroe were born to women with some college or higher educational attainment.

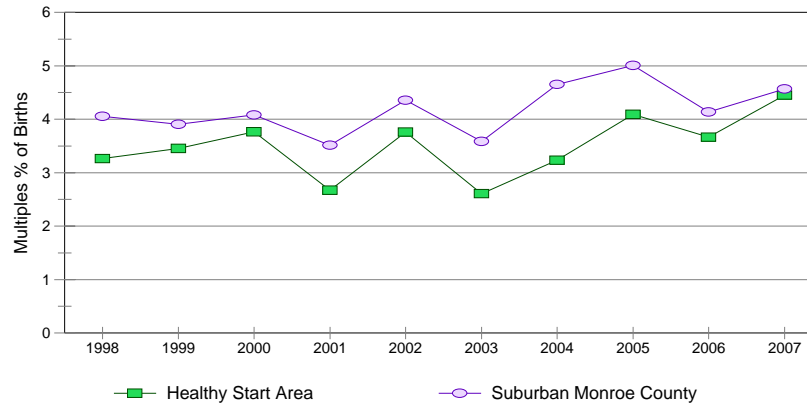
Fewer than 30% of Healthy Start birth mothers stated they were married at the time of their children’s births, compared to nearly 80% of suburban Monroe birth mothers, from 2005 to 2007. Approximately 40% of Healthy Start mothers reported a paternity affidavit on the birth certificate during this period, with 30% reporting no paternity affidavit. Paternity was also considered as a factor related both to maternal behaviors and to birth outcomes. However, increased paternity commitment was found to be closely related to mother’s age and is not separately considered in this analysis.

Number of Births in Study Areas 1998 - 2007



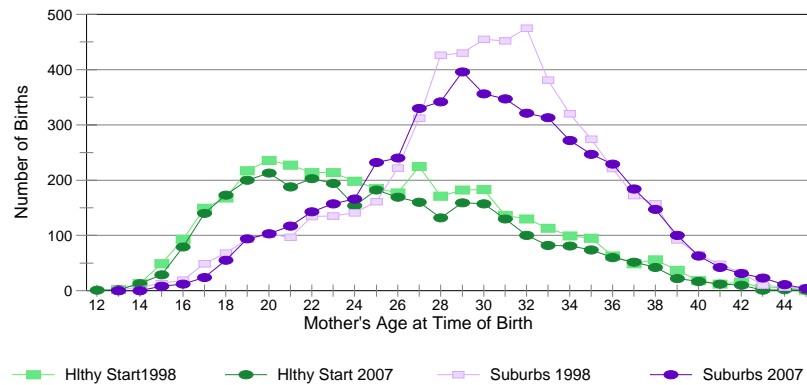
Data Source: Monroe County Department of Public Health, Birth files

Multiple Births 1998 to 2007



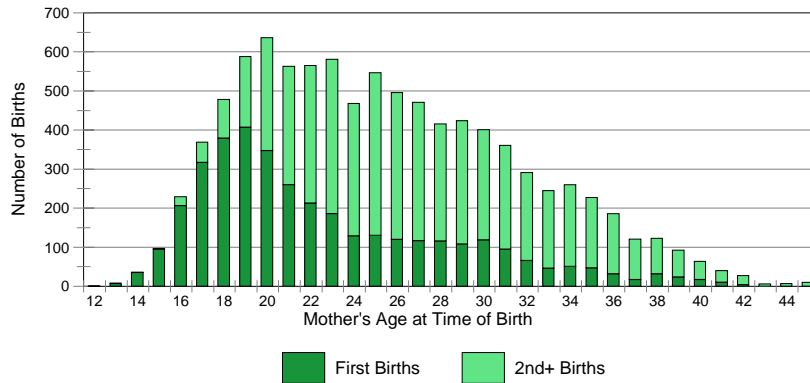
Data Sources: Monroe County Department of Public Health (MCDPH) and NYS Dept of Health, Birth files

Births by Mother's Age 1998 and 2007



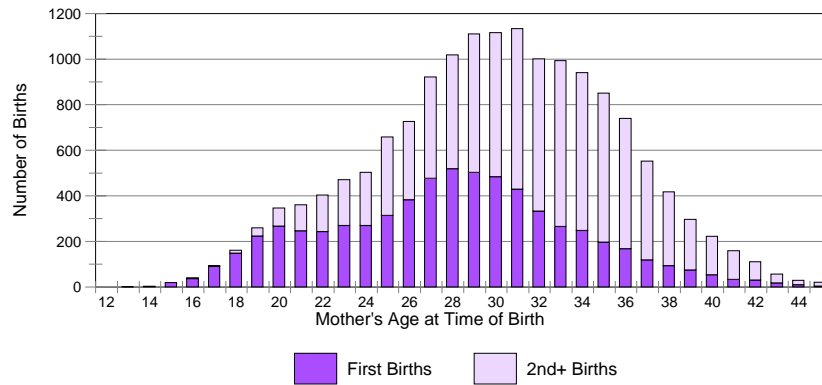
Data Sources: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births by Mother's Age and Birth Order Healthy Start Area 2005-2007



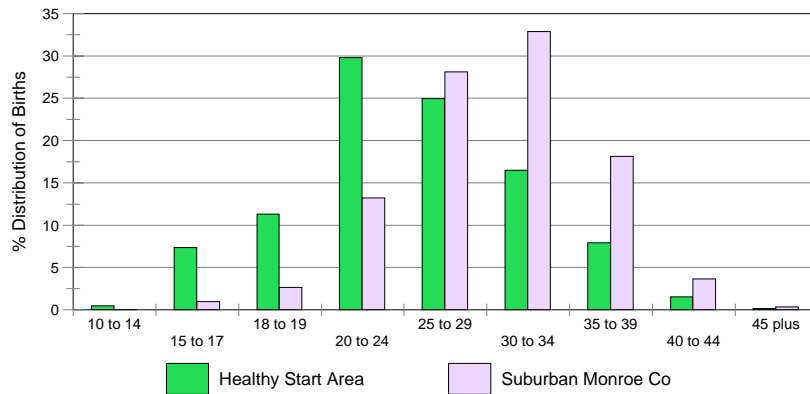
Data Source: Monroe County Department of Public Health, Vital Records

Births by Mother's Age and Birth Order Suburban Monroe Co 2005-2007



Data Source: Monroe County Department of Public Health, Vital Records

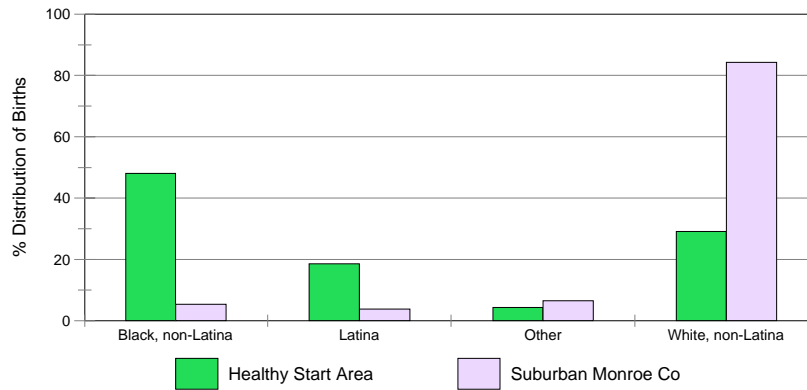
Births by Mother's Age 2005-2007



Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

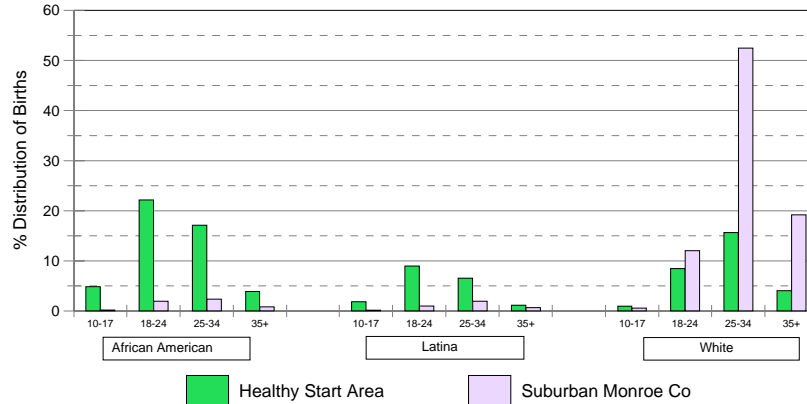
Births by Mother's Race/Ethnicity 2005-2007



Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

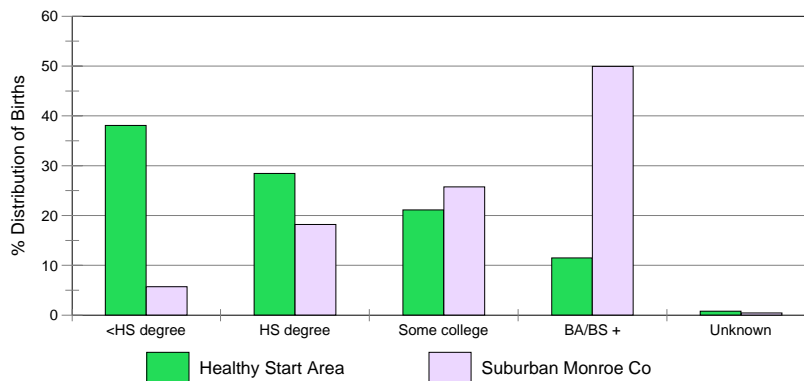
Births by Age & Race/Ethnicity 2005-2007



Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Births by Mother's Education 2005-2007

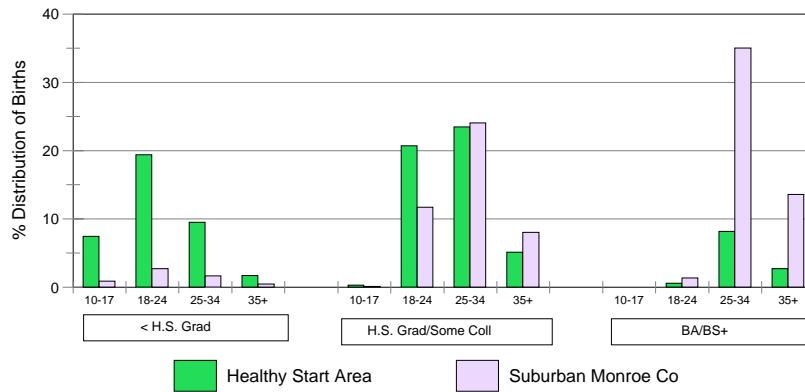


Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Births by Education by Age

2005-2007

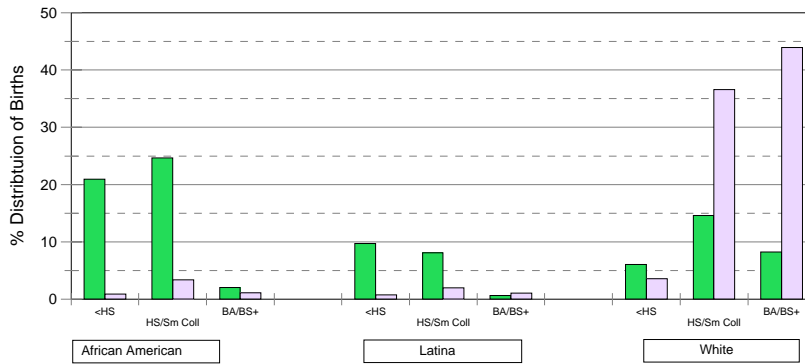


Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Births by Race/Ethnicity by Education

2005-2007

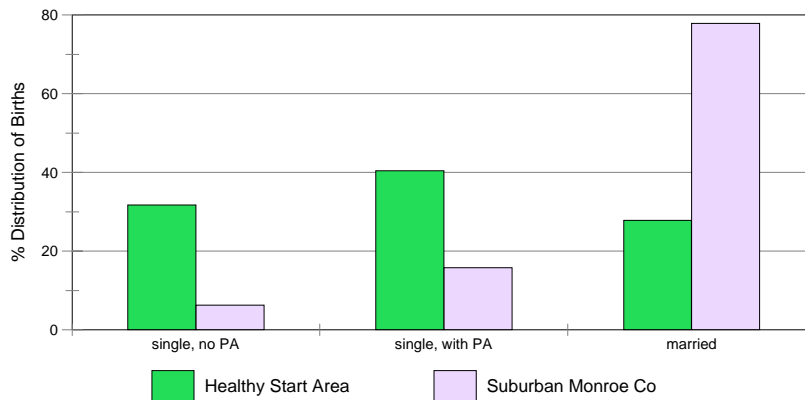


Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Births by Paternity

2005-2007



Data Source: Monroe County Department of Public Health, Birth files

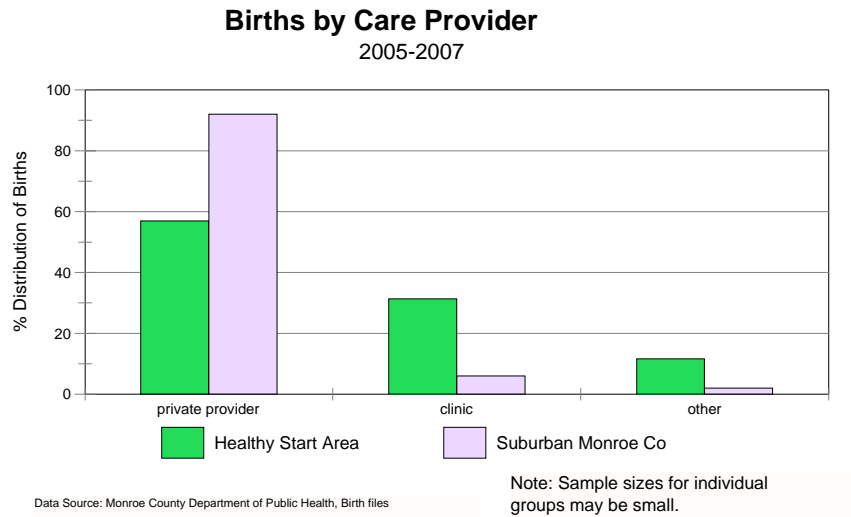
Note: Sample sizes for individual groups may be small.

Access to Care

Approximately 90% of birth mothers who lived in suburban Monroe from 2005 to 2007 sought care from a private provider, compared to less than 60% of Healthy Start area birth mothers. Approximately 30% of Healthy Start area birth mothers sought care at a clinic during this period.

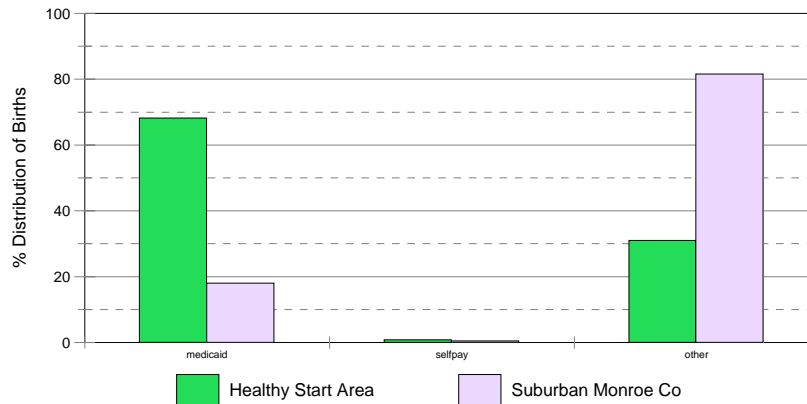
During 2005 to 2007, the majority of Healthy Start area birth mothers received health insurance through Medicaid, while the majority of suburban Monroe birth mothers were covered by a third-party private payer.

From 2005 to 2007, roughly 35% of birth mothers living in the Healthy Start area received adequate prenatal care^q, compared to over 50% of suburban Monroe mothers. Healthy Start area birth mothers during this period were more likely than their suburban counterparts to receive intermediate, inadequate, or intensive prenatal care.



^q The Adequacy of Prenatal Care Utilization Index (APNCU) is a composite of two elements: the timing of the first visit and the adequacy of prenatal visits once care has begun. A woman’s number of visits is compared to the number recommended based on the date of first visit and the length of gestation. With this information, the APNCU Index classifies case as: inadequate, intermediate, adequate, or intensive. The 2010 Healthy People objective is for 90% of women to receive “adequate” prenatal care (defined as either adequate or adequate intensive).

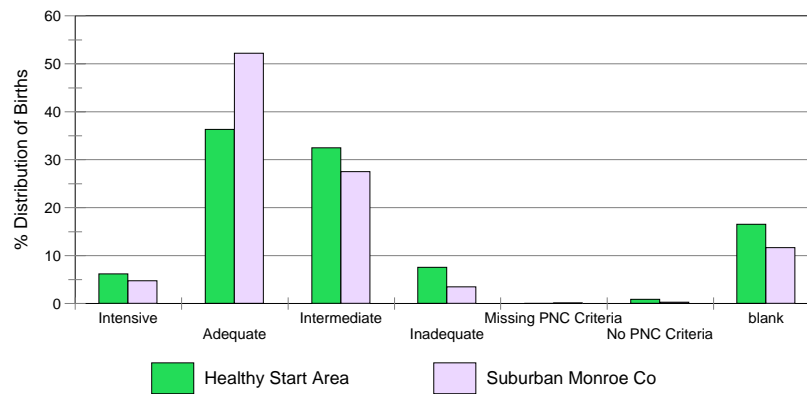
Births by Payer 2005-2007



Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Births by Adequacy of Prenatal Care 2005-2007



Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

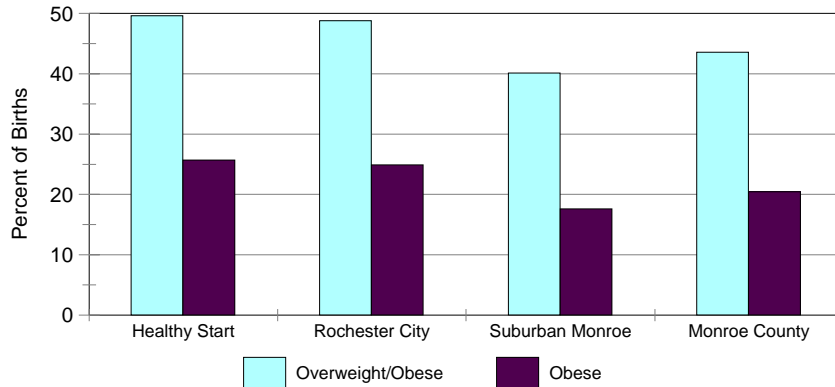
Maternal Health Status Prior to Pregnancy

Births by Pre-Pregnancy Maternal Body Mass Index (BMI)

From 2005 to 2007, approximately 50% of birth mothers living in the Healthy Start area were overweight or obese (body mass index >25), compared to approximately 40% in suburban Monroe County. The likelihood that birth mothers were overweight/obese increased greatly with age, particularly in the Healthy Start area. African American birth mothers were more likely to be overweight or obese than either White or Latina birth mothers. Suburban Monroe County White birth mothers were the least likely to be overweight/obese or obese. These data align with the overall demographic trends of overweight/obesity among females of childbearing age living in Monroe County.

Percent Birth Mothers Overweight/Obese

All Study Areas, 2005-2007

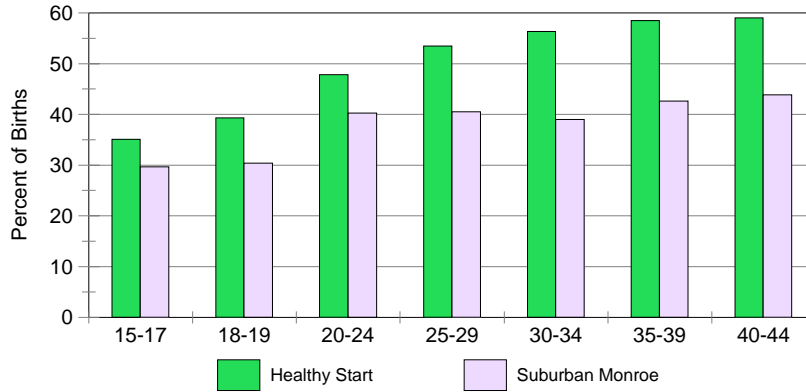


Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Percent Birth Mothers Overweight/Obese

by Age, Healthy Start & Suburbs, 05-07

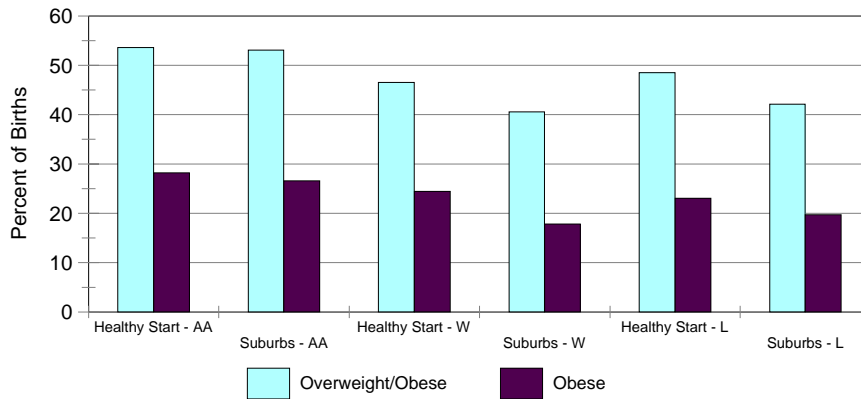


Data Source: Monroe County Department of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

% Birth Mothers by Weight by Race/Ethn

Healthy Start, Suburbs, 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

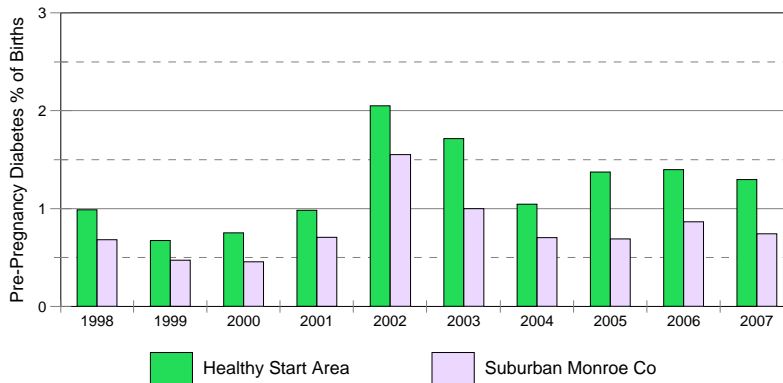
Note: Sample sizes for individual groups may be small.

Births by Pre-Pregnancy Diabetes

From 1998 to 2007, less than 2% of births in the Healthy Start area and suburban Monroe County were to mothers who had diabetes prior to becoming pregnant. Overall, birth mothers living in the Healthy Start area were more likely to have diabetes than suburban Monroe County birth mothers before they became pregnant. There appears to have been an increase in the percent of birth mothers who had diabetes prior to becoming pregnant since the early 2000's, which is in line with the general increase in diabetes prevalence among females living in Monroe County from 2000 to 2006.

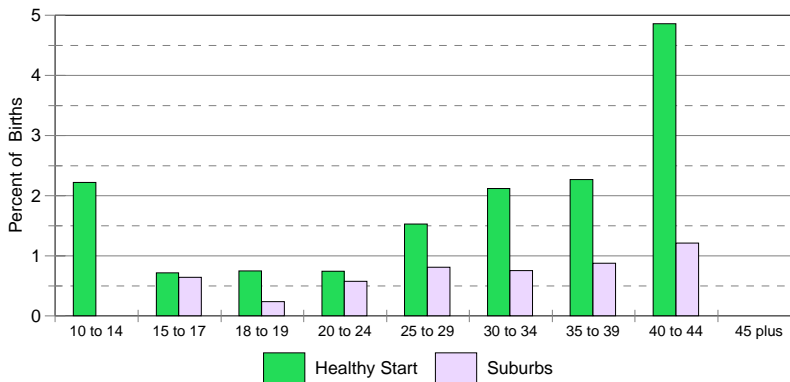
As expected, maternal age is directly related with birth mothers' likelihood to have diabetes prior to becoming pregnant, with older birth mothers more likely to have the disease. Race/ethnicity nor level of educational attainment appear to be less associated with pre-pregnancy diabetes.

Births with Pre-Pregnancy Diabetes
1998-2007



Data Source: Monroe County Department of Public Health, Birth files

Births with Pre-Preg Diabetes Dx
by Mother's Age, 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

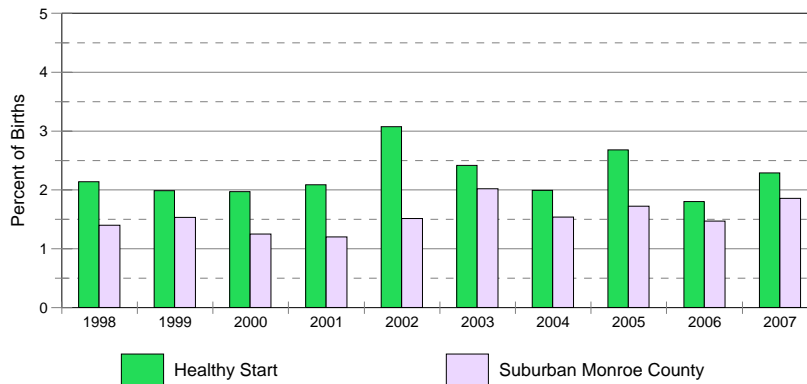
Note: Sample sizes for individual groups may be small.

Births by Pre-Pregnancy Hypertension

From 1998 to 2007, approximately 2% of birth mothers living in the Healthy Start area were diagnosed with hypertension prior to becoming pregnant, compared to roughly 1.5% of suburban Monroe County birth mothers.

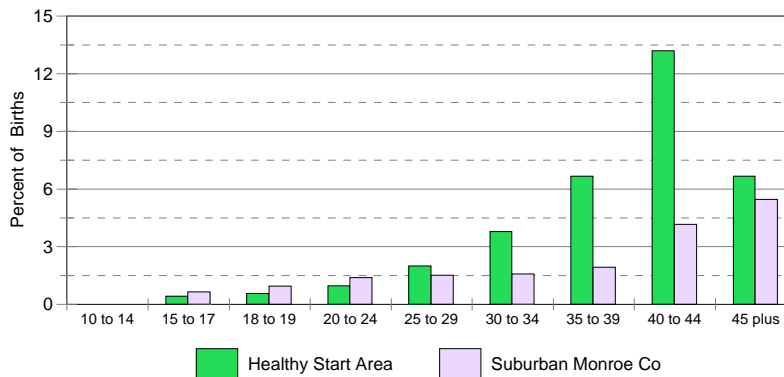
As in the case of pre-pregnancy diabetes, maternal age increases the likelihood that birth mothers have hypertension prior to becoming pregnant, particularly among Healthy Start area birth mothers. We note, however, that these represent very few births and caution should be exercised in interpreting the data. Another demographic variable that appears to be associated with pre-pregnancy hypertension is race/ethnicity. African American birth mothers are more likely to be diagnosed with this condition than either White or Latina birth mothers.

Births with Pre-Pregnancy Hypertension
Healthy Start Area, Suburbs



Data Source: NYS Dept of Health, Birth files 1998-2003; Monroe County Dept of Public Health, Birth files 2004-2007

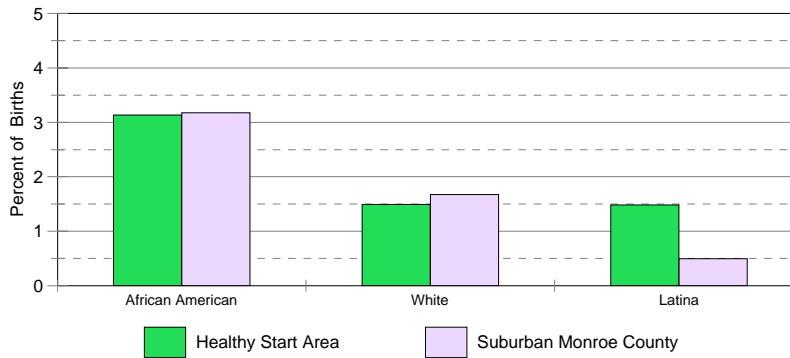
Births with PrePregnancy Hypertension
by Mother's Age 2005-2007



Data Source: Monroe County Dept of Public Health, Birth files

Note: Sample sizes for individual groups may be small.

Births with Pre-Pregnancy Hypertension by Mother's Race/Ethnicity 2005-2007



Data Source: Monroe County Department of Health, Birth files

Note: Sample sizes for individual groups may be small.

Adjusting for Key Demographic Characteristics

To assess whether differences in maternal behaviors and birth outcomes during pregnancy (e.g., STD during pregnancy, low birth weight, etc.) between study areas were associated with some other demographic variable, we adjusted the rates of births with selected maternal behaviors and outcomes for mother's age, race, and level of educational attainment. These variables, in particular mother's educational attainment, accounted for much of the differences.

The unadjusted low birth weight rate, for example, was 169 in the Healthy Start area per 100 in suburban Monroe County (see table).

- After adjusting for mother's age and race, the ratio dropped 28% to 122 low birth weights in the Healthy Start area per 100 in suburban Monroe.
- Adjusting the low birth weight rates by mother's age and level of educational attainment had less of an effect, decreasing the ratio 19% to 137 low birth weights in the Healthy Start area per 100 in suburban Monroe.
- The difference between the Healthy Start area and suburban Monroe in low birth weight rates virtually disappeared after adjusting for race and educational attainment, to 108 low birth weight births in the Healthy Start area per 100 in suburban Monroe.

In other words, the majority of the difference between low birth weight rates for these study areas is explained by mother's race and educational attainment. If mother's race and level of educational attainment were equally distributed in the two study areas, then we would expect the low birth weight rates to be about the same.

Much of the difference between the Healthy Start area and suburban Monroe County in the rate of births for which the mother had a known STD and the rate of births with early prenatal care is explained by mother's race and educational attainment. After adjusting for these two variables, the rate of births for mothers with an STD decreases from 335 births in the Healthy Start area per 100 in suburban Monroe County to 148 births per 100. And, while the actual rate of births with early prenatal care is 76 in the Healthy Start area

per 100 in suburban Monroe County, after adjusting for these two variables the rate changes to 93 births per 100.

We also found that much of the difference in the birth rates for mothers who used tobacco or any substance (including tobacco, alcohol, and/or illegal drugs) between the Healthy Start area and suburban Monroe County was explained by mother's age and level of educational attainment.

Age-, Race-, and Education-Adjusted Rates of Selected Maternal Behaviors and Birth Outcomes, All Study Areas, 2005-07						
		2005-07				
	Healthy Start	City	Suburbs	Monroe County	Ratio of Healthy Start to Suburbs	
Low Birth Weight	Actual %	11.2	11.0	6.6	8.3	1.69
	Age-Race Adj	9.0	8.9	7.4	8.3	1.22
	Age-Educ Adj	9.7	9.7	7.1	8.3	1.37
	Race-Educ Adj	8.5	8.5	7.8	8.3	1.08
% Inadequate Mat. Weight Gain Among Singleton FT Births	Actual %	23.4	23.0	17.6	19.6	1.33
	Age-Race Adj	20.7	20.4	19.0	19.6	1.09
	Age-Educ Adj	20.7	20.8	18.3	19.6	1.13
	Race-Educ Adj	19.8	19.7	19.8	19.6	1.00
Preg w/ STDs	Actual %	10.0	10.2	3.0	5.8	3.35
	Age-Race Adj	7.3	7.8	4.2	5.8	1.75
	Age-Educ Adj	7.1	7.5	3.9	5.8	1.84
	Race-Educ Adj	6.6	7.3	4.4	5.8	1.48
Tobacco Use	Actual %	26.4	26.7	15.0	19.6	1.76
	Age-Race Adj	26.2	27.1	14.9	19.6	1.76
	Age-Educ Adj	20.1	21.2	20.2	19.6	1.00
	Race-Educ Adj	22.2	24.0	16.3	19.6	1.36
Any Substance Use	Actual %	30.0	30.5	15.7	21.5	1.91
Tobacco +/-or	Age-Race Adj	28.6	29.6	16.0	21.5	1.79
Alcohol +/-or	Age-Educ Adj	24.8	26.3	22.8	23.4	1.08
Illegal Drugs	Race-Educ Adj	22.2	24.0	16.3	19.6	1.36
Early Prenatal Care	Actual %	64.5	65.1	85.1	77.4	0.76
	Age-Race Adj	71.9	72.4	79.9	77.0	0.90
	Age-Educ Adj	71.9	72.1	80.7	77.0	0.89
	Race-Educ Adj	73.8	74.1	79.3	77.0	0.93

Note: Adjusted rates are adjusted by the 2005-2007 Monroe County birth distribution
Source: Monroe County Department of Public Health, Birth Files

Maternal Birth Behaviors

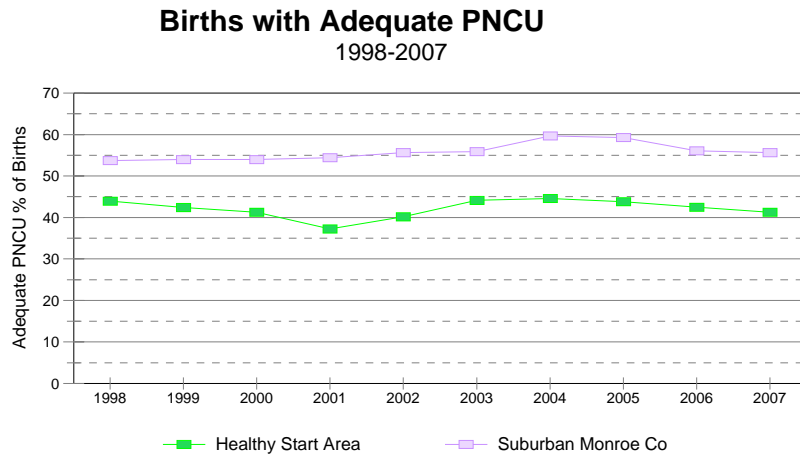
Adequate Prenatal Care Utilization

From 1998 to 2007, roughly 55% of birth mothers living in suburban Monroe County received adequate prenatal care, compared to approximately 37% of birth mothers living in the Healthy Start area. Although there has been some variation during this period, the gap between the two areas has remained fairly constant.

The likelihood of birth mothers receiving adequate prenatal care from 2005 to 2007 in the Healthy Start area and suburban Monroe County peaked between the ages of 30 and 34, and then declined for older women.

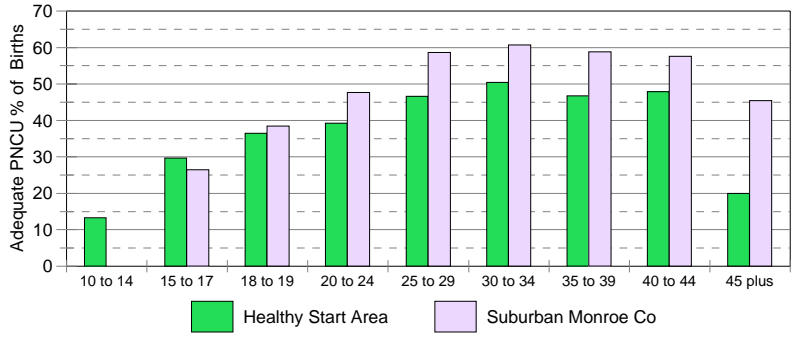
Among Healthy Start area birth mothers, African American women were the least likely and Latinas were the most likely to have received adequate prenatal care during this time period. White suburban birth mothers were the most likely to have received adequate prenatal care from 2005 to 2007 than all birth mothers of all races/ethnicities living in the Healthy Start area.

The likelihood that birth mothers received adequate prenatal care from 2005 to 2007 increased with their level of educational attainment, such that the gap between Healthy Start area and suburban Monroe County residents virtually disappeared among birth mothers with a bachelor's degree or higher.



PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization; Adequate = Adequate + Intensive
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

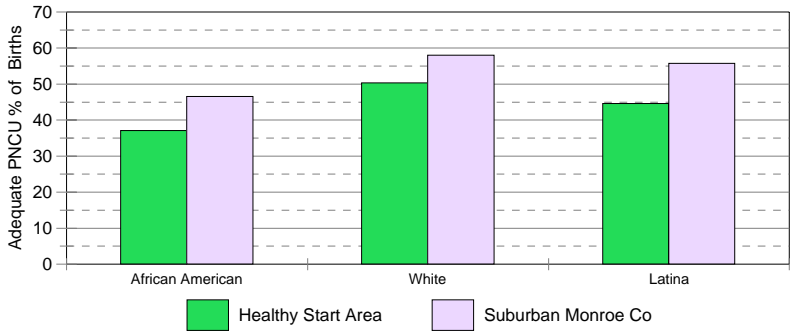
Births with Adequate PNCU by Mother's Age 2005 - 2007



Note: Sample sizes for individual groups may be small.

PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization; Adequate = Adequate + Intensive
Data Source: Monroe County Department of Public Health, Birth files

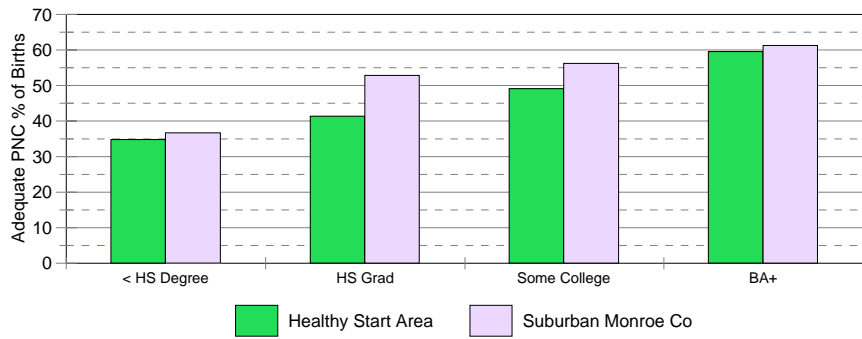
Births with Adequate PNCU by Mother's Race/Ethnicity 2005 - 2007



Note: Sample sizes for individual groups may be small.

PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization; Adequate = Adequate + Intensive
Data Source: Monroe County Department of Public Health, Birth files

Births with Adequate PNC by Mother's Education 2005 - 2007



Note: Sample sizes for individual groups may be small.

PNC = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization; Adequate = Adequate + Intensive
Data Source: Monroe County Department of Public Health, Birth files

Inadequate Prenatal Care Utilization

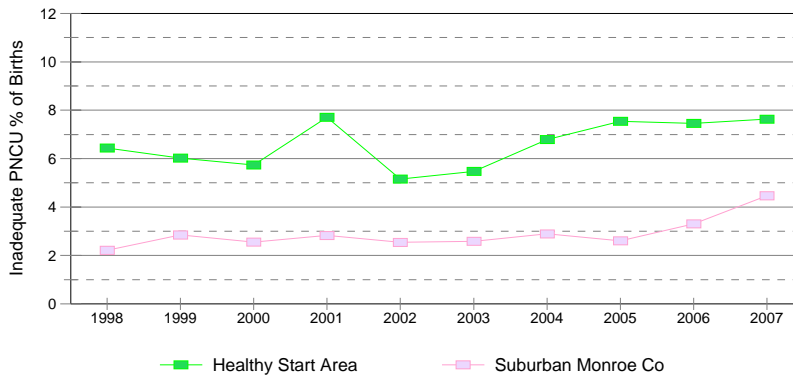
From 1998 to 2007, the percent of births with inadequate prenatal care is consistently higher in the Healthy Start area than in suburban Monroe County. The gap appears to be decreasing, however, as the percent of births with inadequate prenatal care is on the rise in suburban Monroe County.

Overall, younger birth mothers were more likely than older birth mothers to receive inadequate prenatal care from 2005 to 2007. The likelihood of receiving inadequate care increased after the age of 34. The gap in likelihood to receive inadequate prenatal care between the study areas rose as age increased, such that Healthy Start area birth mothers ages 25 to 29 were roughly twice as likely to receive inadequate prenatal care as their suburban Monroe County counterparts.

From 2005 to 2007, African American and Latina birth mothers living in the Healthy Start area were more likely than their White counterparts to receive inadequate prenatal care. African American birth mothers, however, were the most likely to receive inadequate prenatal care in both study areas.

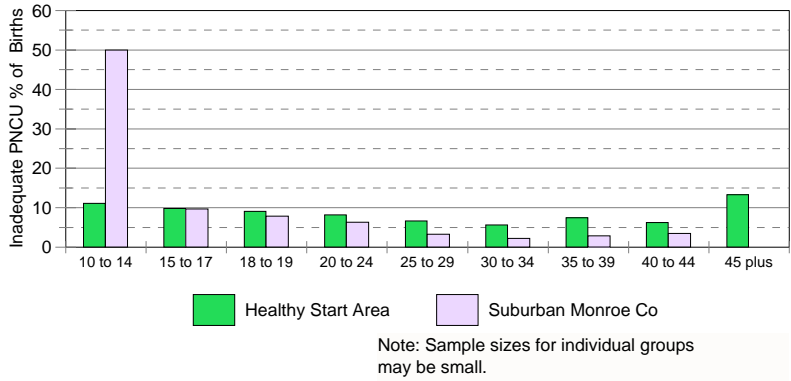
Given the positive influence of educational attainment on birth mothers' likelihood to receive adequate prenatal care, it is not surprising that educational attainment is inversely related to receipt of inadequate prenatal care.

Births with Inadequate PNCU
1998-2007



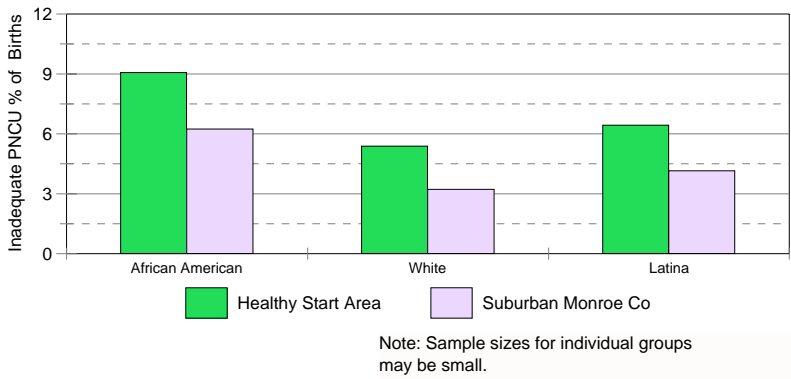
PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Inadequate PNCU by Mother's Age 2005 - 2007



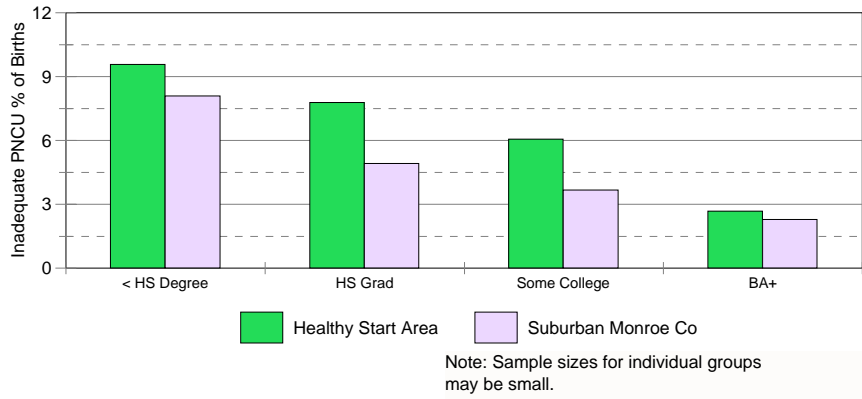
PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization
Data Source: Monroe County Department of Public Health, Birth files

Births with Inadequate PNCU by Mother's Race/Ethnicity 2005 - 2007



PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization;
Data Source: Monroe County Department of Public Health, Birth files

Births with Inadequate PNCU by Mother's Education 2005 - 2007



PNCU = Prenatal Care Utilization; Kotelchuk Index of Adequacy of Prenatal Care Utilization
Data Source: Monroe County Department of Public Health, Birth files

Early Prenatal Care Utilization

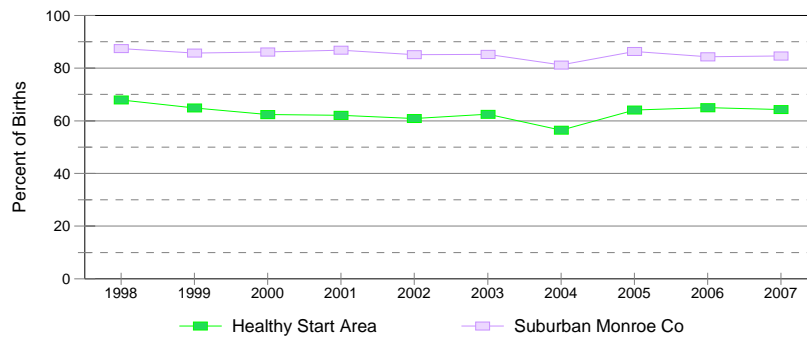
From 1998 to 2007, over 80% of birth mothers in suburban Monroe County and over 60% of birth mothers in the Healthy Start area received early prenatal care, defined as prenatal care starting in the first trimester. The 20% gap between the study areas was fairly consistent during this period. It is also evident in our analyses of mother's age, race/ethnicity, and level of educational attainment.

The likelihood of birth mothers receiving early prenatal care increased with their age and peaked between the ages of 30 and 34 from 2005 to 2007. Although the percent of birth mothers who received early prenatal care decreased after this point, older birth mothers on the whole were more likely to receive early prenatal care than younger birth mothers.

African American birth mothers were less likely to receive early prenatal care than Latina or White birth mothers from 2005 to 2007.

As in the case of adequate prenatal care utilization, mothers' level of educational attainment was directly related to the likelihood of receiving early prenatal care. From 2005 to 2007, the gap between the Healthy Start area and suburban Monroe County nearly disappeared at the highest level of educational attainment.

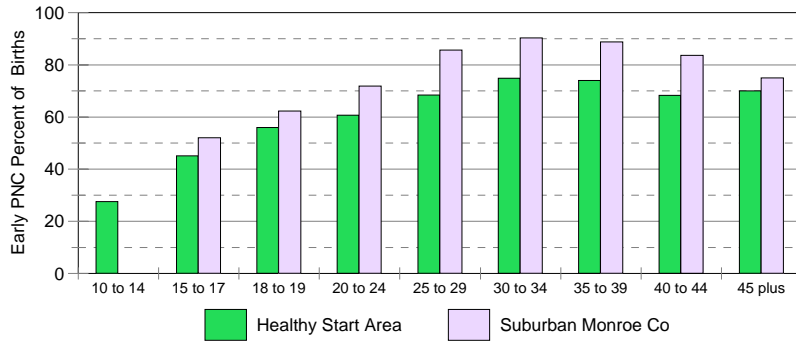
Births with Early Prenatal Care
1998-2007



Note: Sample sizes for individual groups may be small.

Calculations exclude births with unknown start of prenatal care
Data Source: Monroe County Department of Public Health, Birth files

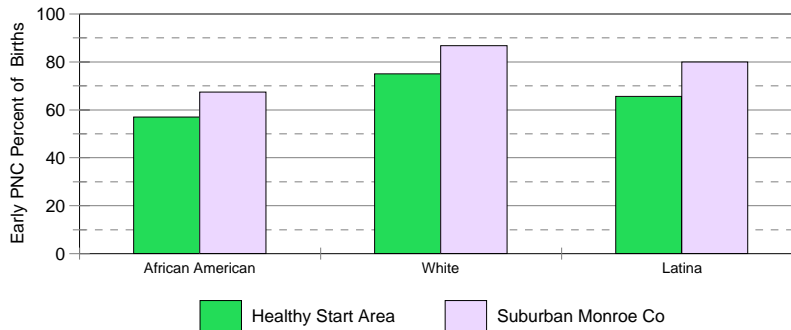
Births with Early Prenatal Care by Mother's Age 2005 - 2007



Note: Sample sizes for individual groups may be small.

Calculations exclude births with unknown start of prenatal care
Data Source: Monroe County Department of Public Health, Birth files

Births with Early Prenatal Care by Mother's Race/Ethnicity 2005 - 2007



Note: Sample sizes for individual groups may be small.

Calculations exclude births with unknown start to prenatal care
Data Source: Monroe County Department of Public Health, Birth files

Births with Tobacco Use Recorded

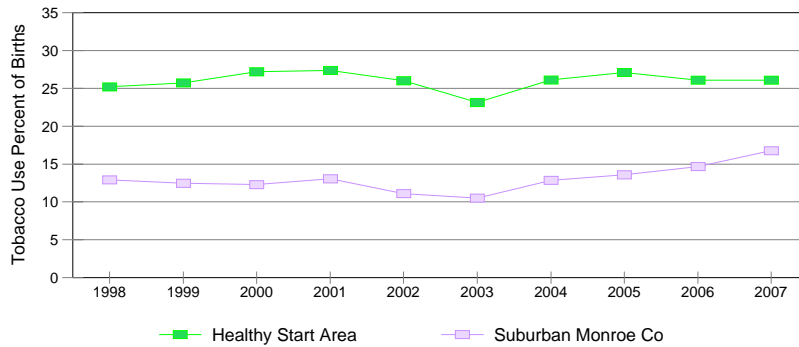
According to the 2006 Monroe County Adult Health Survey, approximately 22% of women ages 18 to 44 reported being smokers. In the Healthy Start area, approximately 32% of female residents in this age group smoked, compared to 18% of residents of other areas. Roughly 29% of female Rochester City residents in this age group reported smoking, compared to 17% of their suburban Monroe County counterparts. No significant differences emerged by age. Latinas were significantly more likely to smoke than White/non-Latinas. Smoking among all women in Monroe County had declined significantly since the survey was last conducted in 2000.

From 1998 to 2007, approximately 25% of births in the Healthy Start area and about 15% of births in suburban Monroe County reported maternal tobacco use. From 2005 to 2007, the percent of births in suburban Monroe County with recorded maternal tobacco use increased slightly, but remained fairly constant in the Healthy Start area.

In suburban Monroe County, maternal use of tobacco peaks between the ages of 18 and 19 but then decreases with age. In the Healthy Start area, the peak comes later at ages 25 to 29. In both study areas, maternal use of tobacco is highest among younger women.

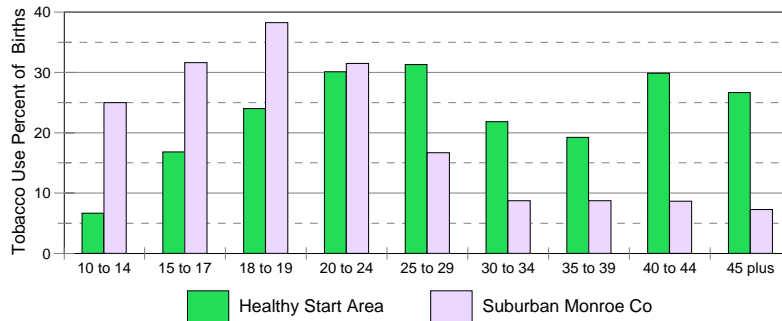
According to the 2006 Monroe County Adult Health Survey, although Latinas between the ages of 18 and 44 were the most likely to smoke in 2006, White birth mothers were the most likely to report smoking during their pregnancy from 2005 to 2007. With increased education, however, the likelihood of maternal tobacco use during pregnancy decreased considerably in both study areas from 2005 to 2007.

Births with Tobacco Use Recorded
1998-2007



For 1998-2003 the Tobacco Use question related only to use during pregnancy, for 2003-2007 the question also asked about use during the 3 months before pregnancy
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

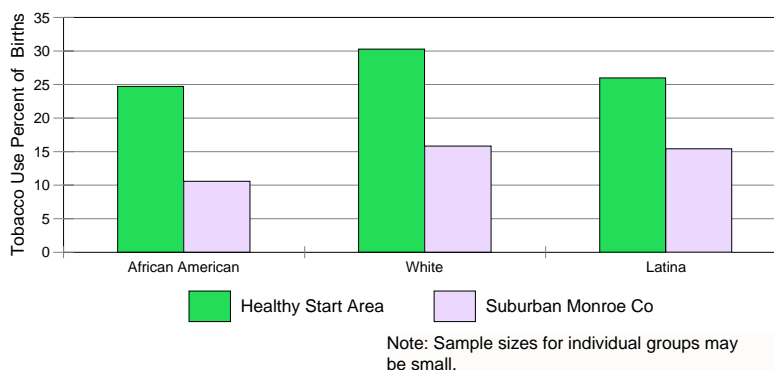
Births with Tobacco Use Recorded
by Mother's Age 2005 - 2007



Note: Sample sizes for individual groups may be small.

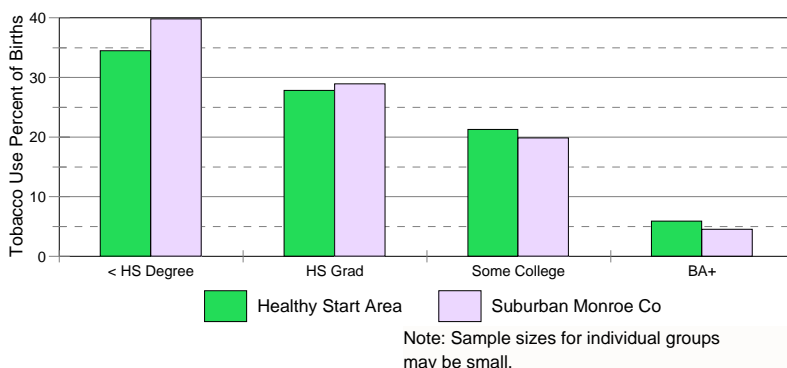
For 1998-2003 the Tobacco Use question related only to use during pregnancy, for 2003-2007 the question also asked about use during the 3 months before pregnancy
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Tobacco Use Recorded by Mother's Race/Ethnicity 2005 - 2007



For 1998-2003 the Tobacco Use question related only to use during pregnancy, for 2003-2007 the question also asked about use during the 3 months before pregnancy
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Tobacco Use Recorded by Mother's Education 2005 - 2007



For 1998-2003 the Tobacco Use question related only to use during pregnancy, for 2003-2007 the question also asked about use during the 3 months before pregnancy
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Maternal Alcohol Use Recorded

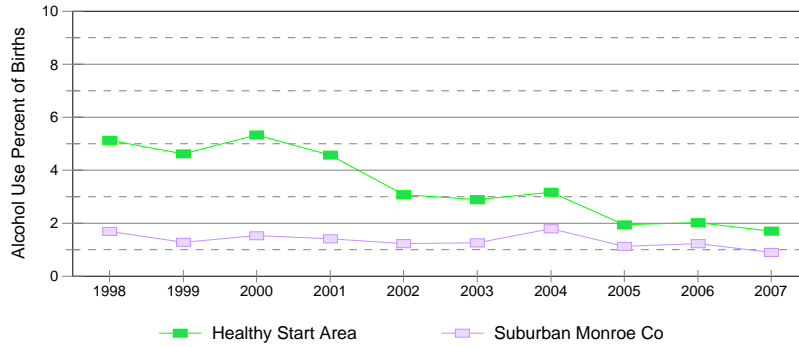
From 1998 to 2007, less than 6% of births in the Healthy Start area and suburban Monroe County had recorded maternal use of alcohol during pregnancy. In the Healthy Start area, this trend has declined considerably and since 2005 only 2% of births were affected, compared to 1% in suburban Monroe County. In contrast to tobacco use during pregnancy, alcohol use as reported is not a widespread problem in these study areas. Because of the low number of births, it is difficult to draw conclusions about the characteristics of birth mothers who use alcohol during their pregnancies.

In the Healthy Start area, alcohol use during pregnancy appears to be more of an issue with older women.

Maternal level of educational attainment appears to have some mitigating effect on birth mothers' likelihood to use alcohol during pregnancy. From 2005 to 2007, the higher a

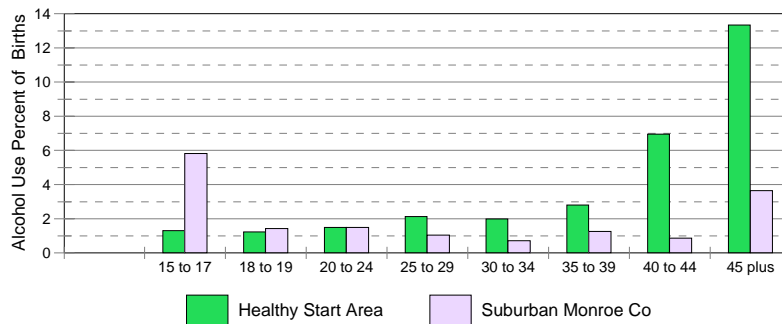
birth mother's level of educational attainment was, the lower the likelihood that she used alcohol during her pregnancy.

Births with Alcohol Use Recorded 1998-2007



Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

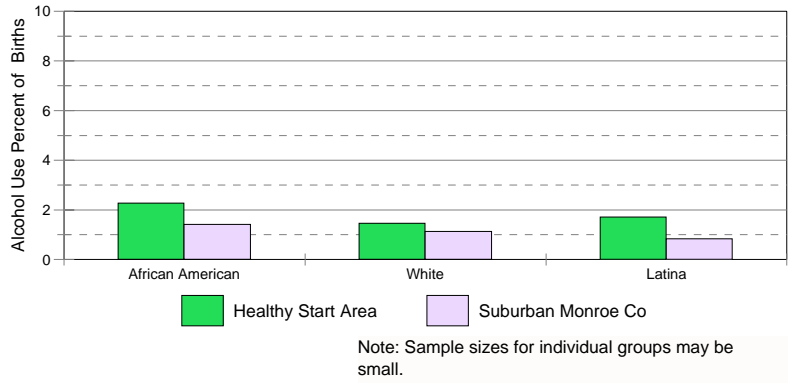
Births with Alcohol Use Recorded by Mother's Age 2005 - 2007



Note: Sample sizes for individual groups may be small.

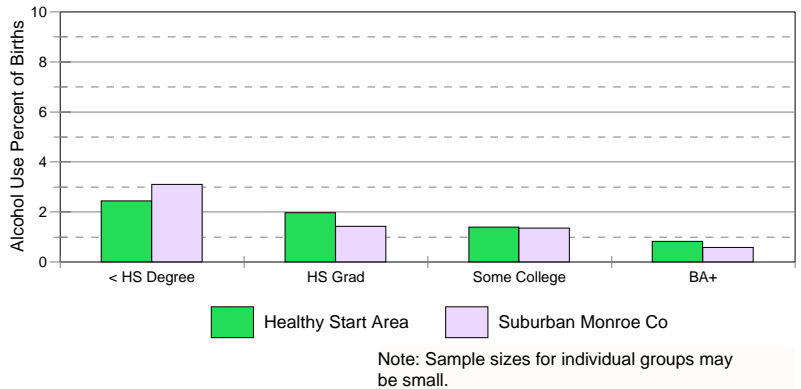
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Alcohol Use Recorded
by Mother's Race/Ethnicity 2005 - 2007



Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Alcohol Use Recorded
by Mother's Education 2005 - 2007



Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

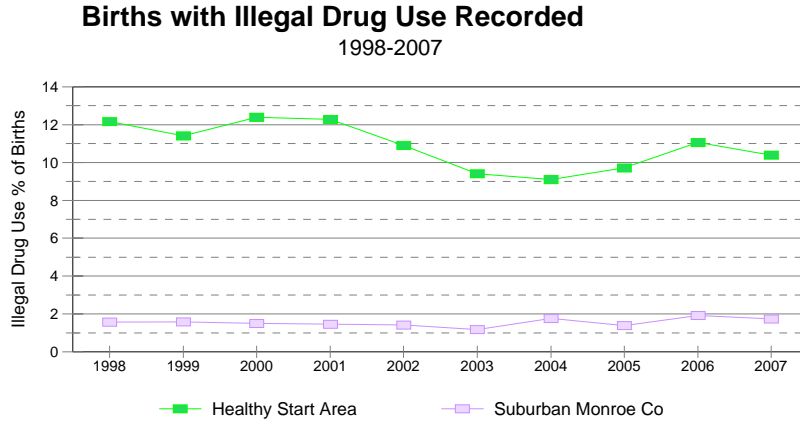
Births with Maternal Illegal Drug Use Recorded

Overall, the percent of births with maternal illegal drug use recorded declined from 1998 to 2007 in the Healthy Start Area, from approximately 12% to 10% of births. The trend has been fairly constant in suburban Monroe County, affecting less than 2% of births.

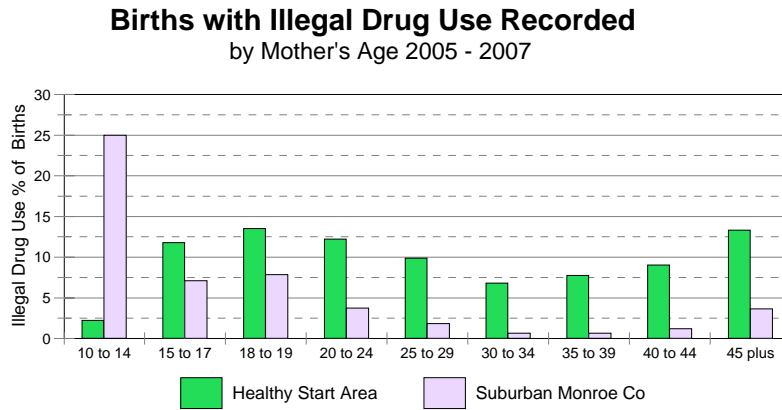
A clear relationship between birth mother's age and use of illegal drugs does not emerge in the Healthy Start area. The highest percent of births among Healthy Start area residents occurs between the ages of 20 and 29. From 2005 to 2007, approximately 12% and 10% of births to women ages 20 to 24 and 25 to 29, respectively, had illegal drug use recorded. In Monroe County during this period, the majority of births with illegal drug use recorded occurred to females younger than 20. However, this represents a very small number of actual births.

The majority of births with illegal drug use recorded are born to African American women living in the Healthy Start area.

As in the case with tobacco and alcohol use, maternal level of educational attainment is inversely related to the likelihood of maternal use of illegal drugs during pregnancy, from 2005 to 2007. The risk for Healthy Start birth mothers significantly decreases with each increase in educational attainment.



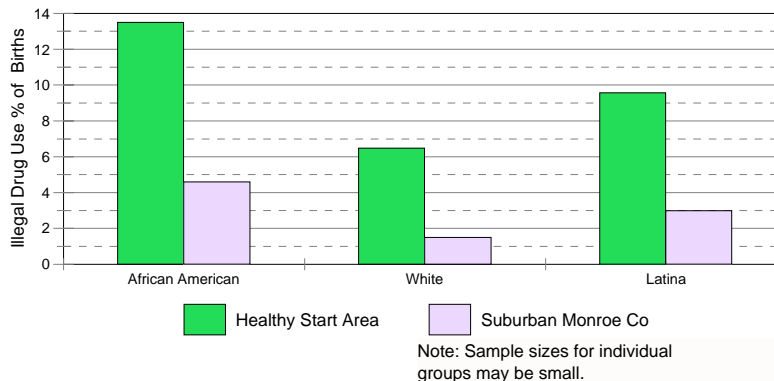
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files



Note: Sample sizes for individual groups may be small.

Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Illegal Drug Use Recorded by Mother's Race/Ethnicity 2005 - 2007



Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Illegal Drug Use Recorded by Mother's Education 2005 - 2007



Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

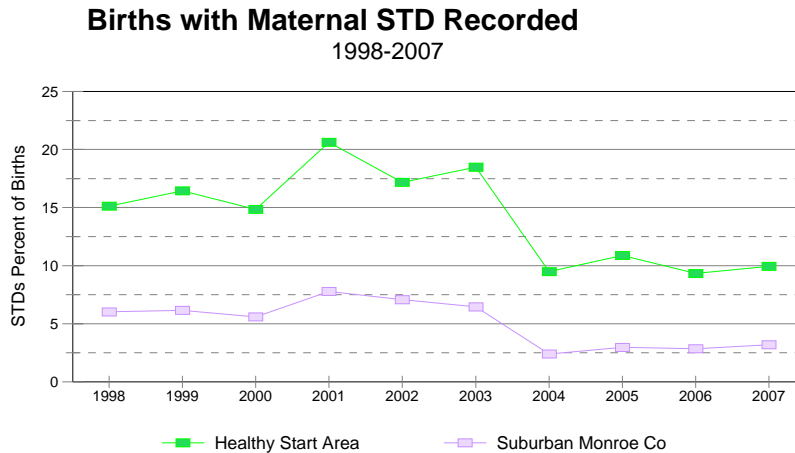
Births with Maternal Sexually Transmitted Disease (STD) Recorded

As stated earlier, from 2001 to 2008, the chlamydia and gonorrhea infection rates among females between 15 and 44 years old were highest for those living in the Healthy Start area. The infection rates of these STDs were much higher in the Healthy Start area than in Monroe County, overall. Furthermore, these STDs predominantly affected young females and African American females. Chlamydia and gonorrhea can be transmitted from the mother to the baby during delivery as the baby passes through the birth canal.⁸⁹ In pregnant women, there is some evidence that untreated chlamydial infections can lead to premature delivery. Chlamydia has also been linked to eye and respiratory infections in newborns. Like many other STDs, chlamydia and gonorrhea can be treated and cured with antibiotics during pregnancy. This fact underscores the importance of prenatal care, since screening for STDs is done at the beginning of pregnancy and also close to delivery, if needed.

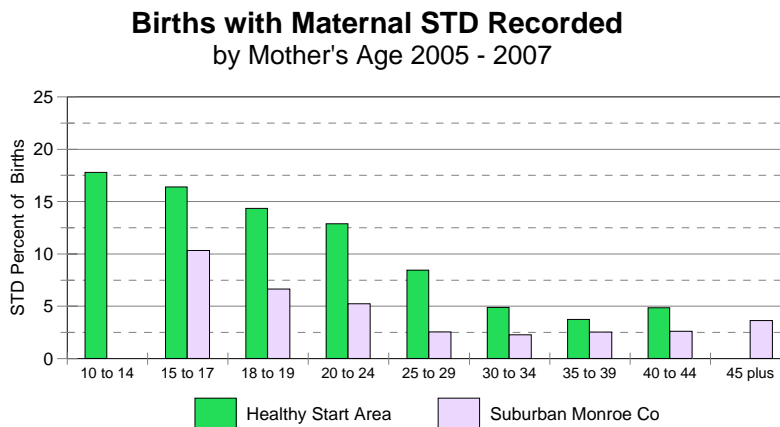
From 1998 to 2007, the percent of births with maternal STD recorded has been significantly higher in the Healthy Start area than in suburban Monroe. There appears to have been a considerable decline in both study areas, however, since 2003. From 2005 to 2007, approximately 10% of birth mothers living in the Healthy Start area had an STD, compared to approximately 2% of suburban Monroe County mothers.

From 2005 to 2007, in both study areas, maternal age was inversely related to birth mothers' likelihood of having an STD, as expected. There does appear to have been a slight increase in the percent of birth mothers with an STD after the age of 39, but the numbers are very small.

As expected, African American birth mothers living in the Healthy Start area have the highest percent of maternal STD recorded from 2005 to 2007. However, educational attainment considerably decreases Healthy Start birth mothers' likelihood having an STD during pregnancy.



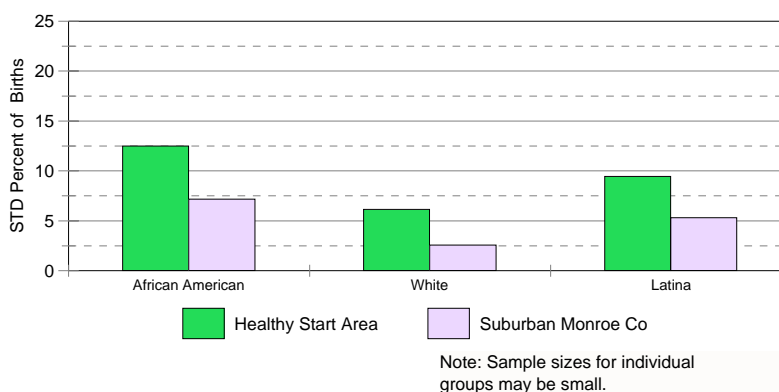
Data Source: Monroe County Department of Public Health, Birth files



Note: Sample sizes for individual groups may be small.

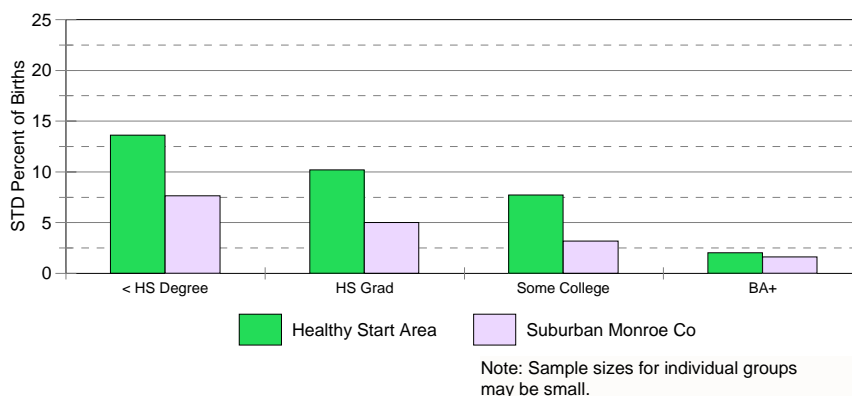
Data Source: Monroe County Department of Public Health, Birth files

Births with Maternal STD Recorded by Mother's Race/Ethnicity 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

Births with Maternal STDs Recorded by Mother's Education 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

Adequacy of Maternal Weight Gain

Maternal weight gain during pregnancy is associated with fetal growth, and insufficient or excessive weight gain may pose or indicate problems for both mother and fetus.⁹⁰ Inadequate weight gain has been associated with increased risk of intrauterine growth retardation (IUGR), preterm birth, low birth weight, and perinatal mortality, while excessive weight gain has been associated with increased risk of a large-for-gestational-age infant, cesarean delivery, and long-term maternal weight retention.⁹¹ Gestational weight gain has also been linked to child adiposity at three years.⁹² More research is assessing the impact of maternal weight gain to childhood outcomes.

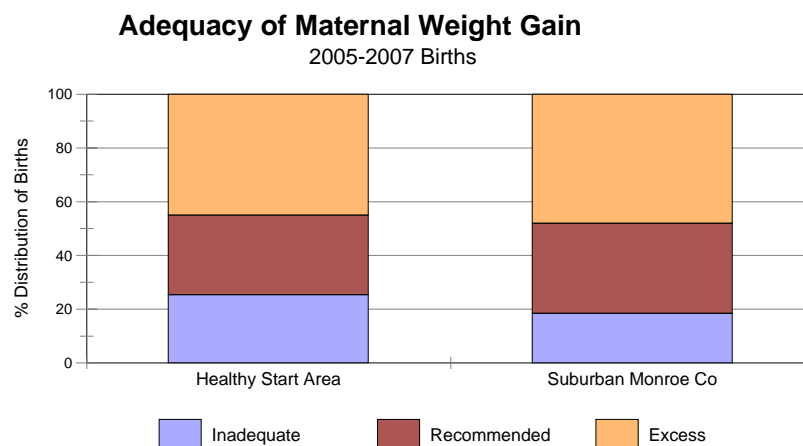
The 1990 Institute of Medicine (IOM) report *Nutrition During Pregnancy* established guidelines for nutrition and weight gain during pregnancy based on women's pre-pregnancy body mass index (BMI).⁹³ The table below presents the recommended gain for singleton pregnancies for women who are underweight, healthy weight, and

overweight/obese. Although the IOM sets the ideal weight gain during pregnancy for women who are obese (BMI >29) prior to becoming pregnant at 15 lbs., the Centers for Disease Control and Prevention (CDC) set an ideal weight gain range of 15 to 25 lbs. for both overweight and obese women. FLHSA adopted the CDC modification of the IOM recommendations in its analysis of adequacy of maternal weight gain. The IOM is in the process of revising its recommendations and will publish the new guidelines later in 2009.

Institute of Medicine Guidelines for Total Weight Gain During Pregnancy Based on Pre-Pregnancy Body Mass Index (BMI), Based on 1990 IOM Report "Nutrition during Pregnancy"	
Pre-Preg BMI	Recommended Gain (lbs) for Singleton Pregnancies
<19.8	28-40
19.8-26.0	25-35
More than 26.0	15-25

Note: For women with a pre-pregnancy BMI greater than 26, the IOM recommends a weight gain of 15 lbs. FLHSA modified this to a range of 15 to 25 lbs. based on the recommendations of the Centers for Disease Control and Prevention. The IOM is currently revising its recommendations and is expected to publish the new criteria later in 2009.

From 2005 to 2007, approximately 30% of singleton births recorded adequate maternal weight gain during pregnancy in the Healthy Start area, compared to 34% in suburban Monroe County.[†] Healthy Start area birth mothers had a tendency to gain less weight during pregnancies than their suburban Monroe County counterparts, who had a higher likelihood of gaining adequate or excess weight. Among those for whom weight gain during pregnancy was recorded, approximately 45% of Healthy Start birth mothers gained excess weight during their pregnancies, compared to 48% of suburban Monroe County birth mothers. This means that nearly half of birth mothers experienced weight gain outside of the IOM guidelines.



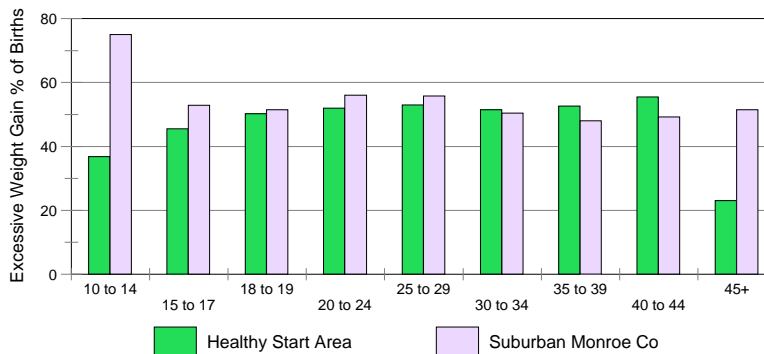
Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

[†] Weight gain during pregnancy data were unavailable for approximately 9% of Healthy Start area births and 7% of suburban Monroe County births.

Excessive Weight Gain during Pregnancy

From 2005 to 2007, maternal age was not associated with excessive weight gain for singleton births in either the Healthy Start area or suburban Monroe County. Birth mothers' race/ethnicity and level of educational attainment, however, were related to excessive weight gain. White birth mothers living in the Healthy Start area were more likely than either African American or Latina birth mothers to exceed the weight gain IOM recommendations. Level of educational attainment was directly related to likelihood of excessive weight gain, such that women with a bachelor's degree or higher were the most likely to gain too much weight during their pregnancy. It looks as though Healthy Start area birth mothers with a college or post-graduate degree are more likely to gain excessive weight with pregnancy. This is related to race/ethnicity, since White women living in the Healthy Start area are the most likely to be college educated, and White women are more likely to have excessive weight gain compared to African American and Latinas.

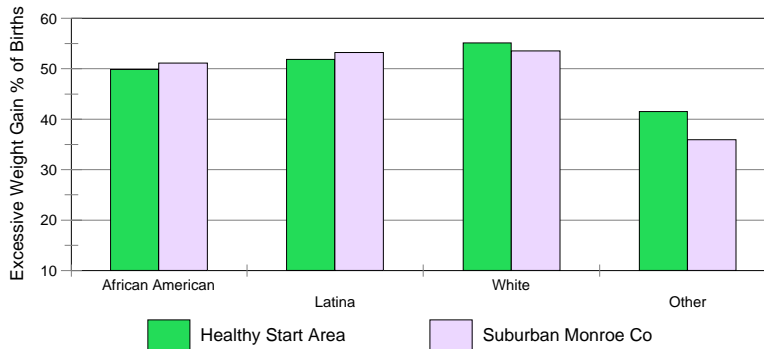
Excessive Weight Gain
by Mother's Age 2005-2007



Note: Sample sizes for individual groups may be small.

Calculations for singleton births excluding unknown weight gain or gestation
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

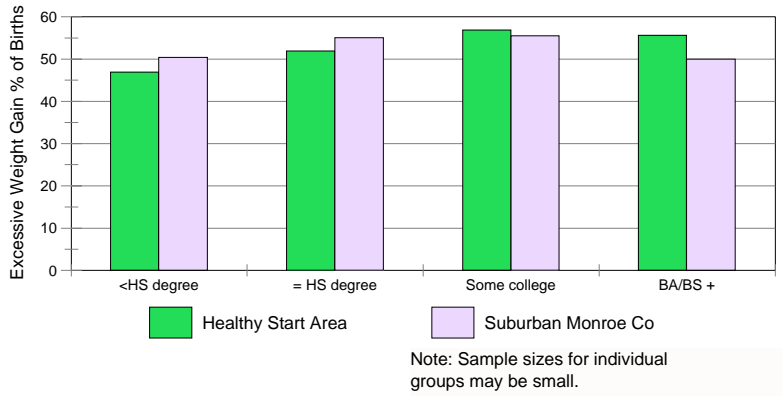
Excessive Weight Gain
by Mother's Race/Ethnicity 2005-2007



Note: Sample sizes for individual groups may be small.

Calculations for singleton births excluding unknown weight gain or pre-pregnancy BMI
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Excessive Weight Gain by Mother's Education 2005-2007



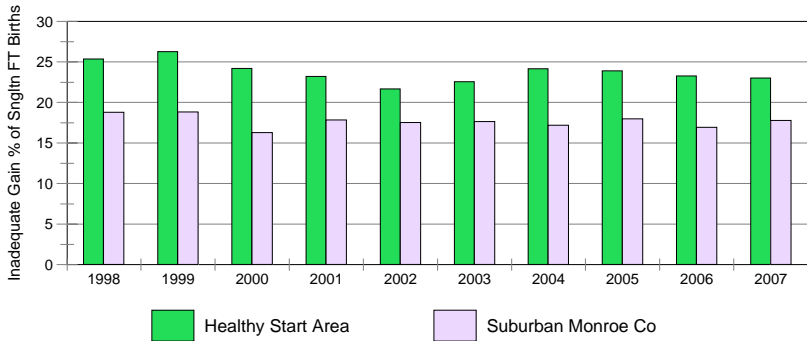
Calculations for singleton births excluding unknown weight gain or pre-pregnancy BMI
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Inadequate Weight Gain during Pregnancy for Full Term Singleton Births

From 2005 to 2007, maternal age was not associated with inadequate weight gain for singleton full term births. As with excessive weight gain during pregnancy, however, maternal race/ethnicity and level of educational attainment do appear to be related. Among Healthy Start area birth mothers, African American (29%) women who delivery single babies to full term are the most likely to gain too little weight during their pregnancies, followed by Latinas (25%). Level of educational attainment appears to be inversely related to the likelihood of inadequate weight gain during pregnancy. Much like excessive weight gain, this trend is likely driven by race/ethnicity differences. Contrary to some anecdotes, teen birth mothers do not exhibit higher rates of inadequate weight gains.

Birth mothers who received inadequate prenatal care from 2005 to 2007 were more likely to gain too little weight, in both the Healthy Start area and suburban Monroe County.

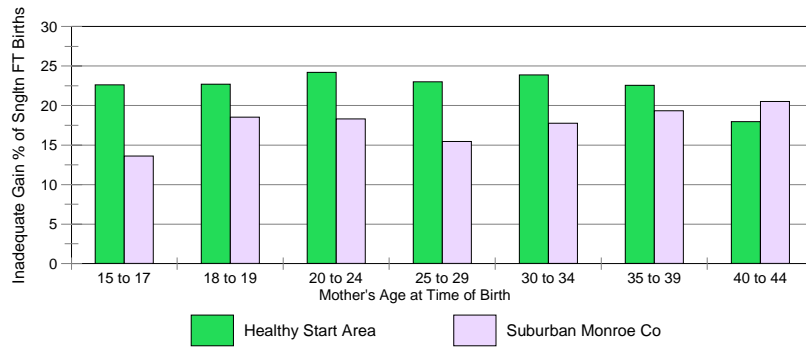
Inadequate Maternal Weight Gain Singleton Full Term Births



Note: Number of observations for individual groups may be small.

Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
Calculations exclude births with unknown maternal weight gain and/or height
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

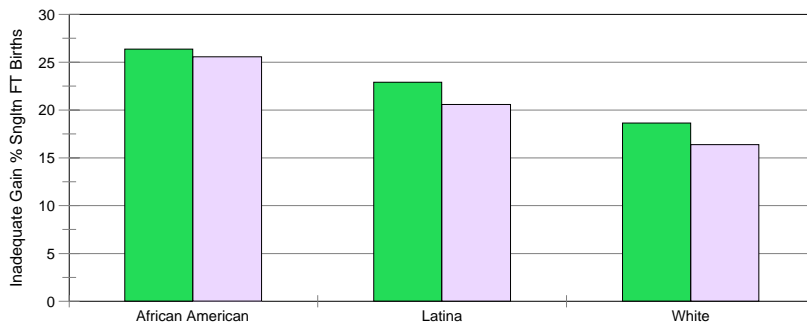
Inadequate Maternal Weight Gain by Age Full Term Singleton Births, 2005-2007



Note: Number of observations for individual groups may be small.

Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
Calculations exclude births with unknown maternal weight gain and/or height
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Inadequate Maternal Wgt Gain 2005-07 Singleton Full Term Births by Mother's Race/Ethnicity

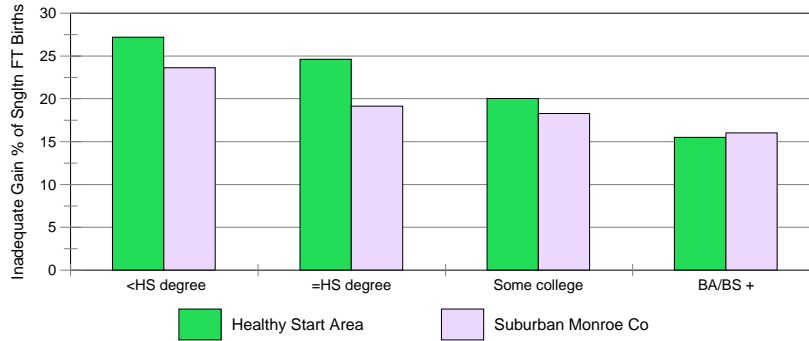


Note: Number of observations for individual groups may be small.

Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
Calculations exclude births with unknown maternal weight gain and/or height
Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Inadequate Maternal Wgt Gain 2005-07

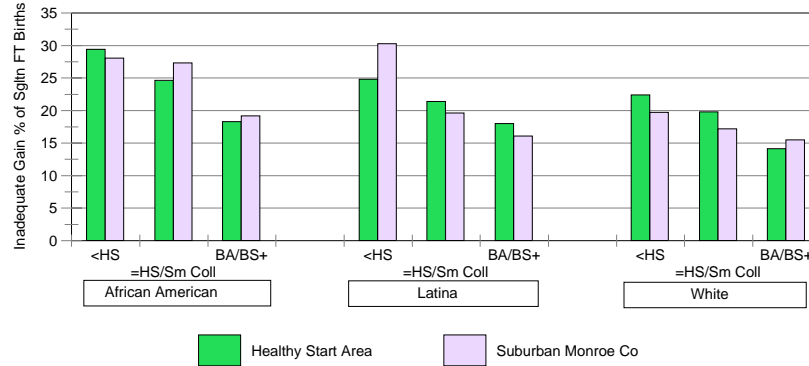
Singleton Full Term Births by Education



Note: Number of observations for individual groups may be small.
 Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
 Calculations exclude births with unknown maternal weight gain and/or height
 Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Inadequate Maternal Wgt Gain 2005-07

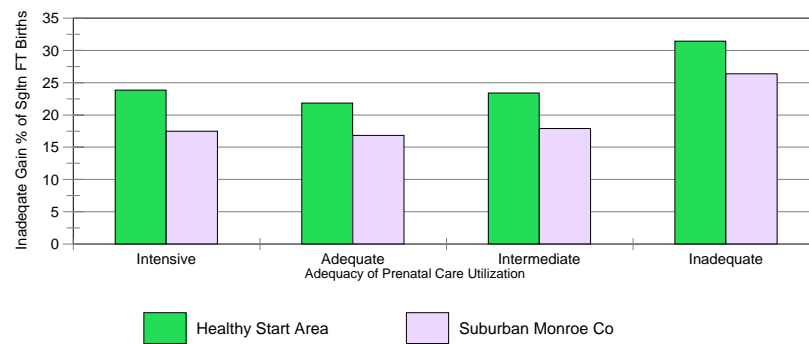
Sgl FT Births by Race & Education



Note: Number of observations for individual groups may be small.
 Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
 Calculations exclude births with unknown maternal weight gain and/or height
 Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Inadequate Maternal Wgt Gain 2005-07

Singleton Full Term Births by Adequacy of Prenatal Care Utilization



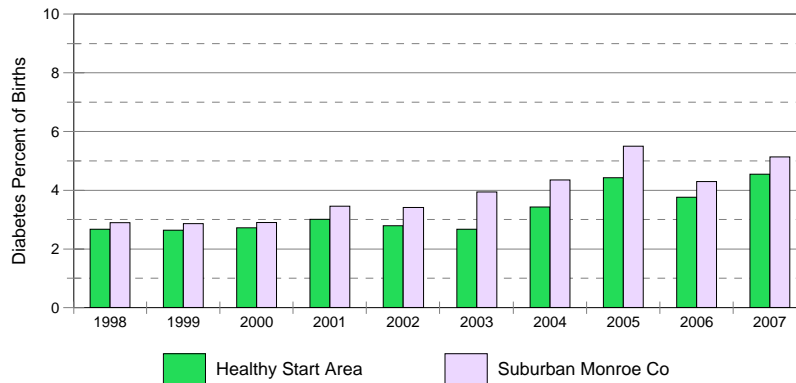
Note: Number of observations for individual groups may be small.
 Adequacy of weight gain IOM recommendations as presented in CDC Pregnancy Nutrition Surveillance
 Calculations exclude births with unknown maternal weight gain and/or height
 Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Births by Gestational Diabetes

According to the National Institute of Diabetes and Digestive and Kidney Diseases, women who have a family history of diabetes, are African American or Hispanic/Latino, are 25 years or older, are overweight, are “pre-diabetic” (blood glucose levels are higher than normal, but not yet high enough for a diagnosis of diabetes), or have a prior history of gestational diabetes, are at risk for developing gestational diabetes.⁹⁴ Gestational diabetes is associated with increased health risks for the baby, including excessive weight gain, premature delivery, stillbirth, low blood glucose right after birth, and respiratory difficulties. Recent studies have linked intrauterine exposure to gestational diabetes to child adiposity and high blood pressure at age three years.⁹⁵ Long term, both the mother and child are at increased risk of developing type 2 diabetes later in life.

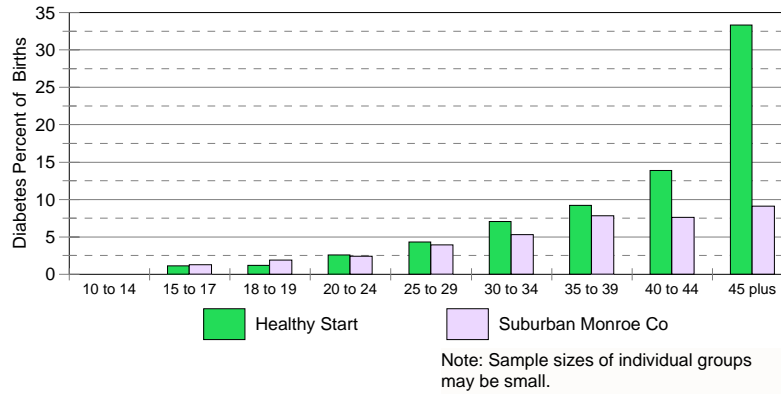
From 1998 to 2007 in the Healthy Start area and suburban Monroe County, the percent of births with gestational diabetes has increased from roughly 3% to 5%. As expected, the likelihood that a birth mother developed gestational diabetes increased significantly with age, particularly in the Healthy Start area. There did not appear to be a significant difference in the percent of birth mothers with gestational diabetes among racial/ethnic groups. Indeed, White birth mothers appeared to be slightly more likely to have the condition than African American and Latina mothers. Given that we know African American and Latina birth mothers are more likely to develop the disease than White birth mothers, this finding is somewhat surprising. It may indicate that more education on modifiable risk factors, such as pre-pregnancy weight status, diet and exercise, needs to increase for all women of childbearing age.

Births w/ Gestational Diabetes
1998-2007



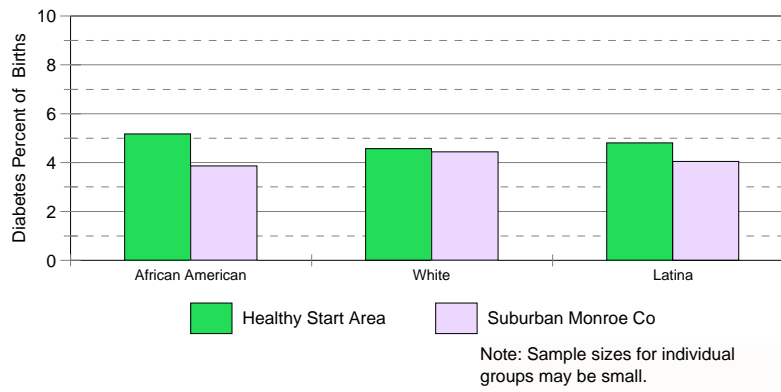
Data Source: Monroe County Department of Public Health, Birth files

Births w/ Gestational Diabetes by Mother's Age 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

Births with Gestational Diabetes by Mother's Race/Ethnicity 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

Births by Hypertension Related to Pregnancy

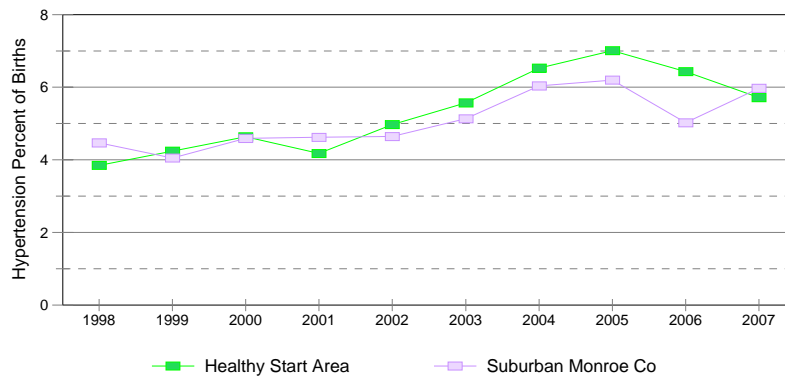
Hypertension is the most common medical problem related to pregnancy, affecting between 2% and 3% of cases.⁹⁶ New onset of hypertension related to pregnancy is diagnosed after 20 weeks' gestation. Severe hypertension during pregnancy is associated with fetal growth restriction, preeclampsia, premature birth, placental abruption, and stillbirth.⁹⁷ Preeclampsia^s, a disorder that only occurs during pregnancy and is characterized by high blood pressure and the presence of protein in the urine, affects 5% to 8% of all pregnancies, and typically emerges after 20 weeks' gestation.⁹⁸ If left untreated, preeclampsia develops into eclampsia. Women with eclampsia often have seizures. Eclampsia can cause coma and even death of the mother and baby and can occur before, during or after childbirth. Maternal risk factors for preeclampsia include a history of chronic high blood pressure prior to pregnancy, previous history of preeclampsia either in the mother or in a first-degree relative, maternal obesity prior to pregnancy, multiple births at pregnancy, of African American heritage, being younger than 18 or over than

^s Preeclampsia is also referred to as toxemia.

35, interpregnancy interval less than two years or more than ten years, and a history of diabetes or kidney disease.

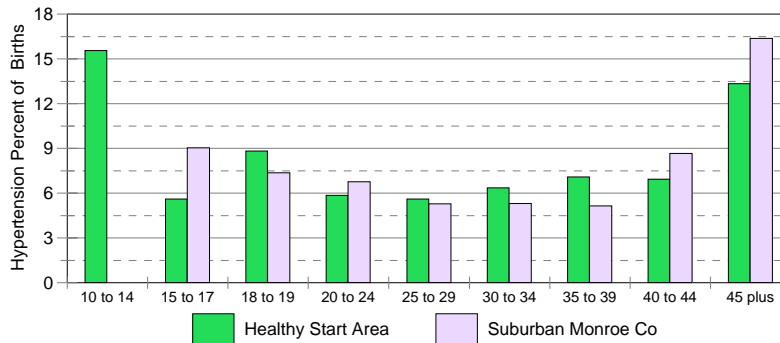
From 1998 to 2007, the percent of births with pregnancy-related hypertension increased from approximately 4% to 5%. It appears that there was a great increase in the percent of these births from 2002 to 2005, but that the percent has since decreased. As expected, the percent of births with pregnancy-related hypertension from 2005 to 2007 peaked among birth mothers 19 or younger and 35 or older. African American (8%) birth mothers were more likely to have pregnancy-related hypertension than either White (6%) or Latina (5%) birth mothers from 2005 to 2007.

Births w/ Pregnancy Rltd Hypertension
1998-2007



Data Source: Monroe County Department of Public Health, Birth files

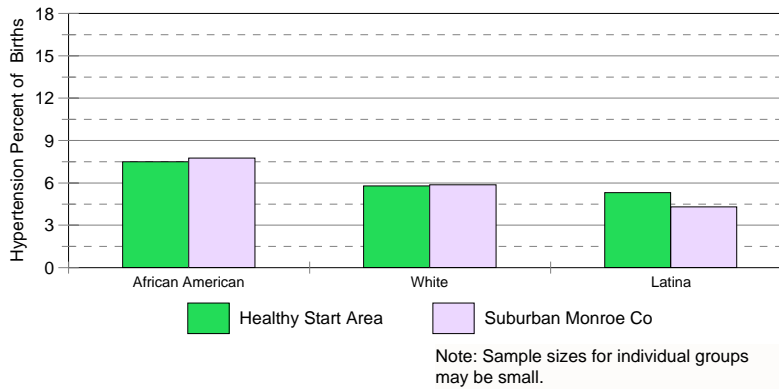
Births w/ Pregnancy Rltd Hypertension
by Mother's Age 2005 - 2007



Note: Sample sizes for individual groups may be small.

Data Source: Monroe County Department of Public Health, Birth files

Births w/ Pregnancy Rltd Hypertension by Mother's Race/Ethnicity 2005 - 2007



Data Source: Monroe County Department of Public Health, Birth files

Birth Outcomes

Births with Low Birth Weight

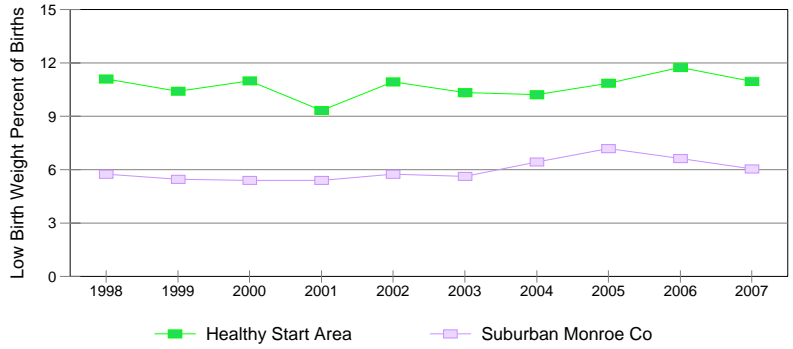
Low birth weight has been linked with respiratory problems, autism, attention deficit hyperactivity disorder, and other issues. The percent of births of low birth weight babies in the Healthy Start area remained at approximately 11% of births throughout the 1998-2007 time period. By contrast, in suburban Monroe County, approximately 6% of births were low birth weight during the same period.

In both the Healthy Start area and in suburban Monroe County, teen birth mothers were more likely to give birth to low weight babies than birth mothers in their twenties and thirties. While about 13% of births to teen mothers in the Healthy Start area were low birth weight, low birth weight babies accounted for about 10.5% of births to 20 – 39 year old birth mothers. Suburban birth mothers ages 20-39 were 40% less likely than those in the Healthy Start area to have low birth weight babies.

African American birth mothers living in the Healthy Start area were most likely to have low birth weight babies (over 14%). White and Latina birth mothers in suburban Monroe County were least likely to have low birth weight babies (6.5% of births). The difference between the proportion of White birth mothers in the Healthy Start area and White birth mothers in the suburbs having low birth weight babies was small – one percentage point.

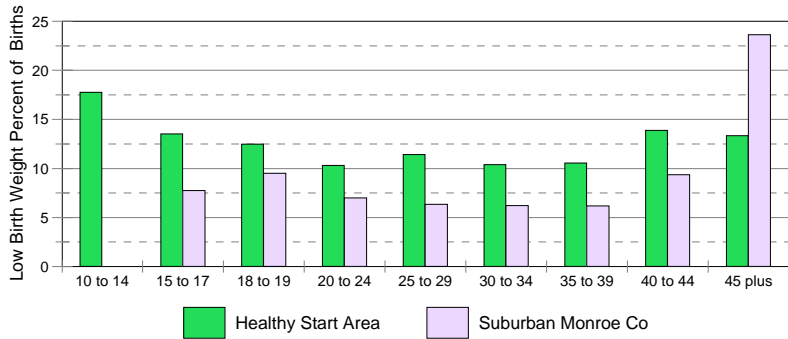
Birth mothers with a college degree living in the Healthy Start area had almost the same chance of having a low birth weight baby as a mother in suburban Monroe County. Most likely to have a low birth weight baby was a birth mother in the Healthy Start area with less than a high school education.

Births with Low Birth Weight 1998-2007



Low Birth Weight = Less than 2500 grams
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

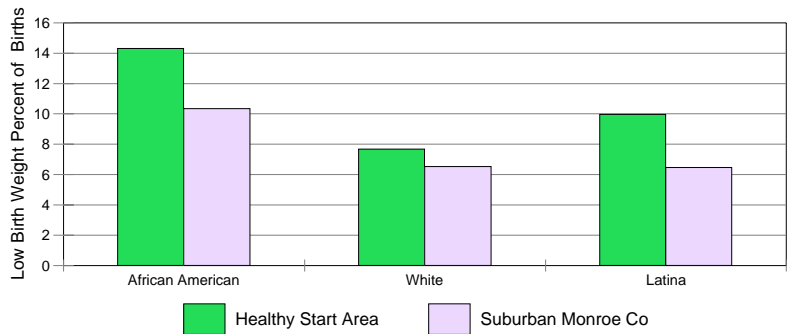
Births with Low Birth Weight by Mother's Age 2005 - 2007



Note: Sample sizes for individual groups may be small.

Low Birth Weight = less than 2500 grams
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

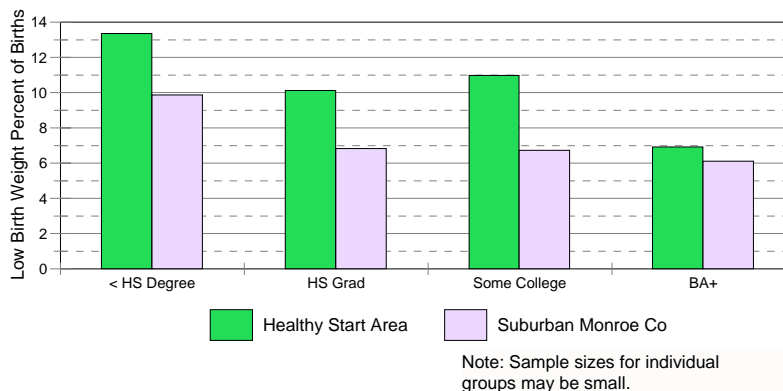
Births with Low Birth Weight by Mother's Race/Ethnicity 2005 - 2007



Note: Sample sizes for individual groups may be small.

Low Birth Weight = less than 2500 grams
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Births with Low Birth Weight by Mother's Education 2005 - 2007



Low Birth Weight = less than 2500 grams
Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Pre-term Births

Pre-term births, defined as occurring before 37 weeks of gestation, accounted for 12.7%, or 1 in 8, of all births in the U.S. in 2007.⁹⁹ Pre-term infants are at greater risk for complications, including respiratory disorders, apnea and bradycardia, infection, and jaundice.¹⁰⁰ Furthermore, pre-term birth is the greatest risk factor for infant mortality. In the U.S. in 2005, pre-term-related deaths accounted for more than one-third of all deaths during the first year of life, and more infants died from pre-term causes than from any other cause.¹⁰¹ Nationally, the highest rates of pre-term birth are for African American women.¹⁰² Racial/ethnic disparities in pre-term deliveries have not been found to be fully explained by differences in socioeconomic conditions or maternal behaviors.

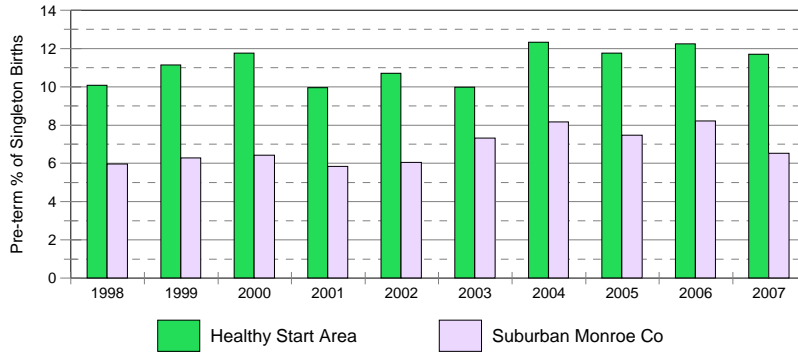
From 1998 to 2007, the percent of pre-term singleton births was consistently higher in the Healthy Start area than in suburban Monroe County. There was an increase in the percent of pre-term births during this period in both study areas, although there appears to be a slight decline since 2006.

Maternal age is a known risk factor for pre-term birth. The risk is highest for birth mothers ages 15 or younger and 40 years or older.¹⁰³ From 2005 to 2007, the percent of pre-term singleton births in both the Healthy Start area and suburban Monroe County was highest at either extreme of the childbearing age spectrum.

Part of the reason for the higher percent of pre-term births in the Healthy Start area may be due to the high percent of African American birth mothers in that area compared to suburban Monroe County. Nearly 15% of singleton pre-term births were born to African American women living in the Healthy Start area. Nonetheless, the percent of pre-term births for White women was approximately 5% higher among Healthy Start area residents than in their suburban Monroe County counterparts, indicating that race/ethnicity alone does not influence this outcome. Adequacy of prenatal care mitigated the likelihood that women in all racial/ethnic groups had a pre-term birth.

Interestingly, level of educational attainment was inversely related to the likelihood of a pre-term birth from 2005 to 2007. This suggests that higher socioeconomic status may be a protective factor against premature delivery.

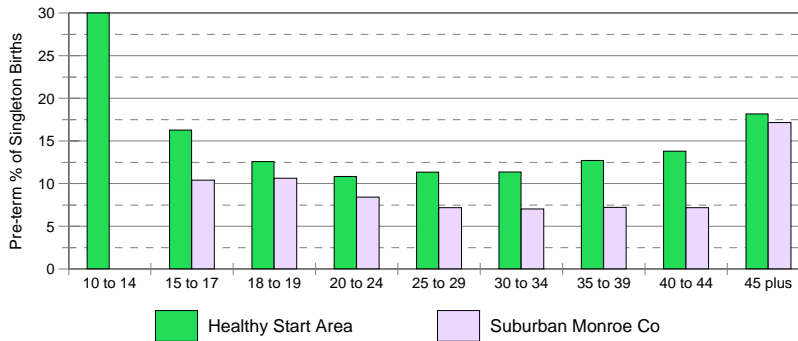
Pre-term Singleton Births 1998-2007



Pre-term is less than 37 weeks gestation; calculation exclude births with unknown gestation
 Data Source: Monroe County Department of Public Health and NYS Department of Health, Birth files

Pre-Term Singleton Births

by Mother's Age 2005 - 2007

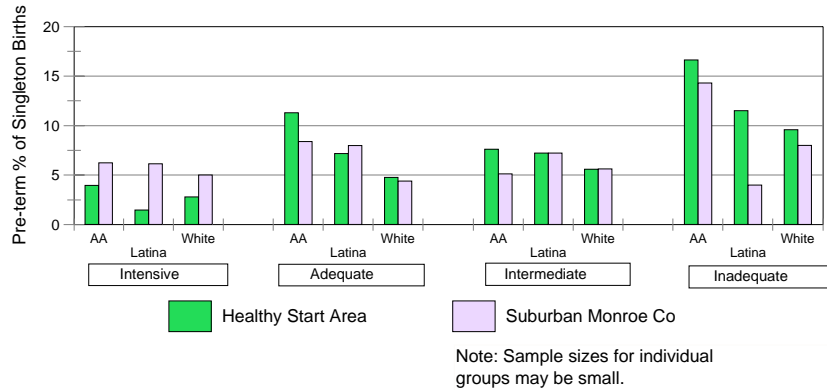


Note: Sample sizes for individual groups may be small.

Pre-term births are <37 weeks gestation; calculation exclude births with unknown gestation
 Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Pre-term Singleton Births 2005-2007

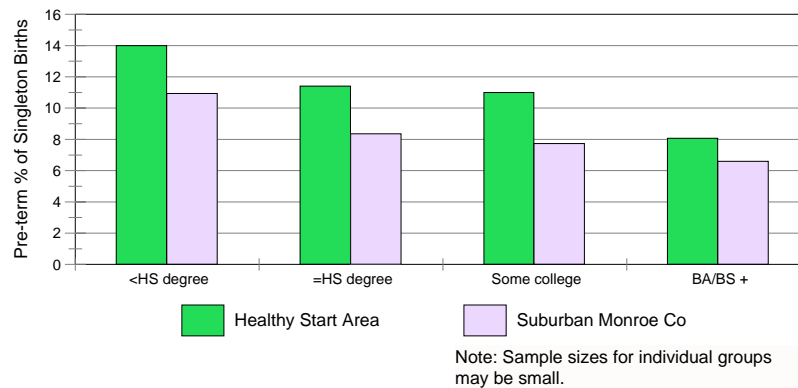
Adequacy of PNC Utilization



Pre-term is <37 weeks gestation; calculation exclude births with unknown gestation;
 AA = African American
 Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Pre-term Singleton Births

by Mother's Education 2005 - 2007



Pre-term is <37 weeks gestation; calculation exclude births with unknown gestation
 Data Source: Monroe County Department of Public Health (MCDPH), Vital Records

Births with NICU Use Indicated on Birth Certificate

From 2005 to 2007, approximately 13% of Healthy Start area births required a stay in the neonatal intensive care unit (NICU), compared to 10% of suburban Monroe County births.

During this period, maternal age was somewhat related to likelihood of NICU use, particularly among Healthy Start area babies. The percent of births that required a stay in the NICU increased with maternal age after the ages of 25 and 29. We note, however, that these represent a small number of births because Healthy Start area birth mothers tend to be younger. There was less of a consistent pattern among suburban Monroe County births, although there was an increase in NICU use after the ages of 35 and 39.

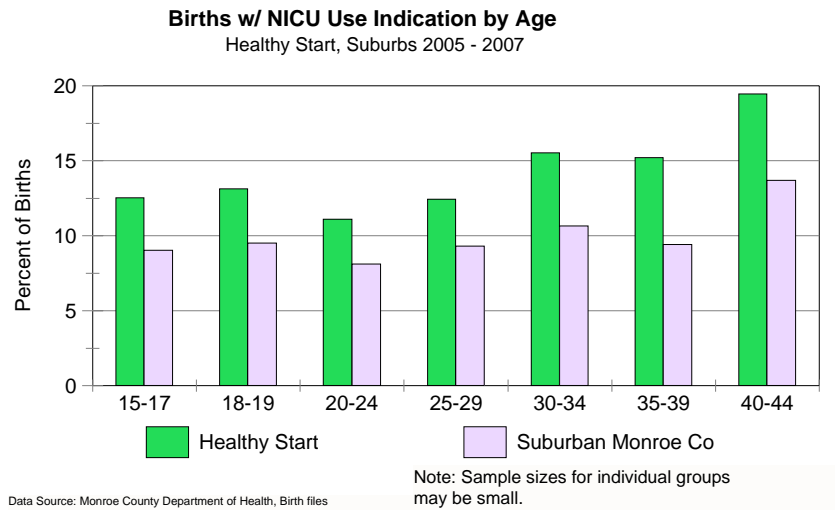
Overall, from 2005 to 2007, nearly 14% of Latina and African American Healthy Start birth mothers had babies who needed to stay in the NICU, compared to 11% of White birth mothers. Nearly 10% of White suburban birth mothers' babies stayed in the NICU following delivery.

There was not a clear relationship between maternal level of educational attainment and likelihood of a NICU indication on the birth certificate.

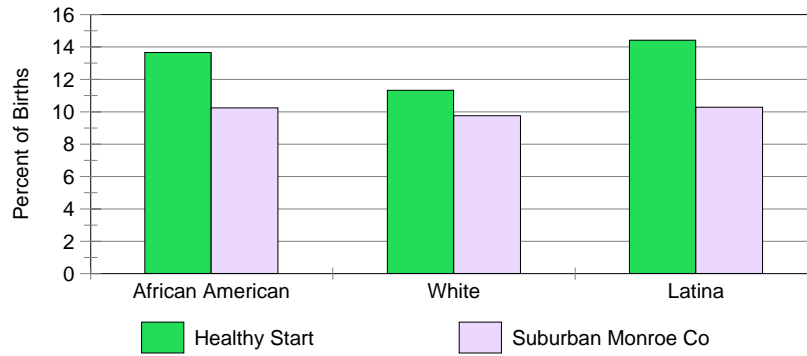
Among birth mothers for whom the level of adequacy of prenatal care utilization (APNCU) was known from 2005 to 2007, those who had intensive prenatal care utilization were the most likely to have infants who required a stay in the NICU. However, there was very little difference between those who had inadequate, adequate, and intermediate prenatal care utilization.

From 2005 to 2007, among birth mothers for whom tobacco, alcohol, or illegal drug use was recorded on the birth certificate, approximately 35% of births to Healthy Start area birth mothers who used tobacco required care in the NICU. Approximately 45% of births to suburban Monroe birth mothers who used tobacco required care in the NICU. Surprisingly, a lower percentage of births to mothers who used alcohol or an illegal substance required a NICU stay. Latina birth mothers who smoked were more likely to have a birth that required NICU care than African American or White birth mothers.

Maternal weight gain was not directly related to likelihood of NICU care, as birth mothers who gained the recommended amount of weight were more likely to have their baby sent to the NICU. Infant weight and gestation, however, were predictably related to NICU use. Very low birth weight and pre-term birth were highly associated with NICU use.



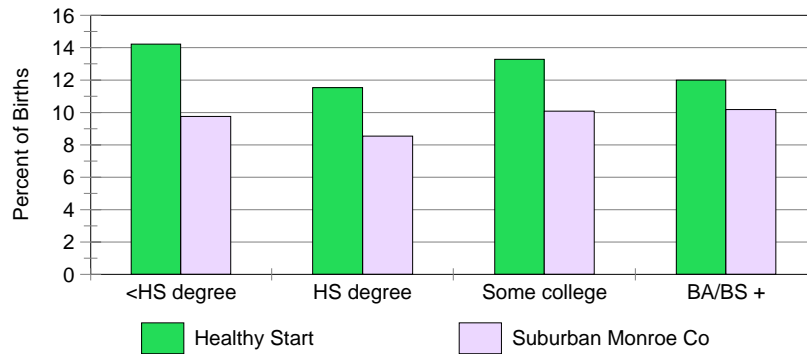
Births w/ NICU Indication by Race/Ethn
Healthy Start, Suburbs 2005 - 2007



Data Source: Monroe County Department of Health, Birth files

Note: Sample sizes for individual groups may be small.

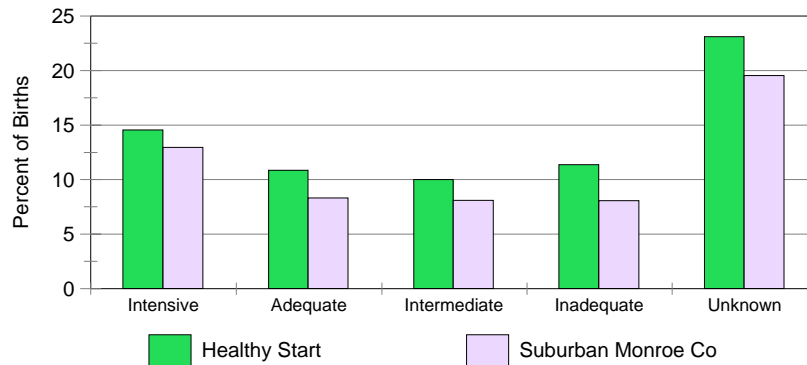
Births w/ NICU Indication by Education
Healthy Start, Suburbs 2005 - 2007



Data Source: Monroe County Department of Health, Birth files

Note: Sample sizes for individual groups may be small.

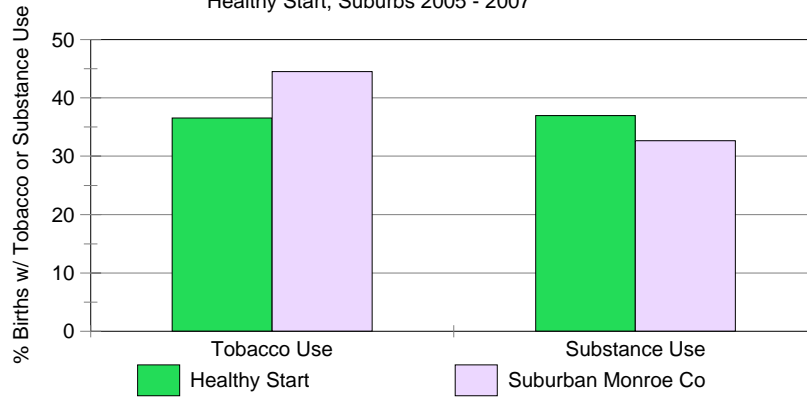
Births w/ NICU Indication by APNCU
Healthy Start, Suburbs 2005 - 2007



Data Source: Monroe County Department of Health, Birth files

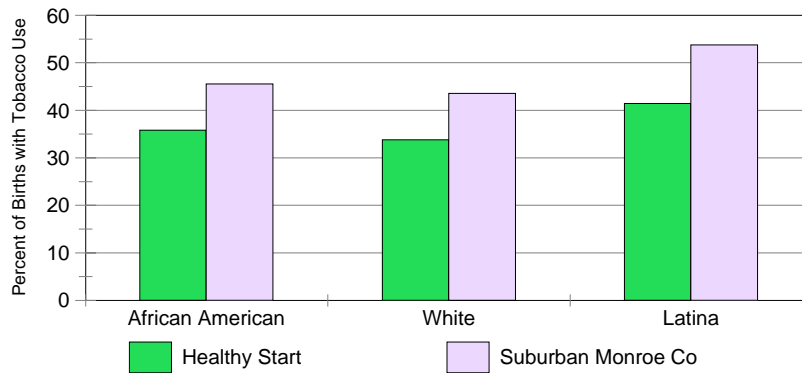
Note: Sample sizes for individual groups may be small.

Births w/ NICU Indication by Drug Use*
Healthy Start, Suburbs 2005 - 2007



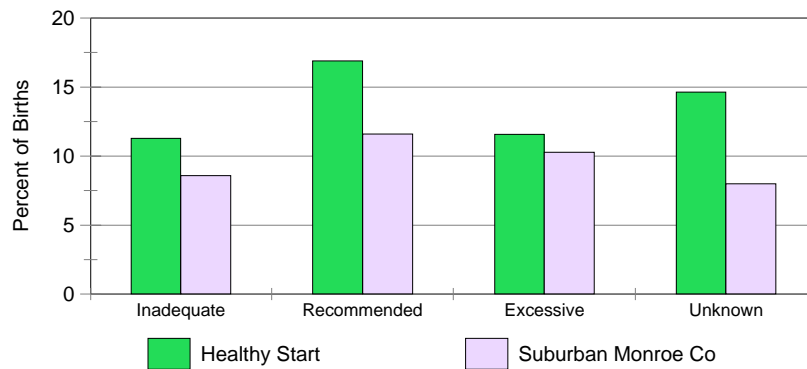
*Includes tobacco, alcohol, and/or illegal substance use
Data Source: Monroe County Department of Health, Birth files
Note: Sample sizes for individual groups may be small.

Births w/ NICU Indication
Tobacco by Race/Ethn 2005 - 2007



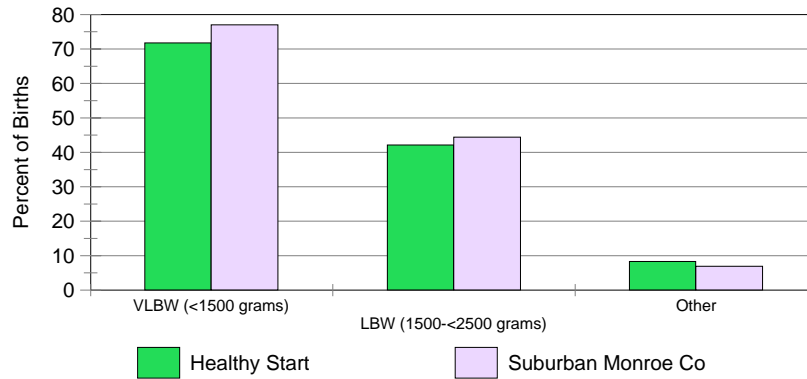
Data Source: Monroe County Department of Health, Birth files
Note: Sample sizes for individual groups may be small.

Births w/ NICU Indication
Maternal Weight Gain, 2005 - 2007



Data Source: Monroe County Department of Health, Birth files
Note: Sample sizes for individual groups may be small.

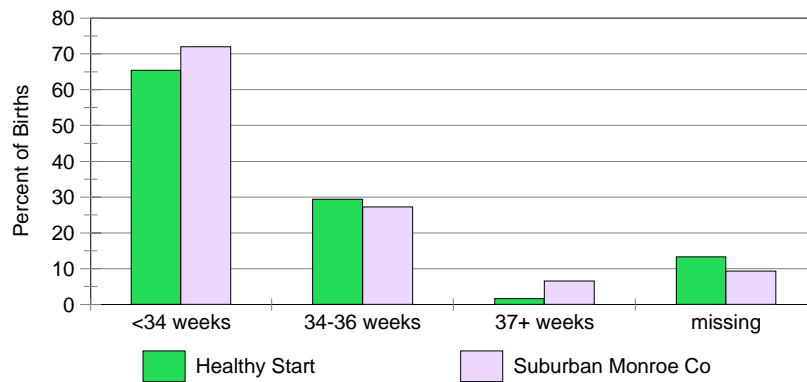
Births w/ NICU Indication by LBW
Healthy Start, Suburbs 2005 - 2007



Data Source: Monroe County Department of Health, Birth files

Note: Sample sizes for individual groups may be small.

Births w/ NICU Indication by Gestation
Healthy Start, Suburbs 2005 - 2007



Data Source: Monroe County Department of Health, Birth files

Note: Sample sizes for individual groups may be small.

Matched Infant Birth & Mortality Data

The matched birth/infant death file for 2005 to 2007 provided by the Monroe County Department of Public Health permits the analysis of infant mortality by characteristics that are available on the birth certificate, such as maternal demographic characteristics, birth weight, and prenatal care participation. To create this file, each death certificate for an infant (under one year of age) is matched to his/her certificate of live birth based on the baby’s residence at birth.

On virtually every metric observed, the infant death rate per 1,000 births from 2005 to 2007 is higher in the Healthy Start area than in suburban Monroe County. In the Healthy Start area, the overall infant death rate is 13.0 per 1,000 births, compared to 4.1 per 1,000 births in suburban Monroe County and 7.4 per 1,000 births for Monroe County as a whole.

The maternal demographic characteristics that were associated with a higher infant mortality rates include:

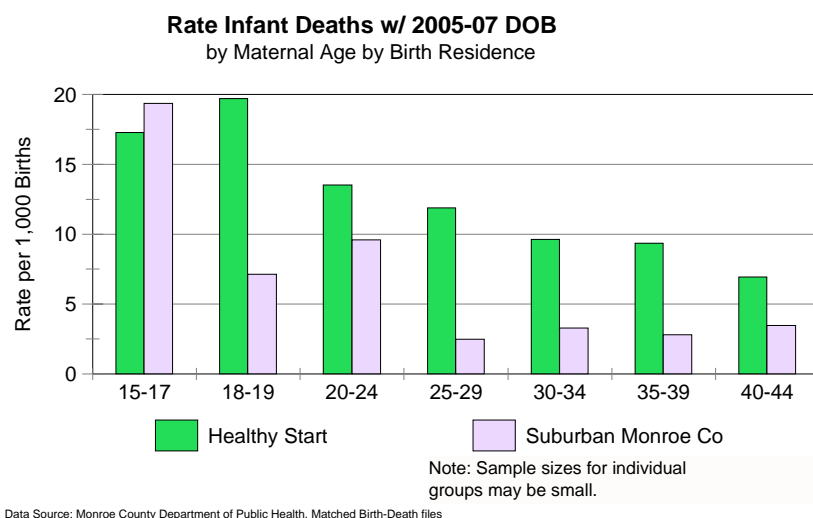
- Age: Younger birth mothers (24 years or younger) were more likely to lose their babies than older birth mothers.
- Race/ethnicity: African American birth mothers had a higher infant mortality rate than Latino or White births.
- Level of educational attainment: Birth mothers with less education were more likely to experience an infant death than those with more education.

The maternal perinatal behaviors that were associated with higher infant mortality rates include:

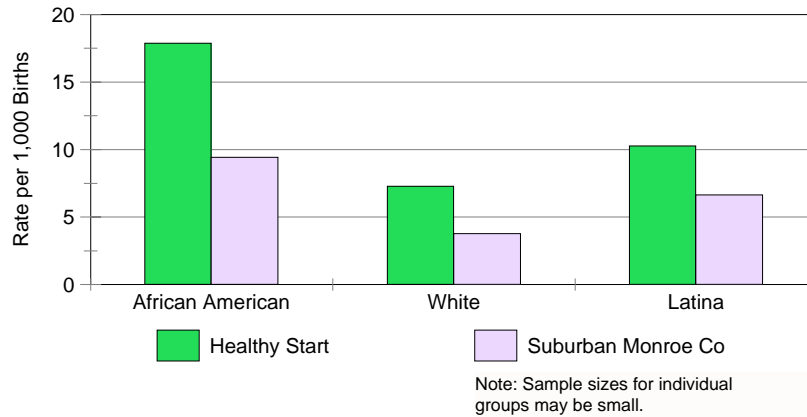
- Tobacco use: Particularly among Latinas in the Healthy Start area, tobacco use was associated with increased risk of infant mortality.
- Weight gain: Inadequate maternal weight gain during pregnancy had a higher infant mortality rate – particularly in the Healthy Start area – than recommended or excessive weight gain. Recalling earlier data, inadequate weight gain is more likely to occur for African American and younger birth mothers than White or older birth mothers.
- No prenatal care: This was associated with higher infant mortality rate.

The birth outcomes that were associated with higher infant mortality rates include:

- Very low birth weight (<1,500 grams): This factor was the most highly associated with infant mortality in both study areas.
- Gestation: Pre-term labor at less than 34 weeks was highly associated with infant mortality – but the Healthy Start area rate is roughly twice as high as that of suburban Monroe County.
- NICU stay: Among infants who spent time in the NICU, the mortality rate was higher among Healthy Start area births.

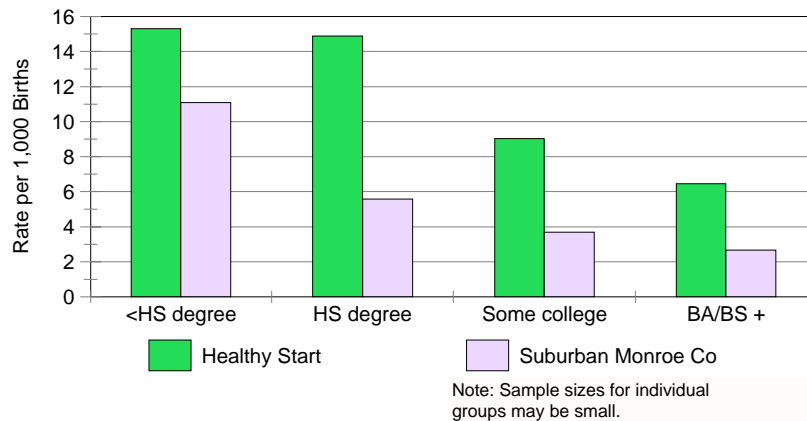


Rate Infant Deaths w/ 2005-07 DOB
by R/E by Residence at Time of Birth



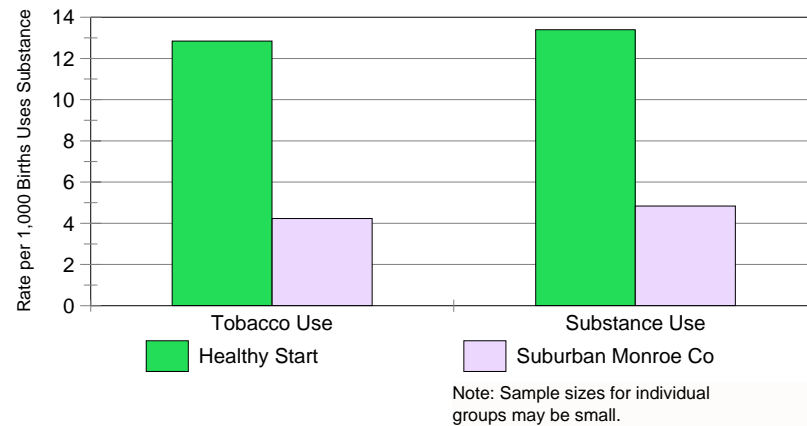
Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Rate Infant Deaths w/ 2005-07 DOB
by Educ. by Residence at Time of Birth



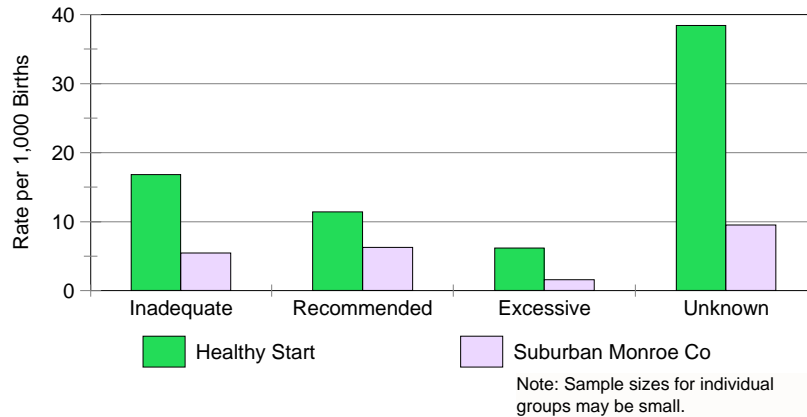
Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Rate Infant Deaths w/ 2005-07 DOB
by Substance Use, Residence at birth



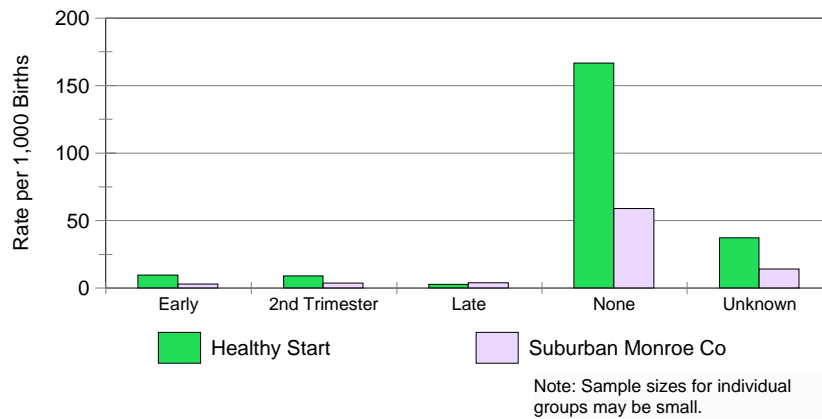
Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Rate Infant Deaths w/ 2005-07 DOB
by Mat. Weight Gain, Birth Residence



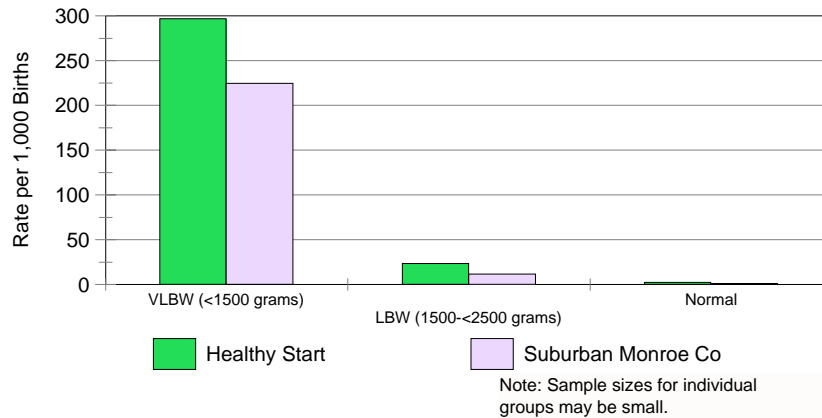
Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Rate Infant Deaths w/ 2005-07 DOB
by Timing PNC by Residence at Birth



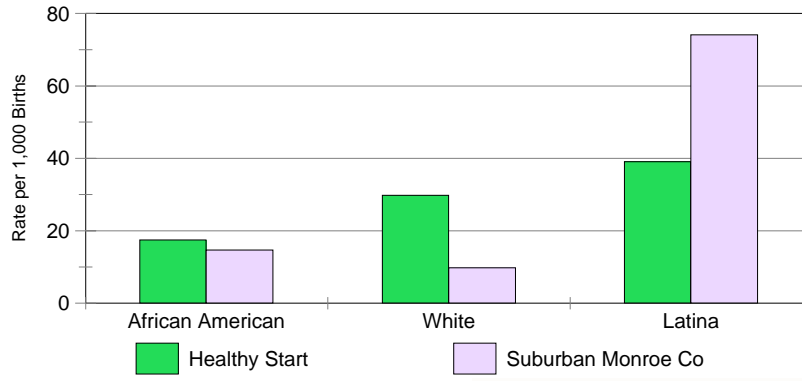
Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Rate Infant Deaths w/ 2005-07 DOB
by Birth Weight by Residence at Birth



Data Source: Monroe County Department of Public Health, Matched Birth-Death files

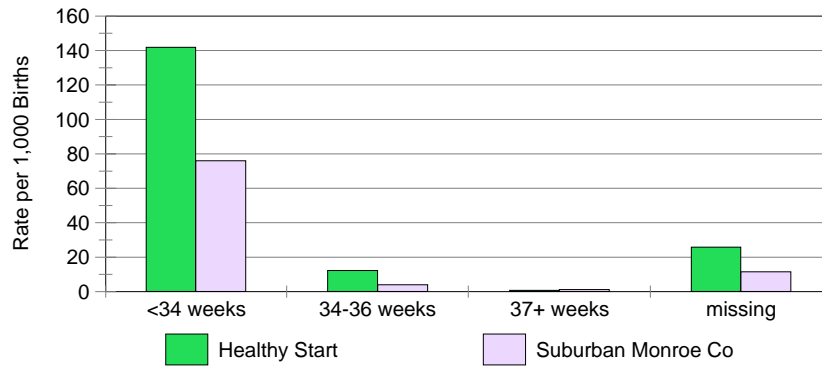
Rate Infant Deaths w/ 2005-07 DOB
by 1500-<2500g & Race, Birth Residence



Note: Sample sizes for individual groups may be small.

Data Source: Monroe County Department of Public Health, Matched Birth-Death files

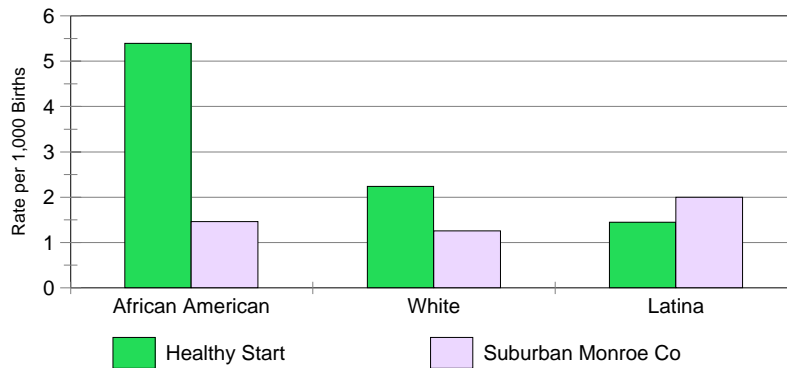
Rate Infant Deaths w/ 2005-07 DOB
by Gestation, by Residence at Birth



Note: Sample sizes for individual groups may be small.

Data Source: Monroe County Department of Public Health, Matched Birth-Death files

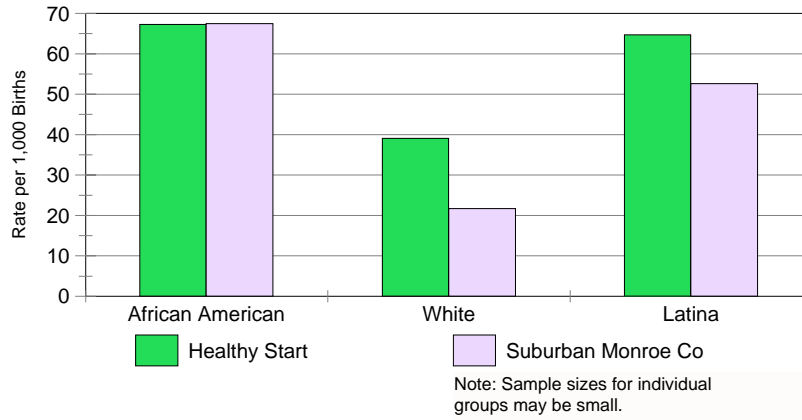
Rate Infant Deaths w/ 2005-07 DOB
+37 Weeks & Race, Birth Residence



Note: Sample sizes for individual groups may be small.

Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Rate Infant Deaths w/ 2005-07 DOB
<37 Weeks & Race, Birth Residence



Data Source: Monroe County Department of Public Health, Matched Birth-Death files

Appendix

Data Sources

Demographic & Socioeconomic Factors

- 2000 Census of Population and Housing, U.S. Dept of Commerce, Census Bureau
- 2005-2007 American Community Survey, U.S. Dept of Commerce, Census Bureau
- 2008 Nielsen Claritas Demographic Update (purchased)
- U.S. Department of Agriculture, Center for Nutrition Policy and Promotion
- New York State Office of Temporary and Disability Assistance

Incarceration Statistics

- Monroe County Sheriff's Department
- New York State Department of Correctional Services

Health Indicators & Behaviors

- Monroe County Department of Public Health
- 2006 Monroe County Adult Health Survey, Monroe County Department of Public Health
- 2004-2008 Children's Institute Parent Appraisal of Children's Experiences (PACE) Survey

Health System Access & Utilization

- New York Statewide Planning and Research Cooperative System (SPARCS) Hospitalization and Emergency Department files, New York State Department of Health
- 2007 Medicaid Adjudicated Claims, analyzed by Coordinated Care Services, Inc.
- Claims data, Monroe Plan for Medical Care

Pregnancies & Birth Outcomes

- 1998-2003 Vital Records, New York State Department of Health
- 2004-2007 Vital Records, Monroe County Department of Public Health

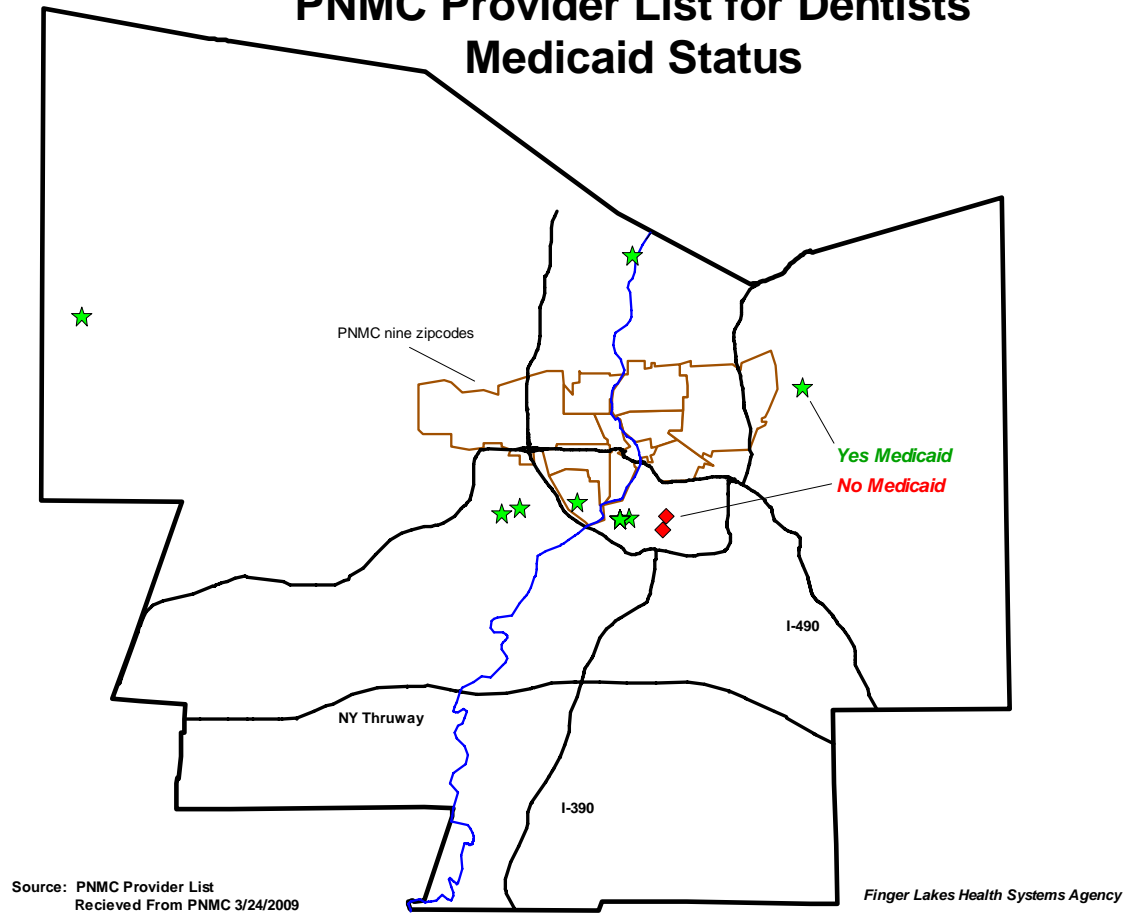
Maps & Inventories

- Inventory of Parks and Recreation sites, Greater Rochester Health Foundation
- Rochester Police Department
- Blue Cross Blue Shield Excellus 2009 Provider List
- PNMC Provider Inventory

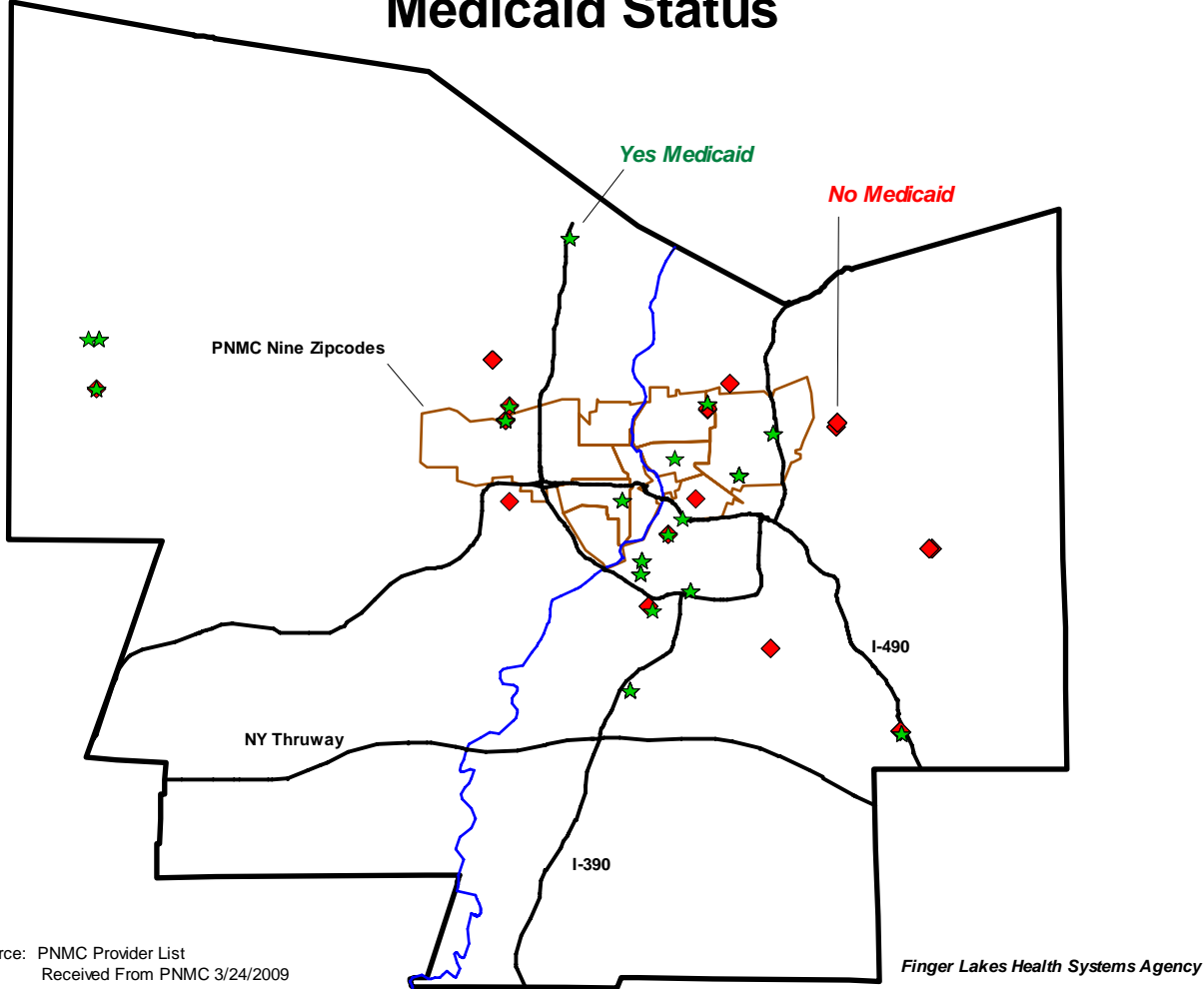
Provider Inventory Maps

As part of this project, FLHSA generated maps from the PNMC provider inventory of dentists and OB-GYNs that take Medicaid. In addition, FLHSA also conducted an inventory of mental health providers in Monroe County that take Medicaid.

Monroe County PNMC Provider List for Dentists Medicaid Status



Monroe County PNMC Provider List for OB/GYN Medicaid Status



The Mental Health Providers Inventory – Summary

Based on existent databases and telephone survey, FLHSA conducted an inventory of mental health providers[†] in Monroe County. The purpose of the inventory was to identify providers that accept Medicaid, a potential barrier to access. The target audience of the inventory is the Healthy Start area female population of childbearing age. The results show that while most providers take Medicaid HMO options, very few practitioners outside of large clinics take straight (fee-for-service) Medicaid. The inventory was used to generate a map of Rochester and the surrounding areas showing the location of the different mental health providers. Although the large size of our database and the full map of Rochester would lead us to believe that there are abundant mental health services available to Healthy Start area residents, a close up shows that parts of the city are lacking in these resources. Specifically, the Healthy Start area zip codes have very few mental health providers on the whole, with certain zip codes having as few as one provider. Most chemical dependency and mental health services in the city are concentrated in the southwest quadrant.

Methods

The initial database of mental health providers came from the January 2009 Rochester-based Excellus Health Plan (Excellus) provider list. Excellus is the largest non-for-profit insurer in New York State and the largest insurer in Rochester. FLHSA used this list to initiate the inventory because the aim was to identify mental health providers who accepted Medicaid, and the provider list helped narrow the universe down to providers who accepted third-party billings.

The Excellus list contained information such providers' name, specialty, address, phone number and full/part time status. FLHSA began with the zip codes in the Health Start area (14605, 14606, 14607, 14608, 14609, 14611, 14613, 14619, and 14621) since these would be the most geographically accessible providers for women living in the Healthy Start area. Through internet searches, FLHSA identified some basic information regarding whether the provider was in a private or group practice, as well as identified other providers that were not on the original list. We then placed phone calls and left messages when needed for these providers regarding our goal to create an inventory of mental health providers in Monroe County. In addition to confirming the provider's name, address and phone number, FLHSA asked the following questions:

- 1) Do they accept Medicaid?
- 2) Do they have a sliding fee scale?
- 3) Are they accepting new patients?
- 4) Are they accepting new patients with Medicaid?
- 5) What is the wait time for new patients?

This was an iterative process, which led to the addition of questions regarding the provider's practice schedule and full/part time status.

[†] The mental health providers in this inventory include psychiatrists, clinical psychologists, and licensed clinical social workers.

After exhausting the Healthy Start area zip codes, FLHSA called providers from the remaining parts of the city of Rochester (zip codes 14604, 14610, 14614, 14620, 14624, 14627, 14642) using the same procedure. In addition to calling individual providers, FLSHA identified hospital systems and spoke with practice managers to obtain practice level information.

Another level of this project implemented the Management Account Reporting System (MARS) quarterly report, a list of providers who billed for Medicaid in 2008. FLHSA was able to ascertain Medicaid insurance information on some of the remaining providers whom we were not able to make contact with by merging the Excellus file with the MARS report. The final database contains information on all the individual providers that FLHSA was able to contact as well as practice level data on the hospital systems and other group practices. The merged database was used to create maps showing the distribution of mental health providers in Monroe County as well as whether they accept Medicaid, Medicaid option plans or no Medicaid at all.

Results

Mental Health Services

Each of Rochester's three hospital systems has associated outpatient mental health clinics. All clinics connected with the hospitals accept both straight Medicaid and Medicaid options and have sliding fee scales. Many, but not all, of the clinics have evening hours.^u Clinics often have long wait times for new patients, usually in the range of a few weeks. The database has each major clinic listed on its own line, with the clinic's name in the "Last Name" field. The database also contains information on some of the individual practitioners who work at the clinics.

The Unity Health System has three locations with outpatient adult mental health services:

- 835 West Main Street
Rochester, NY 14611
(586) 368-6550
- Evelyn Brandon Health Center
81 Lake Avenue
Rochester, NY 14608
(585) 368-6900
- 100 Pinewild Drive
Suite 2A
Rochester, NY 14606
(585) 368-6700

^u We defined "evening hours" to mean patients are seen until at least 6 pm.

The Rochester General/ ViaHealth Health System has two locations for outpatient adult mental health services:

- Rochester Mental Health Center
490 East Ridge Road
Rochester, New York 14621
(585) 922-2500
- Genesee Mental Health Center
Alexander Place
224 Alexander Street
Rochester, NY 14607
(585) 922-7799

The University of Rochester Strong Behavioral Health has six clinics for various types of mental health services:

- Adult Ambulatory Services
300 Crittenden Blvd
Rochester, NY 14642
(585) 275-3535
- Child & Adolescent Outpatient Services
315 Science Parkway
Rochester, NY 14620
(585) 279-7800
- Lazos Fuertes: Health Care for Latino Families
817 E. Main St.
Rochester, NY 14605
(585) 244-6643
- Strong Recovery Addiction Psychiatry Program
Ground Floor G-9054
300 Crittenden Blvd.
Rochester, NY 14642
(585) 275 -3161
- Strong Ties
2613 West Henrietta Rd.
Rochester, NY 14623
(585) 249-4900

- Partial Hospital Services – Adults
315 Science Parkway
Suite 300 – Building B
Rochester, NY 14620
(585) 279-7850

In addition to the above clinics, another major provider of mental health services to individuals with straight Medicaid is Catholic Family Center. There are two outpatient mental health programs at Catholic Family Center, the Adult Mental Health clinic, which takes straight Medicaid, and the Counseling Program, which takes only HMO options. Both programs have a sliding fee scale. Currently, the wait time at the Adult Mental Health Clinic is approximately two weeks, and its locations are as follows:

- 87 N. Clinton Avenue
Rochester, NY 14604
(585) 262-7149
- 55 Troupe Street
Rochester, NY 14608
(585) 262-7149

In Monroe County, there are many licensed clinical social workers and psychologists, and a smaller number of psychiatrists, who work in individual or small group practices. While most accept Medicaid options, very few take straight Medicaid. Of those FLHSA reached, approximately half have at least some evening or weekend hours. The wait times for new patients are generally shorter than at clinics, with many practitioners reporting a wait time of about one week. However, a significant number of these providers are currently not accepting any new patients.

Outpatient Chemical Dependency Services

Our information about outpatient chemical dependency services is based primarily from the Excellus provider directory. Overall, we found 13 organizations with outpatient chemical dependency services in Monroe County, some of which have multiple locations. Some are free-standing programs and others are connected to larger institutions such as hospitals. Almost all accept Medicaid. In addition to these centers, a few private practitioners provide both mental health and substance abuse services; these individuals generally take Medicaid HMO options but not straight Medicaid.

Limitations

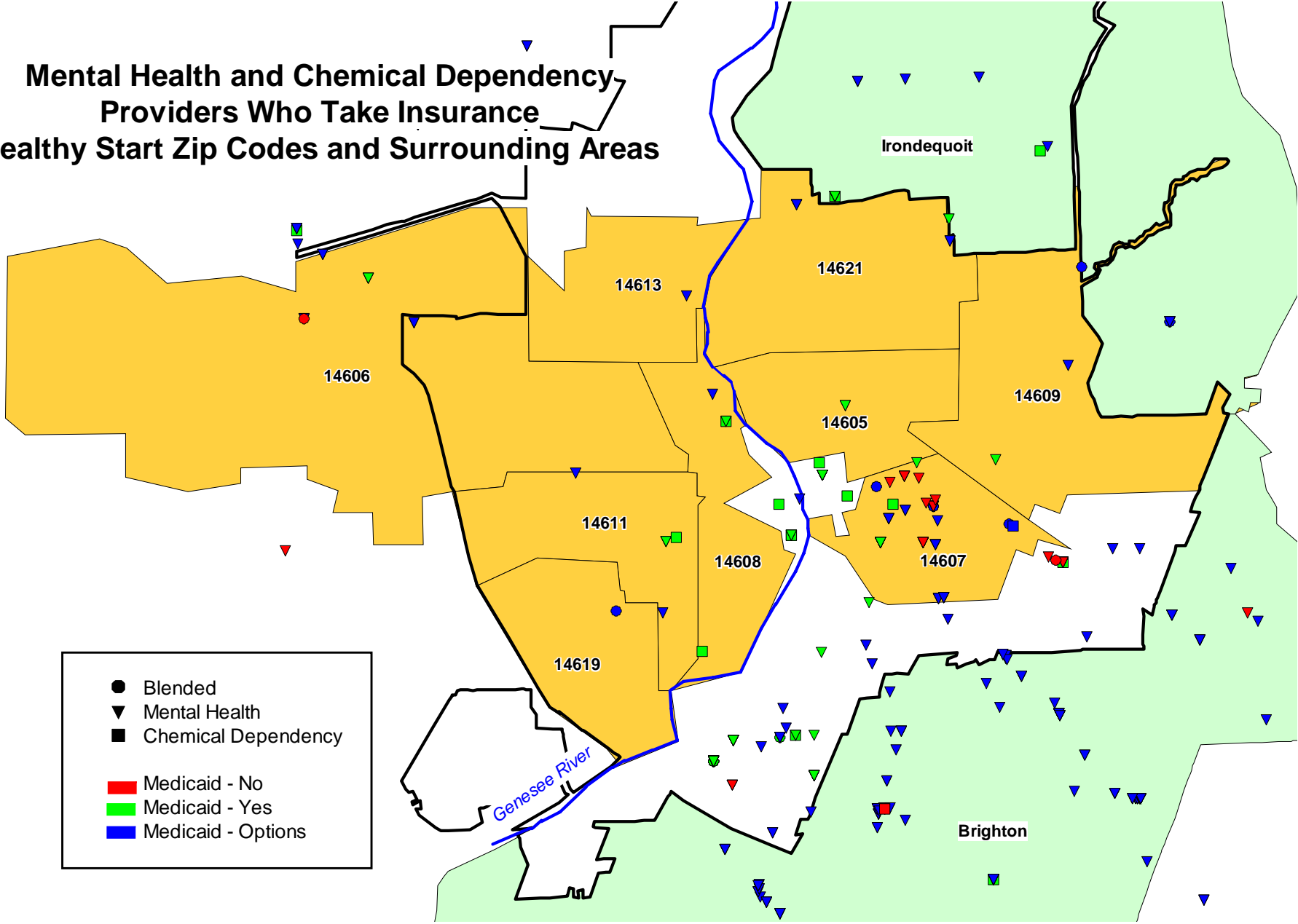
Because of a number of limitations, this database cannot be thought of as an exhaustive list of all Medicaid mental health providers in Monroe County who serve the specified age group. The inventory does not include other types of professionals such as psychiatric nurse practitioners, and it does not include of the pediatric outpatient mental health clinics. Because we based our search on the Excellus January 2009 provider list, we have not included providers who do not accept any insurance or only accept insurance other than Excellus. However, since Excellus is the largest insurer in the Rochester region, it is

unlikely that we are missing many Medicaid providers by utilizing this list for the inventory.

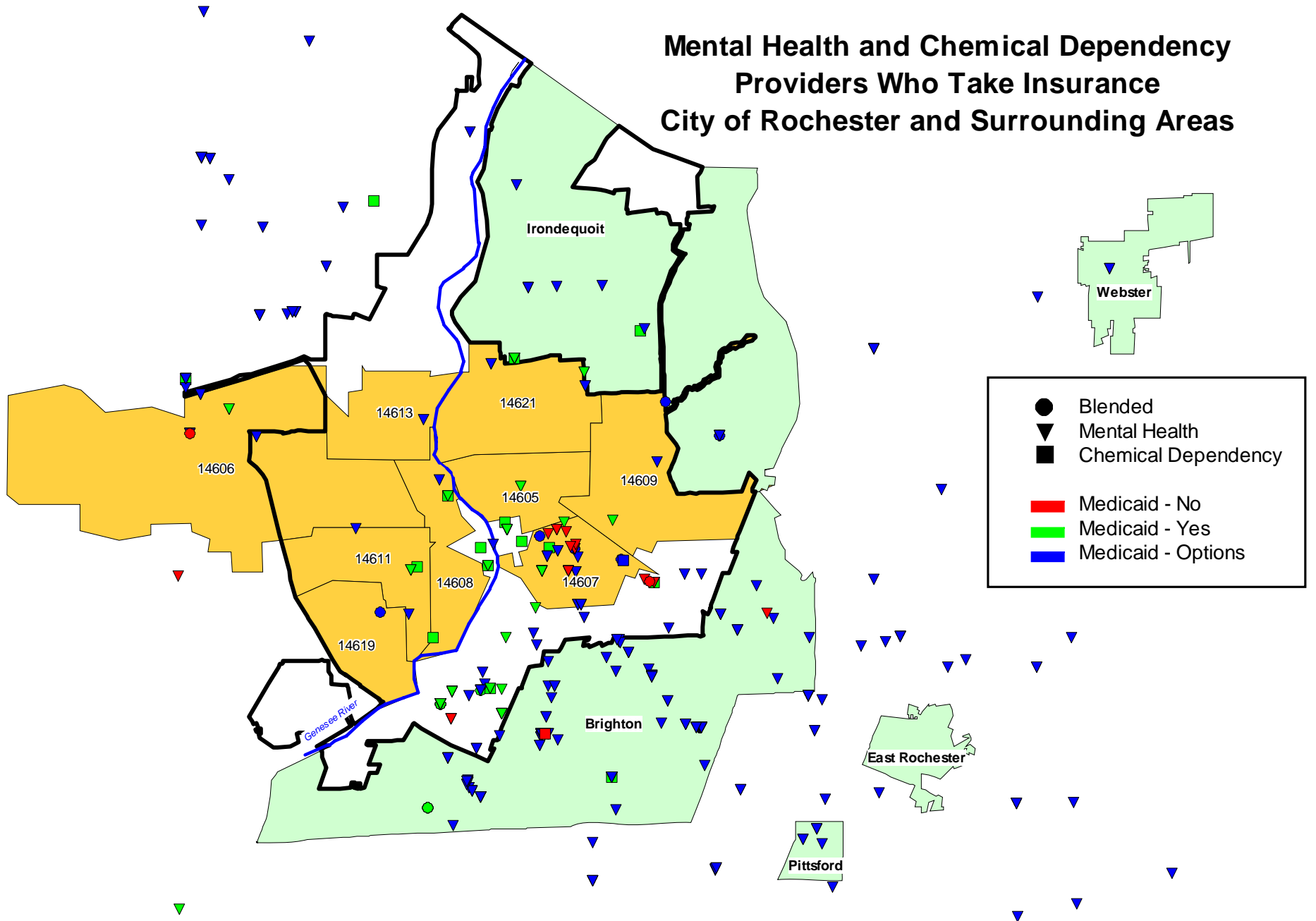
Providers whose addresses lie beyond the city limits were not contacted by phone because these were considered to be less likely to be sought out by women living in the Healthy Start area. Within the city of Rochester, FLHSA was able to reach most of the large clinics. However, there are still a number of providers in the list who did not respond to our calls. For these providers, the information listed in the inventory is based on the Excellus and MARS databases, which could be inaccurate or out-of-date. For example, an address we have could be a billing address and not the location where the provider sees patients.

Even for providers FLHSA was able to contact, some inconsistencies exist. In some cases, FLHSA only was able to obtain answers to some of the questions, such as when we communicated with a clerical assistant instead of the provider him/herself. Also, while some of the clinics were willing to provide full lists of the names of their staff, others were not. However, FLHSA believes that this is not a critical limitation since new patients go through a central intake line for appointments and are often seen by the next available practitioner.

Mental Health and Chemical Dependency Providers Who Take Insurance Healthy Start Zip Codes and Surrounding Areas



Mental Health and Chemical Dependency Providers Who Take Insurance City of Rochester and Surrounding Areas



Endnotes

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