

Maternal and Perinatal Health in Western New York

Prepared for the Health Foundation for Western
and Central New York

August, 2012

Table of Contents

Introduction and Methodology.....	2
Demographic Characteristics.....	3
Perinatal Health Data.....	5
Perinatal Measures – A Closer Look	6
Teen Pregnancy Rates	
Teen Birth Rates	
Late or No Prenatal Care	
Low Birth Weight	
Infant Death Rate	
Concentration of Risk	14
Hot Spot Analysis	17
Conclusion	19
Appendix A – Census Data	20
Appendix B – Perinatal Data	27
Appendix C - Maps	39

Introduction & Methodology

The Health Foundation for Western and Central New York (HFWCNY) commissioned the Western New York Community Health Planning Institute (WNYCHPI), the planning arm of the P² Collaborative of Western New York, to replicate an analysis on maternal and child health performed for the Central New York area in 2010.

This analysis includes a scan of demographic characteristics and perinatal and maternal health outcomes within the eight counties of Western New York (WNY). Zip code data from the 2000 and 2010 U.S. Census Bureau¹ was analyzed to understand the demographic profile of the area with a focus on the following key indicators:

- total population
- number of births
- urban-rural classification
- percent of population five and younger
- percent of population eighteen and older
- percent of population sixty-five and older
- percent of population that speaks a foreign language at home
- average family size
- percent of families below poverty
- racial and ethnic composition
- educational levels
- employment status.

Perinatal Data (2007-2009 and 2008-2010) from the New York State Department of Health, Bureau of Biometrics and Health Statistics and New York City Mental Hygiene, Bureau of Vital Statistics,² was analyzed, which included the following health indicators:

- teen pregnancy rates
- teen birth rates
- late or no prenatal care
- low birth weight
- infant death rate.

The following report consists of merged Census and perinatal health data that analyzes demographic characteristics and perinatal health in WNY, identifying ZIP codes that are high risk for poor maternal and perinatal health outcomes and hot spots where the HFWCNY can focus its funding and efforts. The report is followed by appendices that contain detailed ZIP code level data and maps.

¹ U.S. Census Bureau; Census 2010, 2010 Demographic Profile SF; Census 2000 Summary File 3; generated by Amanda Scates-Preisinger; using American Fact Finder; <<http://factfinder2.census.gov>>; (1 June 2012).

² New York Department of Health; ZIP Code Perinatal Data Profile 2007-2009; ZIP Code Perinatal Data Profile 2008-2010; generated by Amanda Scates-Preisinger; using the Perinatal Data Profile; <<http://www.health.ny.gov/statistics/chac/perinatal/>>; (1 June 2012).

Demographic Characteristics

Western New York is comprised of eight counties that vary in population size from under 50,000 to almost 1,000,000 people. Erie and Niagara Counties, the most populous of all eight WNY Counties, contain the major urban area of Buffalo-Niagara Falls.

Table 1: County Populations

Allegany	48,946
Cattaraugus	80,317
Chautauqua	134,905
Erie	919,040
Genesee	60,079
Niagara	216,469
Orleans	42,883
Wyoming	42,155

The demographic characteristics in Table 2 provide an overview of the population living in WNY. Within this data set, the larger the standard deviation (how much variation exists from the average, or mean), the more a measure varies across ZIP codes. For example, the standard deviation of total population, 10,773.63, shows that the average population varies a great amount above and below the mean of 8,361 people per ZIP code. On the other hand, the mean of the population less than five years old is approximately 5.5 percent. Its standard deviation of 1.4 indicates that the average percentage of individuals less than five years does not vary dramatically between ZIP codes. When comparing Central New York demographics to WNY, WNY is slightly more populous, older, slightly more diverse, and has a higher percentage of families below the poverty level.

Table 2: Average Demographic Characteristics across ZIP³ Codes in Service Area

Variable	N	Mean	Std. Dev.	Minimum	Maximum	Central NY Comparison ⁴
Total Population	183	8361.43	10773.629	183	53555	7,504.46
Population less than 5 years old (%)	183	5.49	1.3622	0.5	13.5	6.00
Population more than 18 years old (%)	183	77.51	3.9494	56.8	97.4	73.61
Population more than 65 years old (%)	183	15.25	3.1388	2.9	26.8	12.82
White (%)	183	91.32	15.7511	16	99.8	94.00
Black (%)	183	6.07	14.3071	0	82.5	3.00

³ ZIP Code Tabulation Areas

⁴ Huang, Lee Ann & Bonnie Hart; Improving Services for Pregnant Women and Children 0-1 in Central New York State; Chapin Hall at the University of Chicago; April 2010

Variable	N	Mean	Std. Dev.	Minimum	Maximum	Central NY Comparison⁴
American Indian / Alaska Native (%)	183	1.89	4.7738	0	37.5	N/A
Asian (%)	183	1.15	1.7867	0	11.9	0.79
Other (%)	183	1.13	2.1272	0	18.3	2.21
Hispanic (%)	183	2.86	4.3336	0	37.2	1.41
Average Family Size	183	2.99	0.16378	2.56	4.37	3.07
% High School graduate or higher	182 ⁵	82.27	7.7786	40	96	82.94
% Bachelor's Degree or higher	182	17.64	10.2690	4	69.6	19.85
Speaks a foreign language at home (%)	182	5.61	4.9892	0	37.6	5.38
Participating in the labor force (%)	182	63.03	6.9411	19.1	76.1	64.91
Families below poverty level (%)	182	8.68	8.1328	0	67.6	7.58

⁵ Data not available for one of the ZIP Codes in Census 2000 Data

Perinatal Health Data

WNYCHPI analyzed demographic and perinatal health data across 182 ZIP codes in WNY. The following table provides a comparison perspective of perinatal health indicators between 2007-2009 and 2008-2010. Perinatal data from 2008-2010 became publicly available online midway through the analysis and was added to provide perspective on trends within WNY. Total births vary from just over 1,000 in Wyoming County to almost 30,000 in Erie County. Because of the vast differences in total births, changes in the number of low birth weight babies, for example, will dramatically impact the percentage of low birth weight in less populous ZIP codes. Furthermore, for reasons of confidentiality, teen pregnancy and birth numbers are suppressed in some ZIP codes within less populated areas.

WNYCHPI analyzed the five identified perinatal indicators defined below:

- Low Birth Weight: *Births weighing between 100-2499 grams.*
- Late or No Prenatal Care: *Prenatal care was initiated during the third trimester of pregnancy or not at all.*
- Infant Death Rate: *Infant deaths per 1,000 live births*
- Teen Birth Rate: *Births to females ages 15-19 per 1,000 female population ages 15-19*
- Teen Pregnancy Rate: *Pregnancies (births + abortions + spontaneous fetal deaths) to females ages 15-19 per 1,000 female population ages 15-19.*

Teen pregnancy rates and birth rates decreased significantly from 2007-2009 to 2008-2010 (Table 3), an improvement throughout all eight counties of WNY. The percentage of mothers with late or no prenatal care decreased or stayed the same in five counties and the infant death rate decreased in four. However, the percentage of low birth weight babies increased in five of the eight counties of WNY. Overall, maternal and perinatal health indicators showed improvement in WNY except for low birth weight babies, which increased from 8.57 percent to 8.78 percent.

Table 3: Comparison: 2007-2009 and 2008-2010

Years	County	Total Births	Low Birth Weight (%)	Late/No Prenatal Care (%)	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
2007-2009	Allegany	1648	7.3	4.2	4.2	23.2	30.9
2008-2010	Allegany	1607	7.4	4.6	2.5	20.1	26.6
2007-2009	Cattaraugus	3027	14.4	4.9	6.9	42.8	52.8
2008-2010	Cattaraugus	3020	14.8	4.2	4.6	38.2	47.3
2007-2009	Chautauqua	4208	9.8	6.3	7.4	35.7	48.7
2008-2010	Chautauqua	4092	10	6.4	8.6	32.8	44.5
2007-2009	Erie	29519	8.1	4	7.4	30	54.6
2008-2010	Erie	29234	8.1	4.0	7.7	26	47
2007-2009	Genesee	2029	6	2.3	5.9	30.3	46.7
2008-2010	Genesee	1966	6.3	2.4	5.6	25.2	36.9
2007-2009	Niagara	6795	7.8	3.5	6.8	30.8	54.3
2008-2010	Niagara	6764	8.1	3.4	5.9	27.3	46.5
2007-2009	Orleans	1268	8.2	3.6	5.5	30.8	46.6
2008-2010	Orleans	1256	7.5	3	6.4	28.3	39.3
2007-2009	Wyoming	1238	5.1	2.3	4.8	19.2	34.6
2008-2010	Wyoming	1205	5.1	2.1	5.8	16.8	28.3
2007-2009	8 Counties	49713	8.57	4.36	6.23	30.34	47.2
2008-2010	8 Counties	49120	8.78	4.15	6.11	26.74	41.62

Perinatal Measures – A Closer Look

These indicators were compared to national averages. Data analysts divided each indicator into quartiles and recorded the ZIP codes that fall within the highest quartile for 2007-2009 and 2008-2010 in Tables 4a – 4e below.

The top quartiles for teen birth rate, infant death rate, percentage of low birth weight, and percentage of late or no prenatal care in 2007-2009 are higher than the national averages, indicating that at least 25 percent of WNY performs poorly in comparison to national data. In 2008-2010 all perinatal measures improved except for the percentage of low birth weight babies. While these measures showed improvement, the highest quartiles for teen birth rates, late or no prenatal care, low birth weight, and infant death rate remain above the national average.

Teen Pregnancy Rates

Teen pregnancy rates improved in all eight counties and the average teen pregnancy rate across WNY is well below the national average (67.8/1000). ZIP codes with the lowest teen

pregnancy rates are located in Allegany County (14744, 14802, and 14803), Wyoming County (14145) and Erie County (14170, 14032).

Some ZIP codes had very high teen pregnancy rates. The 14209 ZIP code had a teen pregnancy rate of 153.7/1000 in 2007-2009 and 138.2/1000 in 2008-2010. 14219, a ZIP code just to the West of Gowanda, NY, in Cattaraugus County, had the highest teen pregnancy rate in 2007-2009 at 166.7/1000 and the fifth highest in 2008-2010 at 131.8/1000. Finally, Erie County's ZIP code 14203 had the highest teen pregnancy rate in 2008-2010 at 294.1/1000. This rate is almost two times the rate of the second highest rate in WNY. Overall, Erie County had the most ZIP codes with teen pregnancy rates above the national average and in the highest quartiles.

Teen Birth Rates

Teen birth rates improved in all eight counties of WNY from 2007 to 2010. Allegany County (14802, 14803), Erie County (14032), and Wyoming County (14145, 14591) all experienced zero teen births from 2007-1010. However, many ZIP codes in WNY still have higher teen birth rates than the national average of 34.3/1000. 14129, the ZIP code with the highest teen pregnancy rate in 2007-2009, also has the highest teen birth rate of 142.9/1000 and 108.5/1000 in 2007-2009 and 2008-2010 respectively. 14209 and 14207, ZIP codes in Erie County, also have teen birth rates over 100/1000. While Erie County had the highest proportion of ZIP codes with high teen pregnancy rates, Cattaraugus County has the highest proportion of ZIP codes with high teen birth rates.

Late or No Prenatal Care

The perinatal indicator for prenatal care improved slightly across WNY. The largest proportion of ZIP codes with zero percent of women receiving late or no prenatal care is located in Genesee and Wyoming Counties. However, some counties remained stagnant or showed an increase in the percentage of women who received late or no prenatal care. Nationally, 3.6 percent of women receive late or no prenatal care. More than half of the ZIP codes in Allegany, Cattaraugus, and Chautauqua Counties were higher than the national average. Forty-three percent and 28.6 percent of women in Cattaraugus County who live in the ZIP code 14726 received late or no prenatal care in 2007-2009 and 2008-2010 respectively. This was the poorest performing ZIP code followed by two ZIP codes in Chautauqua County, 14724 and 14767, at approximately seven times the national average.

Low Birth Weight

Low birth weight was the only indicator across all counties in WNY that did not improve from 2007-2010. The percentage of low birth weight babies decreased in Orleans County, but the percentage of low birth weight remained stagnant or increased in all other counties. The ZIP code with the highest percentage of women receiving late or no prenatal care, 14726 in Cattaraugus County, also had a very high percentage of low birth weight. With 73.8 percent of babies in 2007-2009 and 75.4 percent in 2008-2010, women in this ZIP code have low birth weight babies at almost ten times the national average of 8.2 percent. Nearly 50 percent of ZIP codes in Allegany, Cattaraugus, and Chautauqua Counties score above the national average for

low birth weight and in Cattaraugus County, more than 50 percent of ZIP codes measure in the highest quartile from 2008-2010. Finally, over 50 percent of ZIP codes in WNY are above the Healthy People 2020 Target of 7.8 percent⁶.

Infant Death Rate

The infant death rate increased in four counties and decreased in four. The four counties that saw a decrease in the infant death rate were Allegany, Cattaraugus, Genesee, and Niagara. The infant death rate is relatively low in the majority of ZIP Codes and almost two-thirds of Counties overall meet the Healthy People 2020 target of 6.0 infant deaths per 1,000 live births.

The four counties in WNY that saw an increase in the infant death rate were Chautauqua, Erie, Orleans and Wyoming. While Orleans and Wyoming County generally perform well for four of the five perinatal indicators, two ZIP codes (14066 and 14477) had infant death rates at least five times the national average of 6.75/1000. Allegany County's ZIP code 14754 had the highest infant death rate in 2007-2009 and 2008-2010 at 76.9/1000 and 90.9/1000 respectively.

⁶ <http://www.healthypeople.gov/2020/topicsobjectives2020>

Table 4a: Teen Pregnancy Rates

County	Total Number of ZIP Codes	2007-2009 ZIP Codes above National Average ⁷ (>67.8/1000)	2007-2009 Number of ZIP Codes in the Highest Quartile (>61.9/1000)	2008-2010 Number of ZIP Codes in the Highest Quartile (>51.3)
Allegany*	23	4 14715, 14739, 14822, 14880	5 14715, 14727, 14739, 14822, 14880	4 14727, 14739, 14822, 14880
Cattaraugus*	23	6 14042, 14070, 14129, 14743, 14760, 14779	7 14042, 14070, 14101, 14129, 14743, 14760, 14779	6 14042, 14070, 14101, 14129, 14760, 14779
Chautauqua*	25	3 14048, 14136, 14701	4 14048, 14136, 14701, 14733,	5 14062, 14701, 14733, 14781, 14782
Erie*	60	14 14091, 14201, 14204, 14206, 14207, 14208, 14209, 14210, 14211, 14212, 14213, 14215, 14218, 14220	17 14091, 14201, 14204, 14206, 14207, 14208, 14209, 14210, 14211, 14212, 14213, 14214, 14215, 14216, 14218, 14220, 14225	19 14081, 14201, 14202, 14203, 14204, 14206, 14207, 14208, 14209, 14210, 14211, 14212, 14213, 14214, 14215, 14218, 14220, 14222, 14225
Genesee	13	1 14013	3 14013, 14058, 14143	1 14143
Niagara	17	4 14028, 14301, 14303, 14305	4 14028, 14301, 14303, 14305	5 14028, 14105, 14301, 14303, 14305
Orleans	7	0	1 14411	1 14411
Wyoming*	15	0	1 14550	1 14550
Total	183	32	42	42

*Some ZIP codes with a population of less than 30 teenagers are suppressed within these Counties for reasons of confidentiality

⁷ <http://www.guttmacher.org/pubs/USTPtrends08.pdf>

Table 4b: Teen Birth Rates

County	Total Number of ZIP Codes	2007-2009 ZIP Codes above ⁸ National Average (>34.3/1000)	2007-2009 Number of ZIP Codes in the Highest Quartile (>41/1000)	2008-2010 Number of ZIP Codes in the Highest Quartile (>35.5)
Allegany*	23	6 14715, 14727, 14739, 14822, 14880, 14895	5 14715, 14727, 14739, 14822, 14880	5 14715, 14727, 14739, 14822, 14880
Cattaraugus*	23	10 14042, 14065, 14070, 14101, 14129, 14741, 14743, 14753, 14760, 14779	10 14042, 14065, 14070, 14101, 14129, 14741, 14743, 14753, 14760, 14779	8 14042, 14065, 14070, 14101, 14129, 14743, 14760, 14779
Chautauqua*	25	8 14048, 14136, 14701, 14724, 14733, 14757, 14781, 14787	5 14048, 14136, 14701, 14733, 14781	5 14048, 14701, 14733, 14781, 14782
Erie*	60	17 14081, 14091, 14201, 14204, 14206, 14207, 14208, 14209, 14210, 14211, 14212, 14213, 14215, 14216, 14218, 14220, 14225	14 14081, 14091, 14201, 14204, 14206, 14207, 14209, 14210, 14211, 14212, 14213, 14215, 14218, 14220	14 14081, 14201, 14203, 14204, 14206, 14207, 14208, 14209, 14210, 14211, 14212, 14213, 14215, 14218,
Genesee	13	4 14013, 14020, 14058, 14143	3 14013, 14058, 14143	3 14013, 14058, 14143
Niagara	17	5 14008, 14028, 14301, 14303, 14305	3 14301, 14303, 14305	5 14008, 14028, 14301, 14303, 14305
Orleans	7	2 14098, 14411	0	2 14098, 14411
Wyoming	15	1 14550	1 14550	0
Total	183	53	41	42

*Some ZIP codes with a population of less than 30 teenagers are suppressed within these Counties for reasons of confidentiality

⁸ <http://www.cdc.gov/nchs/data/databriefs/db89.htm>

Table 4c: Late or No Prenatal Care

County	Total Number of ZIP Codes	2007-2009 ZIP Codes above National Average ⁹ (>3.6%)	2007-2009 Number of ZIP Codes in the Highest Quartile (>5.3%)	2008-2010 Number of ZIP Codes in the Highest Quartile (>5.58)
Allegany	23	14 14060, 14709, 14711, 14714, 14715, 14735, 14744, 14777, 14802, 14804, 14813, 14822, 14880, 14897	7 14709, 14711, 14714, 14735, 14744, 14802, 14897	10 14060, 14709, 14711, 14714, 14715, 14735, 14744, 14802, 14813, 14897
Cattaraugus	23	15 14041, 14042, 14065, 14070, 14129, 14138, 14171, 14719, 14726, 14729, 14731, 14741, 14753, 14755, 14779	11 14041, 14065, 14070, 14129, 14138, 14171, 14719, 14726, 14731, 14753, 14755	7 14041, 14065, 14138, 14719, 14726, 14753, 14755
Chautauqua	25	18 14048, 14063, 14136, 14701, 14710, 14712, 14718, 14723, 14724, 14728, 14736, 14740, 14747, 14748, 14757, 14767, 14775, 14781, 14782,	13 14048, 14136, 14701, 14712, 14723, 14724, 14736, 14740, 14747, 14767, 14775, 14781, 14782	15 14048, 14062, 14712, 14718, 14723, 14724, 14728, 14736, 14740, 14747, 14757, 14767, 14775, 14781, 14782
Erie	60	22 14004, 14047, 14068, 14080, 14081, 14111, 14150, 14201, 14204, 14206, 14207, 14208, 14209, 14211, 14212, 14213, 14214, 14215, 14217, 14218, 14225, 14228	9 14081, 14204, 14208, 14209, 14211, 14212, 14213, 14214, 14215	12 14081, 14102, 14111, 14204, 14207, 14208, 14209, 14211, 14212, 14213, 14215, 14218
Genesee	13	3 14005, 14013, 14058	1 14013	0
Niagara	17	7 14012, 14028, 14094, 14105, 14301, 14303, 14305	1 14012	1 14105
Orleans	7	2 14098, 14103	1 14103	0
Wyoming	15	4 14024, 14066, 14113, 14550	2 14066, 14113	1 14066
Total	183	85	45	46

⁹

<http://www.marchofdimes.com/peristats/ViewSubtopic.aspx?reg=99&top=5&stop=25&lev=1&slev=1&obj=8&dv=ms>

Table 4d: Low Birth Weight

County	Total Number of ZIP Codes	2007-2009 ZIP Codes above National Average ¹⁰ (>8.2%)	2007-2009 Number of ZIP Codes in the Highest Quartile (>10%)	2008-2010 Number of ZIP Codes in the Highest Quartile (>9.78)
Allegany	23	11 14060, 14708, 14715, 14717, 14735, 14754, 14770, 14777, 14804, 14806, 14897	5 14060, 14708, 14717, 14735, 14754	5 14060, 14717, 14735, 14754, 14777
Cattaraugus	23	11 14065, 14138, 14719, 14726, 14729, 14741, 14743, 14753, 14755, 14772, 14779	9 14065, 14138, 14719, 14726, 14729, 14743, 14753, 14755, 14772	8 14101, 14138, 14719, 14726, 14729, 14743, 14755, 14772
Chautauqua	25	17 14048, 14063, 14701, 14710, 14712, 14716, 14718, 14723, 14728, 14733, 14740, 14747, 14750, 14757, 14767, 14775, 14784,	13 14048, 14712, 14716, 14718, 14723, 14728, 14733, 14740, 14747, 14757, 14767, 14775, 14784	15 14048, 14062, 14712, 14716, 14718, 14723, 14728, 14733, 14740, 14747, 14750, 14757, 14767, 14775, 14784
Erie	60	22 14026, 14030, 14055, 14085, 14091, 14111, 14141, 14203, 14204, 14207, 14208, 14209, 14211, 14212, 14213, 14214, 14215, 14218, 14219, 14220, 14227, 14228	10 14055, 14091, 14203, 14207, 14208, 14209, 14211, 14212, 14214, 14215	12 14055, 14085, 14091, 14203, 14204, 14207, 14208, 14209, 14211, 14212, 14214, 14215
Genesee	13	2 14054, 14416	0	0
Niagara	17	5 14108, 14174, 14301, 14303, 14305	3 14301, 14303, 14305	5 14108, 14174, 14301, 14303, 14305
Orleans	7	2 14411, 14477	2 14411, 14477	1 14477
Wyoming	15	3 14066, 14082, 14113	1 14066	0
Total	183	73	43	46

¹⁰ <http://www.cdc.gov/nchs/fastats/births.htm>

Table 4e: Infant Death Rate

County	Total Number of ZIP Codes	2007-1009 ZIP Codes above National Average ¹¹ (6.75/1000)	2007-2009 Number of ZIP Codes in the Highest Quartile (>8.6/1000)	2008-2010 Number of ZIP Codes in the Highest Quartile (>8.3)
Allegany	23	6 14714, 14754, 14770, 14803, 14804, 14813	6 14714, 14754, 14770, 14803, 14804, 14813	3 14754, 14804, 14813
Cattaraugus	23	9 14065, 14070, 14171, 14719, 14737, 14738, 14748, 14755, 14760	9 14065, 14070, 14171, 14719, 14737, 14738, 14748, 14755, 14760	4 14065, 14171, 14755, 14779
Chautauqua	25	8 14048, 14701, 14710, 14712, 14718, 14724, 14728, 14733,	7 14701, 14710, 14712, 14718, 14724, 14728, 14733,	12 14136, 14701, 14710, 14712, 14716, 14718, 14724, 14728, 14733, 14781, 14782, 14784
Erie	60	21 14006, 14025, 14080, 14086, 14111, 14150, 14201, 14202, 14207, 14208, 14208, 14210, 14211, 14213, 14214, 14215, 14218, 14219, 14223, 14227, 14228	14 14025, 14111, 14201, 14202, 14207, 14208, 14211, 14213, 14214, 14215, 14218, 14219, 14223, 14228	16 14025, 14033, 14072, 14080, 14111, 14201, 14202, 14207, 14208, 14210, 14211, 14214, 14215, 14218, 14225, 14228
Genesee	13	3 14020, 14054, 14422	3 14020, 14054, 14422	2 14013, 14422
Niagara	17	6 14092, 14094, 14301, 14303, 14304, 14305	2 14303, 14305	2 14092, 14305
Orleans	7	2 14411, 14477	1 14477	2 14103, 14477
Wyoming	15	3 14024, 14066, 14550	3 14024, 14066, 14550	4 14009, 14024, 14066, 14550
Total	183	58	45	45

¹¹ http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_06.pdf

CONCENTRATION OF RISK

ZIP codes that measured in the top quartile of the 2007-2009 perinatal health data were given one point, displayed on Table 5 as an 'X', for each of the following four perinatal measures: teen pregnancy rate, low birth weight, late or no prenatal care, and infant death rate. If a ZIP code measured in the top quartile for two or more indicators, it was considered at high risk for poor maternal and perinatal health outcomes. Table 5 includes 47 ZIP codes in WNY that are considered high risk. The majority of these ZIP codes are located in Cattaraugus, Chautauqua, and Erie Counties.

Table 5: Summary of Core Outcomes in Highest Risk ZIP Codes

County	ZIP Code	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate
Allegany	14714		X	X	
Allegany	14735	X		X	
Allegany	14754	X	X		
Cattaraugus	14065	X	X	X	
Cattaraugus	14129			X	X
Cattaraugus	14138	X		X	
Cattaraugus	14171		X	X	
Cattaraugus	14070		X	X	X
Cattaraugus	14719	X	X	X	
Cattaraugus	14726	X		X	
Cattaraugus	14743	X			X
Cattaraugus	14753	X		X	
Cattaraugus	14755	X	X	X	
Cattaraugus	14760		X		X
Chautauqua	14048	X		X	X
Chautauqua	14136			X	X
Chautauqua	14701		X	X	X
Chautauqua	14712	X	X	X	
Chautauqua	14718	X	X		
Chautauqua	14723	X		X	
Chautauqua	14724		X	X	
Chautauqua	14728	X	X		
Chautauqua	14733	X	X		X
Chautauqua	14740	X		X	
Chautauqua	14747	X		X	
Chautauqua	14767	X		X	
Chautauqua	14775	X		X	
Genesee	14013			X	X
Erie	14091	X			X
Erie	14201		X		X
Erie	14204			X	X
Erie	14207	X	X		X
Erie	14208	X	X	X	X
Erie	14209	X		X	X

County	ZIP Code	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate
Erie	14211	X	X	X	X
Erie	14212	X		X	X
Erie	14213		X	X	X
Erie	14214	X	X	X	X
Erie	14215	X	X	X	X
Erie	14218		X		X
Niagara	14301	X			X
Niagara	14303	X	X		X
Niagara	14305	X	X		X
Orleans	14411	X			X
Orleans	14477	X	X		
Wyoming	14066	X	X	X	
Wyoming	14550		X		X
		33	27	31	26

Table 6 shows the number of ZIP codes demonstrating the most common combination of indicators; late or no prenatal care and low birth weight topped the common combinations with 21 ZIP codes sharing poor outcome measures.

Table 6: Common Combinations of Poor Outcome Measures in High Risk Zip Codes

Outcome Combinations	Number of ZIP codes demonstrating each combination
Late/No Prenatal Care and Low Birth Weight	21
Low Birth Weight and Infant Death Rate	17
Teen Pregnancy Rate and Low Birth Weight	15
Late/No Prenatal Care and Infant Death Rate	15
Teen Pregnancy Rate and Infant Death Rate	15
Teen Pregnancy Rate and Late/No Prenatal Care	14

Table 7 compares the identified high risk ZIP codes with other ZIP codes on demographic characteristics. Individuals in the high risk ZIP codes are more likely to live in poverty, be racially diverse, have less education, be less involved in the labor force, and speak another language.

Table 7: Demographic Characteristics of Highest Risk ZIP Codes

Variable	High Risk ZIP Code	Other ZIP Codes
Five or younger**	6.28%	5.21%
Eighteen plus*	75.92%	78.05%
Family poverty**	14.49%	6.65%
White**	80.95%	94.9%
Black**	14.8%	3.05%
Other*	1.97%	.84%
Hispanic*	4.66%	2.24%
High School **	77.76%	83.84%
College*	13.37%	19.12%
Labor*	61.18%	63.67%
Language**	8.48%	4.60%

*<.01 **<.0001

Hot Spot Analysis (2007-2009 Perinatal Data)

The 47 ZIP codes identified as high risk were included in the hot spot analysis. Hot spots were identified if two contiguous ZIP codes had a poverty rate greater than or equal to 8.675 percent (the average poverty rate for families in WNY) and a combination of two of three risk indicators: identified as high risk, in the highest quartile for teen pregnancy rate, or in the highest quartile for late or no prenatal care. The following tables provide a description of each hot spot. Each hot spot also identifies the percentage of births within each county. A map of the hot spots can be found in *Appendix C*.

Allegany County No hot spots identified

Cattaraugus County One hot spot identified (Hinsdale, Olean) 25 percent of births in Cattaraugus County

ZIP Code	Total Births	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate	Poverty Rate \geq 8.675
14743	57	X			X	9.6
14760	714		X		X	11.8

Cattaraugus/Chautauqua One hot spot identified (Perrysburg, Gowanda, South Dayton, Cherry Creek, Conewango Valley) 7.9 percent of births in Cattaraugus and Chautauqua Counties

ZIP Code	Total Births	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate	Poverty Rate \geq 8.675
14129	72			X	X	11.6
14138	98	X		X		13.6
14070	167		X	X	X	10.3
14726	183	X		X		24.3
14723	51	X		X		11.3

Erie County Two hot spots identified (Buffalo)

31.11 percent of births in Erie County

Buffalo West Side

ZIP Code	Total Births	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate	Poverty Rate \geq 8.675
14201	602		X		X	41.9
14207	1240	X	X		X	21.5
14213	1355		X	X	X	36.6

Buffalo East Side

ZIP Code	Total Births	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate	Poverty Rate \geq 8.675
14204	372			X	X	31.9
14208	402	X	X	X	X	23.2
14209	252	X		X	X	25.5
14211	1132	X	X	X	X	29.9
14212	536	X		X	X	32.4
14214	648	X	X	X	X	16.7
14215	1862	X	X	X	X	21.6

Genesee County
No hot spots identified

Niagara County
One hot spot identified (Niagara Falls)
22.16 percent of births in Niagara County

ZIP Code	Total Births	Low Birth Weight	Infant Death Rate	Late/No Prenatal Care	Teen Pregnancy Rate	Poverty Rate \geq 8.675
14301	607	X			X	22.8
14303	235	X	X		X	21.2
14305	664	X	X		X	18.2

Orleans County
No hot spots identified

Wyoming County
No hot spots identified

Conclusion

Three hot spots, the two in Buffalo and one in Niagara Falls, are urban areas where poverty rates are very high and ZIP codes experience poor perinatal and maternal health outcomes. Specifically, every ZIP code in these hot spots has high teen pregnancy rates. The Buffalo ZIP codes 14208, 14211, and 14215 measure in the highest quartile for all four health indicators in 2007-2009 and 2008-2010. All three ZIP codes in Niagara Falls also have more than 10 percent low birth weight in 2007-2010.

The hot spot in Olean and Hinsdale has slightly elevated poverty rates and high teen pregnancy rates. Olean, NY has a population of just over 14,000, which is around 17% of the population of Cattaraugus County. Furthermore, 25 percent of births happen in this hot spot. Changes in perinatal health in this hot spot alone could greatly affect health outcomes in Cattaraugus County.

Finally, the hot spot shared by Cattaraugus and Chautauqua Counties has relatively high poverty rates. All ZIP codes in this hot spot have a high percentage of women who receive late or no prenatal care. This could be an issue of access or culture as many Amish communities live in this region.

This analysis reveals that perinatal and maternal health is improving slightly across all eight counties in WNY. However, there is still much work to be done; the percentage of low birth weight babies increased from 2007-2010, many ZIP codes measure higher than the national average for all health indicators, and WNYCHPI identified five hot spots where communities are experiencing poor maternal and perinatal health in conjunction with high poverty rates.

Appendix A – Census Data

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14060	Allegany	443	5.2	78.8	16.5	3.8	2.89	11.9	99.5	0.2	1.6	0	0.2	1.8	80.1	5	62.5
14708	Allegany	183	7.1	74.9	8.7	0	3.16	1.9	97.3	1.1	0	0.5	1.1	0	81.5	6.5	48.8
14709	Allegany	1535	7.2	75.8	17.1	1.7	2.96	11.1	97.9	0.5	0.7	1.1	0.5	0.9	83.7	14.8	57.6
14711	Allegany	1766	7.9	74.1	14.6	5.9	3.05	13.4	98.8	0.6	1.1	0.8	0.4	0.9	80.8	12.8	57.6
14714	Allegany	487	8	72.3	15.2	6.9	3.4	17	98.8	0.8	1	0.2	0.8	0.4	75.5	10.5	62.6
14715	Allegany	2747	6.3	73.9	13.9	1.6	3.02	12.4	98.8	0.6	0.5	0.7	0.1	0.6	81.1	10	60.8
14717	Allegany	636	3.8	84.3	21.7	2.3	2.64	10.3	99.5	0	0	0.5	0.2	1.9	82	11.9	62
14721	Allegany	230	5.2	80	14.8	7.3	2.92	13.8	100	0	0.4	0	0	0	75.4	9.8	64.1
14727	Allegany	5450	5.1	79	17.7	2.8	2.84	7.2	98.2	1	0.4	0.6	0.9	1.4	83.7	15.8	61.2
14735	Allegany	2751	7.9	71.1	15	5.3	3.16	14.7	99	0.4	0.8	0.1	0.2	1.2	76.6	12.9	60.3
14739	Allegany	2903	7	75	15.8	3.7	3.03	16.7	98.4	1.4	0.9	0.3	0.5	1.9	80.6	10.8	59.1
14744	Allegany	2094	3.2	86.2	11.3	6.9	3.21	17	93.6	2.2	0.5	4.5	0.7	2	84.6	46	60.7
14754	Allegany	667	4.9	77.8	16.2	2.4	2.84	15.9	99.3	0.3	0.6	0.6	0	0.4	85	7.5	66.8
14770	Allegany	2963	6.5	74.8	15.1	1.9	2.94	9.3	98.5	1.3	0.7	0.6	0.3	0.8	86	14.7	68.6
14777	Allegany	667	4.8	77.8	21	1.4	2.88	9.9	99	0.7	0.4	0.3	0	0.7	85.3	13.3	64
14802	Allegany	4135	0.5	97.4	2.9	13.5	2.82	2	86.1	8.4	0.7	5.5	2	4.4	94.8	69.6	59.3
14803	Allegany	1174	5.5	78.9	15.1	3.6	2.86	4.1	98	0.4	0.4	2.2	0.3	1	94.6	46.3	66.9
14804	Allegany	1479	6.3	76.4	14.9	5	2.97	5	98.6	0.5	1	1.7	0.1	1	88	28.3	66.5
14806	Allegany	2269	7.2	73.4	14.5	2.7	3.03	7.2	98.9	0.8	0.3	0.4	0.7	1.1	84	13.2	63.4
14813	Allegany	2520	4.6	78	16.4	3.1	2.88	7.6	97	2.3	1.2	0.4	0.7	1.7	84.3	14.4	58.3
14822	Allegany	1169	4.6	77.8	16	1.7	2.87	8.9	99.3	0.3	0.9	0.1	0.4	0.6	81.8	12.7	62.6
14880	Allegany	1668	4.7	77.8	16.1	1.2	2.93	11.2	99	0.5	0.2	0.6	0.5	1.1	82.6	11.2	56.5
14895	Allegany	9616	5.9	78	19.9	2.5	2.88	10.8	98.2	0.8	0.7	1	0.4	0.9	83.6	18.2	57.8
14897	Allegany	980	5.5	72.8	14.9	0.7	3.1	10.1	99.1	0.4	0.9	0.4	0.1	0.7	76.5	11.7	60
Average	Allegany	2105.50	5.62	77.76	15.22	3.66	2.97	10.39	97.95	1.06	0.66	0.96	0.46	1.14	83.00	17.83	61.17
14041	Cattaraugus	237	5.5	74.7	14.3	*	3.07	*	97.5	5.1	3	0.8	0	0	*	*	*
14042	Cattaraugus	3969	7.2	75.2	13.4	4.8	2.97	10.5	98.6	0.8	1.1	0.5	0.7	1.4	80.3	6.4	67.7
14065	Cattaraugus	1896	7.1	73.7	12.1	4.6	3.04	14.8	99.7	0.1	0.4	0.2	0.1	0.6	73.9	5.3	64.4

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14070	Cattaraugus	6732	4.3	82.8	13.8	5.7	2.94	10.3	78.9	10.6	9.8	0.4	1.8	5.2	78.5	15.9	62.4
14101	Cattaraugus	1905	5.6	77.3	19.5	4.2	2.95	10.8	98.2	1.2	1.7	0.2	0.3	0.9	77.3	11.1	58.6
14129	Cattaraugus	1591	6.5	75.4	14.6	5.4	3.03	11.6	78.3	0.9	22.2	0.6	0.1	1.2	83	12.2	63.2
14138	Cattaraugus	2018	7.3	73.1	15.4	5.6	3.08	13.6	98	1.2	1.9	0.1	0.5	1.8	80.2	11.2	63.9
14171	Cattaraugus	2077	4.9	78.7	15	5	2.91	4	98.4	1.6	0.6	0.2	0.1	1	87.4	15	68.1
14706	Cattaraugus	6356	5.2	77.9	17.8	6	2.91	3.8	97.1	1.1	1	1.6	0.5	1.2	89.3	25.7	58.8
14719	Cattaraugus	3497	5.9	73.3	14.6	6.8	3.11	8.3	98.6	0.7	1.1	0.2	0.1	1.1	79.8	11.2	66
14726	Cattaraugus	2156	13.5	56.8	9	36.6	4.37	24.3	98.8	0.4	0.9	0.2	0.4	0.8	53.1	6.7	59.2
14729	Cattaraugus	948	6.1	75	11.9	3.5	3.14	10.3	98.6	0.6	1.1	0.3	0.2	0.3	81.6	10.7	66.2
14731	Cattaraugus	1576	3.6	82.7	20.9	4.6	2.72	8	98.9	0.4	0.8	0.4	0.6	1.8	88	28.6	67.9
14737	Cattaraugus	4252	6.1	76.5	15.1	3.6	2.94	9.5	98.3	0.6	1	0.8	0.5	1.8	76.7	10.5	61.3
14738	Cattaraugus	3651	4.8	77.3	18.8	2	2.93	2.4	98.5	0.8	1.1	0.1	0.4	1.3	83.6	12.5	62.2
14741	Cattaraugus	1873	5.8	76.3	17.1	1.5	2.99	2.7	99.3	0.1	0.9	0.3	0.1	1.2	80.4	13.3	65
14743	Cattaraugus	1783	6.4	76.7	14.3	4.6	2.93	9.6	98.3	1.5	0.6	0.4	0.3	0.3	81.6	12.1	59.8
14748	Cattaraugus	746	7.2	71.8	16.2	2.1	3.03	11.8	76.1	0.5	24.7	0.3	0	2.4	72.3	6.1	52.3
14753	Cattaraugus	1166	5.4	77.3	16	1.4	2.9	9.7	97.9	1.3	1.5	0.7	0	0.4	81.4	8.6	62.4
14755	Cattaraugus	2916	5.2	78.4	14.3	4.5	2.91	5.9	96.6	1.6	2	0.5	0.3	1	77.1	9.4	65
14760	Cattaraugus	18775	6.1	78.1	16.4	4.4	2.87	11.8	94.4	4.8	1.3	1.4	0.7	2	84.3	20.7	64.6
14772	Cattaraugus	4255	8.1	70.8	15.1	4.8	3.14	6	97.9	1.1	1.6	0.3	0.7	2.2	80.5	13.6	63.6
14779	Cattaraugus	6932	7.5	75.9	15.4	5.1	2.89	16.5	79.7	1.6	20.5	0.8	1.2	3.1	78.4	10.9	59.8
Average	Cattaraugus	3535.09	6.32	75.47	15.26	5.76	3.03	9.83	94.63	1.68	4.38	0.49	0.42	1.43	79.49	12.62	62.84
14048	Chautauqua	15072	6.4	78	17.2	17.4	2.91	16.2	83	7.2	1.5	0.6	11.3	23.2	74.2	13.4	56.5
14062	Chautauqua	3329	4.7	79.3	15.7	4.8	2.88	6.4	98.5	0.6	1.4	0.3	0.3	1.9	84.8	13.7	64.3
14063	Chautauqua	14870	3.6	85.1	12.6	6.7	2.85	4.7	95.8	2.1	0.6	1.7	1.3	3.9	88	28.4	62.9
14136	Chautauqua	5033	5.9	76.8	16	3.2	2.93	7.5	96.6	1.2	2.3	0.6	0.7	2.5	83.8	12.9	64
14701	Chautauqua	40730	6.6	76.7	16.4	7.5	2.91	13.1	93.7	5.4	1.3	0.8	2.4	6.9	80.7	15.8	62.1
14710	Chautauqua	3540	5.2	78.6	17.5	2.4	2.86	6.5	99.3	0.3	0.3	0.3	0.2	0.8	84.3	20.5	65.1
14712	Chautauqua	3342	3.7	79	20.9	1.8	2.83	4.5	99.1	0.6	0.2	0.6	0.1	0.6	89.6	24.5	62.4
14716	Chautauqua	3104	5.2	79.5	11.6	10.1	3.06	11.4	84.4	12	1	0.5	3.5	8.1	59.6	8.4	39.5
14718	Chautauqua	2163	3.7	80	14.6	5	2.82	3.6	92.4	7.1	0.7	0.7	0.6	3.4	87	19	63.5
14723	Chautauqua	1295	6.6	73.3	14	3.9	3.12	11.3	99.2	0.7	0.4	0.5	0.3	1.8	79.9	15.2	68.8
14724	Chautauqua	2540	7.8	69.9	15.4	12.1	3.28	7.4	99.4	0.4	0.6	0.2	0.3	0.6	82.1	16.1	68.2

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14728	Chautauqua	1031	5.8	77.8	17.4	5	2.94	6.8	99	0.9	0.7	0.1	0.7	2.5	87.7	23.7	53.1
14733	Chautauqua	3833	4.9	77.9	18.5	5.7	2.84	6.7	98.5	1.3	0.7	0.2	0.5	2.4	81.2	10.4	64.8
14736	Chautauqua	282	5	73.4	16.3	0	3.14	6.8	98.2	0	0.7	2.1	0.4	0.7	84.6	14.4	65.9
14740	Chautauqua	1431	5	79	26.8	1.6	2.92	7.1	99.5	0.1	1.1	0.1	0.1	1.2	84.3	10.6	68.1
14747	Chautauqua	2289	5.5	77.4	14.2	1.5	2.92	6.5	99	0	1.3	0.5	0.3	1	80.8	11.9	67.9
14750	Chautauqua	4426	4.3	79.6	21.8	1.2	2.83	2.7	97.3	1.2	0.7	1.7	0.5	1.2	90.9	32.9	64.5
14757	Chautauqua	3487	5	78.9	18.2	5.6	2.85	7.4	96.6	3.1	0.5	0.3	0.4	1.9	83.4	25.4	54.5
14767	Chautauqua	2088	9.2	68.5	13.6	10.6	3.38	11.8	98.9	0.4	0.9	0.6	0.2	1.1	80.9	11	62.1
14769	Chautauqua	919	4.9	79.8	18.3	3.8	2.9	4.6	98.2	1.4	0.7	0.1	1	2.1	75.4	8.8	68.5
14775	Chautauqua	2537	5.7	76.9	15.1	3.7	2.96	8.2	98.9	0.5	1	0.1	0.9	1.3	79.3	8.9	64.5
14781	Chautauqua	2225	6.6	72.4	13.3	7.6	3.26	7.9	98.8	0.9	0.3	0.3	0.9	1.8	80.4	12.8	70
14782	Chautauqua	2401	5.5	76.2	14.6	2.8	3.05	10.3	98.5	0.9	0.9	0.3	0.6	1.5	78.3	11.8	54.9
14784	Chautauqua	1033	5.7	75.9	13.6	4.3	3.08	17.2	98.5	1	1.4	0.1	1	2.1	82.1	9.9	62.4
14787	Chautauqua	5121	4.8	79.5	20.3	5.3	2.9	8.8	98	1.2	0.5	0.6	0.9	3.4	81.7	19.7	63.1
Average	Chautauqua	5124.84	5.49	77.18	16.56	5.34	2.98	8.22	96.77	2.02	0.87	0.56	1.18	3.12	81.80	16.00	62.46
14001	Erie	9464	5	78.7	17.6	4.6	2.96	3.1	97.8	0.7	1.7	0.6	0.3	0.9	84.4	14.5	67.1
14004	Erie	12704	3.7	82.1	15.6	5.7	2.96	4.3	89.1	9.4	0.6	0.4	1	2.3	73.9	12.1	55.4
14006	Erie	9858	4.9	78.9	15	5.9	2.95	6.8	97.2	1.1	2.5	0.3	0.4	1.8	83	16.4	63.6
14025	Erie	3039	4.8	75.3	12.9	2.6	3.01	3.5	98.6	0.4	0.9	0.6	0.6	0.8	87	23.2	67.7
14026	Erie	674	5.8	76.1	16.5	6.5	3.09	0	99.6	0	0	0.4	0.3	2.7	82.2	17.2	59.5
14030	Erie	1807	6	79	15.6	2.6	3.03	4.6	97.2	0.5	1.1	1.6	0.4	0.9	80.9	10.6	68.3
14031	Erie	9392	3.8	77.7	21.4	4.2	3.02	1.8	97.6	0.7	0.3	1.7	0.4	1.1	92.5	35.7	59.8
14032	Erie	7989	6.1	68.3	10.8	7.1	3.38	0.5	96	1.5	0.4	2.9	0.3	1.3	93.5	33.3	69.2
14033	Erie	2219	5.3	77	13.5	3.9	3.01	2	99.1	0.4	0.2	0.5	0.3	0.9	93.9	23.6	65.9
14034	Erie	2742	3.8	85.3	10.9	6.5	2.98	5.6	79.8	17	1.3	0.3	3	6.1	40	4	19.1
14043	Erie	24742	4.3	82.1	19.3	8.5	2.86	3.1	97	1.9	0.4	1.3	0.6	1.6	81.6	15.7	67.5
14047	Erie	6440	4.4	79	13.7	4.4	2.97	3.4	97.8	1.1	1.3	0.3	0.4	1.8	86.1	21.9	70.4
14051	Erie	19533	4.8	74.1	12.5	9.7	3.14	1.4	89.8	2.6	0.3	8.2	0.7	1.8	96	59.8	72.6
14052	Erie	17329	4.3	77.4	18	4	3.01	1.5	98.8	0.6	0.3	0.8	0.4	0.9	89.9	33.1	64.4
14055	Erie	1405	3.3	80.6	16.2	0.9	2.89	4.4	99.4	0.4	0.4	0.5	0.4	1.1	81.5	11.3	67.6
14057	Erie	8116	4.3	77.3	16.2	3.9	3.03	1.3	98.5	0.6	0.6	0.4	0.6	1.7	85.1	22	67.6
14059	Erie	8933	3.8	79.4	19.6	7.4	2.93	1.8	99.4	0.3	0.2	0.2	0.2	0.7	89.1	28.7	65.2

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14068	Erie	7150	5.1	77.6	22.2	11.1	3.11	4.4	89.4	3.5	0.3	7.6	0.3	1.3	89	43	70.5
14069	Erie	844	5.5	80	13.3	3.5	2.82	4.4	99.2	0.5	0.1	0.6	0.4	0.2	94.3	24.2	76.1
14072	Erie	20374	4.8	76.9	14.4	6.3	3.03	2.4	94.6	2.5	0.8	2.6	0.5	1.8	92.6	32.4	71.9
14075	Erie	41937	4.6	78.2	17.3	5.3	2.95	2.8	98.1	1	0.5	0.8	0.5	1.8	87.5	28.4	66.9
14080	Erie	4330	5.4	77.4	13	3.1	2.96	6.1	98.6	0.9	0.7	0.4	0.2	0.8	88.4	15.3	67.9
14081	Erie	3095	6.3	76	16.4	5.8	3.06	11.5	62.8	1.1	37.5	0.5	0.1	2.7	76.3	14.5	60.6
14085	Erie	7353	7.2	73.5	10	4.1	3.17	1.9	98.4	0.6	0.6	0.6	0.4	1.8	89.3	25.5	71
14086	Erie	31847	5.2	75.8	13.3	5.4	3.1	2.3	98.1	1.1	0.5	0.8	0.3	1.3	87.2	23.2	70.3
14091	Erie	1079	6	76.7	13.3	7.7	3.05	11.9	75.1	0.4	25.1	0	0.4	3.5	80.9	15.7	62.9
14102	Erie	1281	4.1	74.6	13.8	2	3.14	2.6	99.5	0.5	0.2	0.2	0.1	0.9	95.5	23.4	74.3
14111	Erie	3352	5.8	76	14.5	5.5	3.09	4.7	97.3	1.1	2.6	0.1	0.8	3	84.1	14.1	66.7
14127	Erie	29961	4.9	76.6	18.3	5.7	3.04	1.3	97.3	1	0.4	1.6	0.5	1.6	90.3	39.1	65.5
14139	Erie	2125	6	79.9	13.5	5.6	2.88	0.9	98.6	0.6	0.9	0.8	0.2	0.9	90.8	24.1	67.9
14141	Erie	7728	5.3	76.6	16.2	4	2.97	4.3	98.1	1	1	0.6	0.3	1.8	83	17.3	62.7
14150	Erie	41676	4.7	81.4	19.7	5.6	2.87	5.6	95.7	2.7	0.7	1.5	0.8	2.3	86.2	21.4	63.2
14170	Erie	2286	4.2	78.7	16.4	2.7	2.99	5.7	99.2	0.3	0.5	0.3	0.2	1.7	93.2	27.4	66.1
14201	Erie	11549	7.5	77.7	10.9	37.6	3.1	41.9	54.7	26.1	2.4	2.9	18.3	37.2	68.9	19.8	52.9
14202	Erie	3911	3.7	88.8	11.2	12.6	2.56	19	62.5	30.7	1.3	2	7.1	17.2	69.4	23.9	33.9
14203	Erie	1618	5.7	81.3	13.3	3.1	2.92	67.6	33.6	62.4	1.3	2	3.6	7.7	60.3	14.1	53.7
14204	Erie	8691	6.3	75.7	13.6	9.1	2.95	31.9	20.3	76.9	0.8	0.6	3.6	9.1	63.5	7.2	48.6
14206	Erie	20751	6.1	78.9	15.7	12.5	2.93	13.4	86.7	11.7	1	1.2	1.4	4.6	69.2	8.5	55.2
14207	Erie	23552	8.3	71.6	9.9	13.6	3.22	21.5	68.9	18.7	3	5.3	9.4	20.6	72	8.5	59.1
14208	Erie	11125	4.9	79.5	18.2	5.4	3.05	23.2	18.4	81.1	0.6	0.7	1.1	2.6	66.8	12.8	52.2
14209	Erie	7926	4.7	83.2	16.5	7	2.91	25.5	49.8	46.7	1.4	2.5	2.5	6.1	80.1	30.4	57
14210	Erie	14694	7.4	75.1	11	8.7	3.01	16.4	88.6	9.1	1.6	0.8	3.2	8.8	73.6	9.6	61.7
14211	Erie	22611	7.4	71.3	11.3	6.6	3.14	29.9	18.8	79.1	1.1	2.6	1.4	3.6	68.5	7.4	54.2
14212	Erie	10641	6.7	75	13	13.7	3.12	32.4	51.3	43.9	1.1	5.4	1.3	2.6	61.2	6.7	50.5
14213	Erie	24465	9.1	70.7	7.2	29.6	3.43	36.6	51.4	25.6	2.6	11.9	13.6	28.1	69.6	14.5	55.7
14214	Erie	19775	5.1	82.1	9.3	12.1	2.97	16.7	52.4	39.5	1.3	8.5	2	4.2	84.3	36.4	67.5
14215	Erie	39999	7.1	71.1	10.2	7.1	3.11	21.6	16	82.5	1	1.7	1.4	3.3	79.8	16.2	60.7
14216	Erie	22431	5.6	81.6	12.3	10.7	2.83	8.5	78.8	18.4	1.7	2	2.8	7	84.1	31.7	64.4
14217	Erie	23480	5.1	80.7	18	4.9	2.87	3.9	95	3.6	0.9	1.4	0.8	3.1	87.1	26.5	62.8

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14218	Erie	19039	6.4	78.2	17.4	18.4	2.99	12.2	87.4	11	0.9	1.6	2.4	6.9	76.1	12.6	57.4
14219	Erie	11536	5.3	79	16.2	7.5	2.9	6.1	97.7	1.8	0.5	0.5	0.7	2.9	84.3	16.4	67
14220	Erie	24227	6.6	77.2	13	6.5	3.01	8.6	93.1	4.2	1.1	0.9	2.7	7.6	81.4	17.9	62.9
14221	Erie	53555	4.4	79.4	23.7	9.4	2.97	2.6	89.5	3.6	0.4	7.3	0.7	1.9	91.8	47.4	61
14222	Erie	14046	2.9	90.5	11.6	12.2	2.66	8.7	82	13.4	1.3	3.4	2.6	6.4	88.7	50.8	69.2
14223	Erie	22665	4.9	79.5	17.5	6.2	2.93	4.1	94.1	4.4	0.7	1.8	0.8	2.5	89	28.8	62.3
14224	Erie	39889	4	80.5	20.4	7	2.92	3	98	1.1	0.5	0.8	0.4	1.6	86.4	20.6	63.6
14225	Erie	33385	5.2	80.8	18.9	7.3	2.84	5.9	89	9.7	0.6	1.7	0.7	2.3	81.7	14.6	60.6
14226	Erie	29267	5.8	79.1	15.8	10.8	2.91	4.9	83.4	10.1	0.7	7.3	0.9	2.5	91.9	45.8	62.9
14227	Erie	23426	4.3	83.8	23.6	11.1	2.78	3.1	92.8	4.9	0.4	2.4	0.5	1.5	81.7	16.8	63.7
14228	Erie	20857	4.9	80.9	13.4	12.5	3.02	8.3	81.3	9.5	0.7	10.1	1.2	2.8	91.4	40.9	70
Average	Erie	15198.58	5.32	78.29	15.07	7.92	2.99	9.99	82.80	13.13	1.93	2.16	1.72	4.34	82.20	22.65	62.44
14005	Genesee	1986	6.6	72.4	12.2	2.9	3.22	3.1	98.3	0.5	0.3	0.5	1.3	1.7	92.1	13.8	70.6
14013	Genesee	1751	6	76	15.6	5.6	3.12	6.4	70.2	0.6	29.4	0.2	0.7	1.7	79.2	9.8	63.5
14020	Genesee	23306	5.7	79.8	17.5	5.3	2.89	9	91.9	7.1	1.1	1.3	1.3	3.3	80.9	17.1	61.2
14036	Genesee	5201	5	78.4	14.8	3.3	2.97	3.4	98.5	1.2	1	0.3	0.3	1.1	86.4	14.4	68.9
14040	Genesee	2217	4.6	79.7	15.8	2.8	2.97	0.8	99.8	0.2	0.2	0.3	0	0.9	82.5	11.6	70.5
14054	Genesee	1344	7.6	76	12.3	2.5	3	1	97.7	1.4	0.6	1	0.9	2.6	89.8	15.4	73.5
14058	Genesee	2285	5.8	75.6	13	6.2	3.07	4.8	90.2	3	0.7	0.7	7.5	10.5	86.8	17.9	72.5
14125	Genesee	3782	5.6	75.2	12.9	2	3.14	5.6	96.5	2.2	1.1	0.4	1.6	3.2	82.4	12.4	67.2
14143	Genesee	1214	4.9	80.4	17.5	3	2.8	3.2	98	1.3	0.4	0.2	0.7	1.2	85.8	18.2	68.7
14416	Genesee	3817	4.8	77.2	14.4	4.3	3.06	2.2	98.4	1.1	0.3	0.9	0.4	1.6	90.7	18.8	72.3
14422	Genesee	2468	5.3	77.5	13.3	2.4	3.01	3.2	98	1	0.9	0.4	1.5	2.8	90	13.8	73.9
14482	Genesee	8275	6.2	76.7	15.2	2.9	2.94	3.4	96.9	2.6	0.9	0.6	0.6	2	87.6	17.8	70.4
14525	Genesee	2865	4.9	76.9	12.6	1.8	3.01	4.9	98.4	1	0.4	0.7	0.5	1.6	85.9	16.3	73.7
Average	Genesee	4654.69	5.62	77.06	14.39	3.46	3.02	3.92	94.83	1.78	2.87	0.58	1.33	2.63	86.16	15.18	69.76
14008	Niagara	1467	5.2	75.7	12.5	3.6	3.24	2.4	95.7	1.5	1.1	0.1	2.1	4	84.8	10.9	63.5
14012	Niagara	2362	6.1	74.3	14.6	4.6	3.06	8.2	98.1	1.1	1.1	0.5	0.5	3.7	84	12.6	62.1
14028	Niagara	1595	4.6	77.5	15.8	4.4	2.97	4.2	98	0.7	1.3	1	0.7	1.9	85.4	10.1	63.2
14067	Niagara	5040	5.3	76.3	14.3	3.1	3.02	4.9	97.9	1.3	1.1	0.5	0.7	1.5	86.1	13.1	66.6
14092	Niagara	11086	4.4	81.7	25.2	7	2.86	4	95.8	1.3	2.8	1.2	0.3	1.4	88.8	31.3	62.2
14094	Niagara	50666	5.9	77.5	13.8	4.8	2.96	8.2	93	6.8	1	1	0.9	2.5	84.9	18.5	64.3

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14105	Niagara	4566	5.1	76.2	13.7	3.1	2.96	5.3	97.6	1.1	1.4	0.5	0.7	1.6	83.3	12.4	60.7
14108	Niagara	5882	4.4	77.1	17.1	2.7	2.96	5.2	97.8	1.5	0.8	0.8	0.7	1.2	88.2	14.5	61.6
14120	Niagara	45100	5.1	79.2	15.9	5.9	2.96	4.7	97.4	1.5	0.8	1.1	0.5	1.6	85.6	20.6	67
14131	Niagara	5283	4.4	78.5	15.2	3.6	2.98	4	97.6	0.9	1.8	0.5	0.4	1.8	82.2	16.3	65.6
14132	Niagara	6218	4.5	79.6	16.1	3.3	2.95	3.1	93.9	2.4	4.7	0.4	0.4	1.3	88.9	17.7	63.8
14172	Niagara	3200	5	77.3	14.8	4.4	2.96	3.2	97.5	1.3	1.5	0.4	0.7	1.6	83.2	18.7	60.6
14174	Niagara	5794	4.5	78.4	17.1	6	2.92	3.6	98.2	0.8	0.9	0.7	0.6	1.5	92.6	27.9	64.9
14301	Niagara	12817	7.2	77.5	15.2	11.2	2.91	22.8	68	29.7	4.4	2	1.4	4	72.5	8.6	56.2
14303	Niagara	5981	6.4	77.5	14.8	12.7	2.88	21.2	66.7	31.8	4.9	1.2	2.4	4.5	65.3	8.6	51.5
14304	Niagara	30389	4.7	80.6	18	5.8	2.88	5.1	93.1	4.4	2.1	1.7	0.7	1.8	84.3	15.5	62.2
14305	Niagara	16898	6.1	76.3	14.6	6.2	2.99	18.2	65.3	33.7	2.6	1	1.1	2.8	76.3	14.2	55.9
Average	Niagara	12608.47	5.23	77.72	15.81	5.44	2.97	7.55	91.27	7.16	2.02	0.86	0.87	2.28	83.32	15.97	61.88
14098	Orleans	2958	5.1	74.3	13.9	3.2	3.13	6.5	96.8	1.9	2	0.8	1	2.7	81.7	13.5	61.3
14103	Orleans	11183	5.8	76.2	16.1	4.8	2.99	9.5	91.5	7.5	1.2	0.7	1.5	3.8	77.8	12.9	64.8
14411	Orleans	14491	5.1	79.8	13.8	5.6	3	9.6	85.5	12.8	1.1	0.8	2.2	5.8	73.4	11.1	53.3
14470	Orleans	8016	5.5	77.3	13.8	3.2	2.96	3.8	97.5	1.3	1	0.3	1.2	2.4	72	12.6	55.1
14476	Orleans	2288	5.2	77	13.8	4.8	2.97	6.6	97.9	1	1.3	0.4	0.7	2	88.3	16.1	64.8
14477	Orleans	1732	5.4	76.1	14.3	5.3	3.09	4.4	94.8	2.4	1.5	0.4	2.3	3.8	86	17.6	67.8
14571	Orleans	1176	2.7	82.1	16.1	1.2	2.85	10.4	96.4	3.1	2.5	0.2	1.1	2.6	85.7	18.5	65
Average	Orleans	5977.71	4.97	77.54	14.54	4.01	3.00	7.26	94.34	4.29	1.51	0.51	1.43	3.30	80.70	14.61	61.73
14009	Wyoming	5672	6	76.7	14.7	2.5	2.93	3.4	98.6	0.6	0.7	0.8	0.4	1	82.4	11.9	64.8
14011	Wyoming	9822	3.3	85.6	9.5	4.4	2.99	4.4	72.3	23.5	0.7	0.5	3.6	6.9	65.1	9.4	44.9
14024	Wyoming	1688	7.3	73.3	12.6	4.3	3.19	7.4	98.6	1.3	0.5	0.3	0.2	0.8	79.1	7.7	65.5
14037	Wyoming	1166	4.1	80.1	16	2.4	2.98	2.1	98.9	0.6	0.7	0.2	0.3	0.8	83.3	20.1	69.3
14066	Wyoming	1318	4.1	76.7	13.3	2.7	2.96	5.3	99.2	0.1	0.5	0.1	0.2	1	81.2	9.8	66.1
14082	Wyoming	426	5.2	78.6	13.1	2.3	2.88	7.1	98.1	0	0.2	0.9	0.7	1.6	87.1	17.8	71.7
14113	Wyoming	703	4.6	76.2	12.9	1.4	3.13	1	99.1	1	0.4	0.3	0.1	1.4	84	12.5	64.6
14145	Wyoming	1618	4.6	78.2	14.4	1.3	2.95	3.3	99.2	0.1	0.6	0.1	0.8	2.1	86.1	9.9	71.6
14167	Wyoming	1663	4.8	80.2	14.1	2.5	2.86	8.4	98.3	0.4	0.1	0.2	0.2	2.5	86.7	11.2	70.5
14427	Wyoming	1964	5.4	77.6	14.7	2.9	2.89	11.5	99.1	0.7	1	0.4	0.1	1.5	82	13.1	66.2
14530	Wyoming	5575	5.8	77.1	15.3	3.3	2.91	6	97.6	1	0.6	0.6	1.5	3.2	81.2	14.9	67.9
14536	Wyoming	687	6.4	74.8	15.3	0.8	2.91	14.6	98.5	0.7	1.3	1	0.1	0.9	82.9	7.1	63.3

ZIP Code	County	Total Population	Age			Speaks foreign language at home (%)	Average Family Size	Families below poverty level (%)	Race / Ethnicity (%)						Education (%)		Percent participating in labor force
			Less than five	Eighteen and older	Sixty-five and older				White	Black	AIAN	Asian	Other	Hispanic	High school or higher	Bachelor's degree or higher	
14550	Wyoming	1537	5.5	78.9	17.2	3.3	2.92	5.6	98.1	0.8	0.8	0.7	1.1	1.7	80.3	7.9	67.7
14569	Wyoming	6211	5.4	77.6	16.1	1.8	2.94	8.3	98.4	0.4	0.9	0.9	0.6	1.5	81.4	14.8	61.6
14591	Wyoming	1748	4.7	77.2	14.5	2.9	2.97	3.8	97.8	1.4	0.5	0.5	1.5	2.5	86.4	16.2	70.8
Average	Wyoming	2786.53	5.15	77.92	14.25	2.59	2.96	6.15	96.79	2.17	0.63	0.50	0.76	1.96	81.95	12.29	65.77

Appendix B

Perinatal Data 2007-2009

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14060	Allegany	22	13.6	4.5	0	*	*
14708	Allegany	10	20	0	0	*	*
14709	Allegany	49	0	6.1	0	14.2	28.4
14711	Allegany	81	6.2	13	0	17.2	23
14714	Allegany	20	0	15	50	*	*
14715	Allegany	130	9.2	4.7	0	65.4	71.9
14717	Allegany	25	20	0	0	*	*
14727	Allegany	182	4.9	2.3	0	49.2	67.1
14735	Allegany	116	14.7	10.2	0	33.7	41.2
14739	Allegany	117	3.4	3.5	0	75	95.8
14744	Allegany	42	2.4	7.5	0	1.4	1.4
14754	Allegany	13	23.1	0	76.9	10.4	20.8
14770	Allegany	101	8.9	1	9.9	30	40
14777	Allegany	20	10	5	0	*	*
14802	Allegany	14	0	7.7	0	0	2.8
14803	Allegany	38	2.6	0	26.3	0	0
14804	Allegany	43	9.3	4.8	23.3	21.9	27.3
14806	Allegany	95	9.5	2.2	0	17.8	22.2
14813	Allegany	61	3.3	5.1	16.4	17	30.6
14822	Allegany	39	5.1	5.3	0	68.4	94
14880	Allegany	56	5.4	3.8	0	76	81.9
14895	Allegany	328	7.6	1.3	3	41	56
14897	Allegany	34	8.8	10	0	10.8	21.5
Average	Allegany	71.13	8.17	4.91	8.95	30.52	40.33
14041	Cattaraugus	13	0	8.3	0	*	*
14042	Cattaraugus	175	5.7	4.7	0	56.7	68
14065	Cattaraugus	86	12.8	6.4	11.6	53.8	59.1
14070	Cattaraugus	167	4.8	5.8	12	56.9	70.5
14101	Cattaraugus	68	4.4	3	0	56.7	63.8
14129	Cattaraugus	72	5.6	6	0	142.9	166.7
14138	Cattaraugus	98	26.5	12.9	0	29.4	44.1
14171	Cattaraugus	55	3.6	6.1	18.2	33.3	38.9

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14706	Cattaraugus	175	2.3	2.3	0	14	19.6
14719	Cattaraugus	145	33.1	7.1	20.7	27.3	35.5
14726	Cattaraugus	183	73.8	43.9	0	7.3	18.3
14729	Cattaraugus	27	22.2	4.3	0	*	*
14731	Cattaraugus	25	4	8	0	20.8	20.8
14737	Cattaraugus	142	5.6	2.9	14.1	30.1	42.6
14738	Cattaraugus	84	6	1.2	11.9	12.5	21.8
14741	Cattaraugus	60	10	5.1	0	48.4	59.1
14743	Cattaraugus	57	14	3.6	0	63.5	68.8
14748	Cattaraugus	25	8	0	40	*	*
14753	Cattaraugus	33	15.2	9.7	0	41.7	41.7
14755	Cattaraugus	89	13.5	7.7	11.2	19.6	29.4
14760	Cattaraugus	714	7.6	2.7	9.8	59.5	72.6
14772	Cattaraugus	220	22.3	2.3	0	33.3	41.7
14779	Cattaraugus	314	8.9	4.9	6.4	73.2	85
Average	Cattaraugus	131.61	13.47	6.91	6.78	44.05	53.4
14048	Chautauqua	602	10.3	7	8.3	82.4	101.4
14062	Chautauqua	94	7.4	3.2	0	13.1	22.9
14063	Chautauqua	293	8.5	3.9	3.4	7	11.8
14136	Chautauqua	177	6.8	6.9	5.6	50	69
14701	Chautauqua	1,599	8.3	5.5	8.8	62.8	84.9
14710	Chautauqua	93	9.7	4.8	21.5	19.8	31.1
14712	Chautauqua	65	12.3	6.5	30.8	24.3	38.2
14716	Chautauqua	91	11	2.3	0	19.9	24.3
14718	Chautauqua	45	11.1	4.4	44.4	3.4	27.2
14723	Chautauqua	51	21.6	9.8	0	24.2	36.4
14724	Chautauqua	112	5.4	22.8	8.9	39.9	39.9
14728	Chautauqua	42	35.7	3.8	23.8	9	18
14733	Chautauqua	109	11	2.9	18.3	44.2	64.6
14736	Chautauqua	17	0	11.8	0	*	*
14740	Chautauqua	32	21.9	8.7	0	6.7	13.3
14747	Chautauqua	68	17.6	6.3	0	26.3	39.5
14750	Chautauqua	83	9.6	1.2	0	19.3	30.3
14757	Chautauqua	107	15.9	4.4	0	37	46.3
14767	Chautauqua	77	13	19.4	0	8.3	8.3

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14769	Chautauqua	28	0	0	0	0	18.5
14775	Chautauqua	65	13.8	6.6	0	20.6	28.8
14781	Chautauqua	89	6.7	16.1	0	53.9	58.8
14782	Chautauqua	78	7.7	7.9	0	29.3	51.3
14784	Chautauqua	43	23.3	2.9	0	8.1	16.3
14787	Chautauqua	148	8.1	3	0	37.5	43.4
Average	Chautauqua	168.32	11.87	6.88	6.95	26.96	38.52
14001	Erie	269	4.5	2	0	13.9	22.1
14004	Erie	280	6.1	5.1	0	13.6	22
14006	Erie	279	6.1	1.8	7.2	18.8	38.6
14025	Erie	74	5.4	0	13.5	7.4	14.8
14026	Erie	23	8.7	0	0	*	*
14030	Erie	45	8.9	2.3	0	27.2	47.6
14031	Erie	166	6.6	1.9	0	4.7	12.9
14032	Erie	209	5.3	1.9	0	0	5.9
14033	Erie	45	6.7	0	0	4.8	19.3
14034	Erie	62	3.2	3.3	0	18.5	33.3
14043	Erie	668	6.6	3.6	4.5	12.3	22.4
14047	Erie	182	6.6	4	0	14.4	31.9
14051	Erie	475	7.2	2.6	4.2	2.3	6.2
14052	Erie	381	6.6	3.3	2.6	4.1	11.8
14055	Erie	28	10.7	0	0	31.7	39.7
14057	Erie	151	7.9	2.1	6.6	5.6	16.7
14059	Erie	175	2.9	1.8	0	5.1	17.9
14068	Erie	165	6.1	3.7	0	2.3	10.2
14069	Erie	25	4	0	0	*	*
14072	Erie	544	5.9	3.3	3.7	8.1	19.3
14075	Erie	1,145	4.5	2.3	3.5	13.3	29.7
14080	Erie	134	5.2	4.7	7.5	16.3	39.6
14081	Erie	111	2.7	6.4	0	47.6	59.5
14085	Erie	286	9.4	1.1	0	5.1	15.4
14086	Erie	849	5.4	2.1	7.1	6.7	15.3
14091	Erie	48	14.6	2.2	0	78.4	117.6
14102	Erie	32	3.1	3.2	0	25.6	34.2
14111	Erie	137	8.8	4.7	36.5	23.3	33.3

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14127	Erie	753	6.4	1.9	2.7	4.2	12.9
14139	Erie	78	7.7	2.7	0	14.5	48.3
14141	Erie	244	9.8	1.7	4.1	24.4	34.5
14150	Erie	1,154	6.1	4.3	7.8	24.1	48.3
14170	Erie	49	2	2.1	0	4.6	4.6
14201	Erie	602	8	4.3	13.3	86	137.5
14202	Erie	98	8.2	1.1	20.4	18	39.6
14203	Erie	72	11.1	3.4	0	*	*
14204	Erie	372	8.6	7.2	5.4	87.7	159.1
14206	Erie	747	8.2	4.6	5.4	53.4	101.5
14207	Erie	1,240	11	4.6	9.7	96.7	136.4
14208	Erie	402	11.4	6.9	17.4	39.5	79.9
14209	Erie	252	12.3	7.6	0	100	153.7
14210	Erie	654	7.3	2.9	7.6	62.5	89.6
14211	Erie	1,132	12.6	6.8	13.3	93	157
14212	Erie	536	12.3	5.5	5.6	77.8	125.8
14213	Erie	1,355	9.9	6.8	8.9	72.5	106.2
14214	Erie	648	10.5	5.7	17	26	62.8
14215	Erie	1,862	13.3	7.7	17.2	72.6	141.7
14216	Erie	858	6.6	2.8	7	37.4	63.6
14217	Erie	737	5	4.2	1.4	22.1	48.2
14218	Erie	781	9.6	4.9	10.2	52.7	80.8
14219	Erie	339	8.6	3	11.8	23	44.9
14220	Erie	992	8.5	3.1	6	43.6	73.9
14221	Erie	1,243	6	3.1	4	4.9	14.4
14222	Erie	304	4.6	2.8	6.6	13.4	61
14223	Erie	656	7.3	1.7	10.7	10.4	27.5
14224	Erie	950	6.5	2.6	3.2	11.1	26.3
14225	Erie	1,100	7.7	3.9	3.6	38.1	66.5
14226	Erie	1,055	6.4	3.5	5.7	15	31.1
14227	Erie	637	8.6	3.3	7.8	9.3	22.6
14228	Erie	623	8.5	3.7	11.2	12.2	34.6
Average	Erie	491.88	7.51	3.33	5.70	29.15	52.14
14005	Genesee	57	7	4.3	0	19.9	24.9
14013	Genesee	85	4.7	6.4	0	53.9	68.6

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14020	Genesee	804	6.6	2.3	10	38.5	58.9
14036	Genesee	124	6.5	1.7	0	10.8	26.9
14040	Genesee	59	5.1	0	0	21.2	26.5
14054	Genesee	57	8.8	1.9	17.5	24.4	32.5
14058	Genesee	99	3	4.3	0	56.3	65.7
14125	Genesee	128	7.8	2.5	0	31.3	45.6
14143	Genesee	38	2.6	2.8	0	46.3	64.8
14416	Genesee	105	8.6	3.1	0	15.6	39.1
14422	Genesee	84	3.6	2.5	11.9	26.1	35.9
14482	Genesee	313	5.1	1	6.4	29.5	44.9
14525	Genesee	76	3.9	1.4	0	13.3	30
Average	Genesee	156.08	5.64	2.63	3.52	29.78	43.41
14008	Niagara	45	4.4	2.3	0	35.1	40.9
14012	Niagara	63	4.8	6.7	0	33.3	50
14028	Niagara	58	5.2	5.3	0	34.5	69
14067	Niagara	145	5.5	1.4	0	21.4	29.9
14092	Niagara	250	6	0.4	8	7.8	20.4
14094	Niagara	1,737	7.6	4	8.6	27.3	43
14105	Niagara	125	4.8	5	0	28.8	48
14108	Niagara	135	9.6	2.3	0	12.5	17.8
14120	Niagara	1,347	6.4	3.2	2.2	20.8	40.6
14131	Niagara	137	6.6	3.1	0	24.8	56.3
14132	Niagara	166	4.2	3.1	0	18.1	41.1
14172	Niagara	67	6	1.5	0	6.9	20.8
14174	Niagara	130	8.5	0	0	17.7	33.1
14301	Niagara	607	12	4.8	8.2	99.5	159.7
14303	Niagara	235	10.2	4.6	17	76.2	127.6
14304	Niagara	884	6.4	3.2	6.8	22.8	49.4
14305	Niagara	664	11.1	4.3	16.6	72.2	126.2
Average	Niagara	399.71	7.02	3.25	3.96	32.92	57.28
14098	Orleans	89	4.5	4.8	0	38.8	50.4
14103	Orleans	369	6.5	5.9	5.4	33.3	44.2
14411	Orleans	424	11.8	2.5	7.1	41	65.8
14470	Orleans	242	6.6	2.2	0	19.9	34.3
14476	Orleans	70	5.7	1.6	0	24.9	44.8

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14477	Orleans	42	11.9	2.5	47.6	9.4	18.8
14571	Orleans	32	3.1	3.2	0	17.5	17.5
Average	Orleans	181.14	7.16	3.24	8.59	26.4	39.4
14009	Wyoming	200	6	1.1	5	24.6	43.6
14011	Wyoming	161	5	1.9	6.2	14.3	23.2
14024	Wyoming	73	4.1	4.3	13.7	33.3	44.4
14037	Wyoming	28	3.6	0	0	10.1	40.4
14066	Wyoming	40	12.5	7.7	50	20.4	34
14082	Wyoming	10	10	0	0	*	*
14113	Wyoming	24	8.3	9.1	0	*	*
14145	Wyoming	39	0	2.6	0	0	0
14167	Wyoming	39	2.6	2.9	0	7.1	28.4
14427	Wyoming	61	8.2	0	0	23.8	59.5
14530	Wyoming	210	5.2	1	0	24.2	44.4
14536	Wyoming	24	0	0	0	*	*
14550	Wyoming	71	5.6	4.3	14.1	45.8	65.4
14569	Wyoming	202	3	2.6	0	23.4	30.6
14591	Wyoming	55	7.3	3.6	0	0	11.1
Average	Wyoming	82.47	5.43	2.74	5.93	18.92	35.42

Perinatal Data 2008-2010

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14060	Allegany	16	12.5	6.3	0	*	*
14709	Allegany	53	5.7	7.8	0	6	6
14711	Allegany	79	5.1	14.3	0	18.5	27.8
14714	Allegany	15	0	6.7	0	*	*
14715	Allegany	108	9.3	5.7	0	39.7	42.3
14717	Allegany	24	12.5	0	0	25	25
14721	Allegany	12	0	0	0	*	*
14727	Allegany	167	4.2	1.8	0	42.3	52.9
14735	Allegany	128	11.7	15.7	0	31.7	38.1

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14739	Allegany	121	6.6	4.2	0	54.5	64.1
14744	Allegany	41	7.3	7.7	0	1.4	1.4
14754	Allegany	11	18.2	0	90.9	0	10.1
14770	Allegany	90	5.6	2.3	0	28.5	31.3
14777	Allegany	21	19	0	0	*	*
14802	Allegany	18	0	5.9	0	0	3
14803	Allegany	29	3.4	0	0	0	0
14804	Allegany	46	8.7	4.3	21.7	14.9	29.9
14806	Allegany	98	6.1	2	0	28.2	32.9
14813	Allegany	64	6.3	6.3	15.6	6.2	21.6
14822	Allegany	35	8.6	2.9	0	50.7	58
14880	Allegany	56	8.9	0	0	52.9	63.5
14895	Allegany	322	7.8	1.3	3.1	31.5	45.2
14897	Allegany	39	7.7	8.6	0	*	*
Average	Allegany	69.26	7.62	4.51	5.71	24	30.73
14041	Cattaraugus	16	6.3	7.1	0	*	*
14042	Cattaraugus	172	6.4	4.2	5.8	44.7	52.8
14065	Cattaraugus	83	6	8.2	12	36.5	41.1
14070	Cattaraugus	171	6.4	3.7	0	45.6	57.6
14101	Cattaraugus	67	10.4	1.5	0	52.6	52.6
14129	Cattaraugus	64	3.1	3.3	0	108.5	131.8
14138	Cattaraugus	93	31.2	14.1	0	17.5	39.5
14171	Cattaraugus	58	6.9	1.9	17.2	18.3	27.4
14706	Cattaraugus	154	3.9	3.2	0	10.4	16.6
14719	Cattaraugus	137	36.5	7.4	7.3	29.1	37
14726	Cattaraugus	195	75.4	28.6	0	9.8	16.3
14729	Cattaraugus	28	25	4.3	0	*	*
14731	Cattaraugus	26	7.7	0	0	27.8	34.7
14737	Cattaraugus	154	3.9	2.7	6.5	31.1	37.3
14738	Cattaraugus	79	2.5	2.6	0	19.1	30.1
14741	Cattaraugus	57	8.8	5.4	0	28.2	37.6
14743	Cattaraugus	56	12.5	0	0	36	40.5
14748	Cattaraugus	31	6.5	3.2	0	*	*
14753	Cattaraugus	37	8.1	10.8	0	30.3	30.3
14755	Cattaraugus	89	14.6	6.8	11.2	8.1	12.2

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14760	Cattaraugus	716	6.3	2.8	7	56.1	66.7
14772	Cattaraugus	218	26.1	2.4	0	35.1	44.8
14779	Cattaraugus	319	8.2	3.8	9.4	76.4	88.3
Average	Cattaraugus	131.30	14.03	5.57	3.32	36.06	44.76
14048	Chautauqua	599	10.4	6	8.3	67.3	87.6
14062	Chautauqua	94	11.7	6.7	0	19.3	30.3
14063	Chautauqua	278	7.6	4.1	0	7.1	11.3
14136	Chautauqua	165	7.9	4.9	18.2	33.9	47.1
14701	Chautauqua	1,546	8	5.4	9.1	57.8	76.8
14710	Chautauqua	92	7.6	3.6	10.9	18.4	27.6
14712	Chautauqua	54	18.5	8	37	16.9	28.2
14716	Chautauqua	71	12.7	2.9	14.1	13.8	13.8
14718	Chautauqua	47	14.9	6.8	42.6	3.3	20
14723	Chautauqua	44	22.7	5.6	0	16.7	38.9
14724	Chautauqua	99	7.1	20.2	10.1	25.4	25.4
14728	Chautauqua	43	32.6	16.7	23.3	7.8	15.5
14733	Chautauqua	107	10.3	3.9	9.3	39.7	58.2
14736	Chautauqua	19	0	10.5	0	*	*
14740	Chautauqua	36	22.2	7.1	0	19.2	32.1
14747	Chautauqua	68	16.2	6.3	0	28.7	35.8
14750	Chautauqua	96	13.5	2.1	0	18.6	28
14757	Chautauqua	92	14.1	7.3	0	27.6	32.6
14767	Chautauqua	82	14.6	24.6	0	7.2	7.2
14769	Chautauqua	25	4	0	0	7.2	21.7
14775	Chautauqua	67	14.9	9.1	0	34	40.8
14781	Chautauqua	83	8.4	17.3	24.1	61.4	70.2
14782	Chautauqua	79	8.9	7.8	12.7	42.5	65.4
14784	Chautauqua	42	26.2	3	23.8	21.7	36.2
14787	Chautauqua	164	7.3	3.9	0	29.9	36.5
Average	Chautauqua	163.68	12.89	7.75	9.74	26.06	36.97
14001	Erie	250	4.8	2.5	0	14.5	20.1
14004	Erie	257	5.4	2.4	3.9	12.5	20.6
14006	Erie	258	6.2	2.4	7.8	17.6	31.7
14025	Erie	83	4.8	0	12	13.6	17
14026	Erie	23	8.7	4.5	0	9	9

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14030	Erie	52	9.6	2	0	23	34.5
14031	Erie	170	7.1	1.2	5.9	2	10.2
14032	Erie	187	8	2.2	5.3	0	1.2
14033	Erie	47	8.5	2.2	42.6	4.2	12.5
14034	Erie	58	3.4	1.8	0	14.8	29.6
14043	Erie	663	6.2	3.3	3	13.1	20.6
14047	Erie	182	8.2	4	0	14.1	29.7
14051	Erie	448	6.7	2.6	4.5	1.2	6.1
14052	Erie	359	6.7	2.6	2.8	4.3	10.7
14055	Erie	25	12	0	0	26.1	39.2
14057	Erie	154	9.1	2.1	6.5	4.4	11.1
14059	Erie	175	4	4.1	0	3.1	10.3
14068	Erie	152	6.6	3.9	0	4.6	9.1
14069	Erie	26	0	0	0	*	*
14072	Erie	530	6	2.4	11.3	8.2	18.9
14075	Erie	1,115	5.2	2.1	7.2	10.8	24.7
14080	Erie	127	3.9	3.3	15.7	13.7	23.5
14081	Erie	123	5.7	5.7	8.1	53.8	66.7
14085	Erie	289	10.4	1.1	0	6.3	18.8
14086	Erie	869	5.8	1.9	4.6	5.5	14.9
14091	Erie	44	13.6	2.4	0	16.7	50
14102	Erie	40	0	7.7	0	25.6	38.5
14111	Erie	129	7.8	5.8	23.3	16.7	27.8
14127	Erie	725	7	2.6	0	3.1	9.3
14139	Erie	77	9.1	2.8	0	19.6	47.1
14141	Erie	254	9.4	1.7	7.9	23.3	31.9
14150	Erie	1,175	5.6	2.9	5.1	19.8	37.5
14170	Erie	49	8.2	0	0	0	0
14201	Erie	586	8.2	3.2	15.4	69.7	105.8
14202	Erie	113	6.2	0	8.8	29.1	52.3
14203	Erie	73	13.7	3.3	0	98	294.1
14204	Erie	349	10	6.4	5.7	72.8	133.3
14206	Erie	760	8.9	5.1	6.6	47.9	83.2
14207	Erie	1,265	10.3	5.8	9.5	87.7	116.8
14208	Erie	385	10.6	7	15.6	36.9	71.9

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14209	Erie	243	11.9	5.7	4.1	82.9	138.2
14210	Erie	655	7.2	4	10.7	53	80.2
14211	Erie	1,073	13.2	8	18.6	71.5	128.1
14212	Erie	522	12.6	7.7	3.8	62.8	96.6
14213	Erie	1,392	9.7	7.6	7.2	69.2	100.6
14214	Erie	670	10.3	5.3	14.9	22.5	55.6
14215	Erie	1,866	12.9	6.7	16.6	64.6	124.4
14216	Erie	861	5.9	2.9	5.8	28.6	50
14217	Erie	730	6.4	3.7	2.7	16.4	36.2
14218	Erie	792	9.2	6.1	12.6	51.2	84.3
14219	Erie	347	8.4	2.9	2.9	18.9	36.9
14220	Erie	978	7.7	3.7	4.1	34.9	56.7
14221	Erie	1,163	5.6	2.7	5.2	4.2	12.3
14222	Erie	287	5.6	2.6	3.5	14	55.8
14223	Erie	647	6.2	2.4	6.2	8.4	22.3
14224	Erie	959	6.8	2.1	6.3	6.5	17.9
14225	Erie	1,111	8	3.6	9	32.2	57.6
14226	Erie	1,017	7.8	2.9	4.9	11	26.2
14227	Erie	629	8.6	2.8	3.2	11.6	21.6
14228	Erie	636	8	4.1	9.4	12.6	33.7
Average	Erie	487.07	7.73	3.41	6.51	25.84	47.89
14005	Genesee	57	7	3.8	0	11.8	11.8
14013	Genesee	76	6.6	5.5	13.2	37	41.2
14020	Genesee	779	7.2	2.8	6.4	30.3	44.7
14036	Genesee	123	7.3	1.7	8.1	9.7	19.4
14040	Genesee	56	7.1	0	0	13.7	22.8
14054	Genesee	57	7	0	0	26.7	33.3
14058	Genesee	95	3.2	3.3	0	41.2	49.4
14125	Genesee	121	8.3	2.5	8.3	23.1	32.4
14143	Genesee	38	2.6	0	0	43.9	52.6
14416	Genesee	99	7.1	3.2	0	15.9	31.7
14422	Genesee	81	4.9	0	12.3	22.8	31.3
14482	Genesee	303	4.3	2.1	6.6	29.6	44.4
14525	Genesee	81	3.7	1.3	0	17.2	28.7
Average	Genesee	151.23	5.87	2.02	4.22	24.84	34.13

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14008	Niagara	41	7.3	0	0	46.2	51.3
14012	Niagara	74	4.1	1.4	0	28.1	38.6
14028	Niagara	57	5.3	3.5	0	58.2	79.4
14067	Niagara	132	5.3	0.8	7.6	14.6	20
14092	Niagara	258	6.2	0.8	11.6	7.6	16
14094	Niagara	1,780	8.2	3.9	6.2	26.8	42.2
14105	Niagara	109	4.6	6.7	0	26.1	54.5
14108	Niagara	128	10.2	2.4	0	15.9	19
14120	Niagara	1,319	7.1	2.6	2.3	16.1	29.6
14131	Niagara	133	6.8	3.1	0	25.9	44.4
14132	Niagara	150	2.7	5.4	0	14.8	32.6
14172	Niagara	76	7.9	1.3	0	12.1	33.3
14174	Niagara	132	9.8	0	7.6	17.6	30
14301	Niagara	600	11.2	4.5	5	71.7	114.6
14303	Niagara	243	11.9	5.3	8.2	80.5	144.2
14304	Niagara	892	6.5	3.3	4.5	22	43.9
14305	Niagara	640	11.7	4.2	18.8	59.2	100.1
Average	Niagara	397.88	7.46	2.89	4.22	31.96	52.57
14098	Orleans	96	6.3	2.3	0	44	44
14103	Orleans	359	6.7	5.4	8.4	29	37.8
14411	Orleans	408	9.1	2	7.4	38.5	56.7
14470	Orleans	241	6.2	2.6	0	15.1	27.2
14476	Orleans	65	7.7	0	0	19.8	23.8
14477	Orleans	51	9.8	0	39.2	9.3	9.3
14571	Orleans	36	5.6	2.9	0	26.3	35.1
Average	Orleans	179.43	7.343	2.17	7.86	26	33.41
14009	Wyoming	189	7.9	1.7	10.6	17.9	30.9
14011	Wyoming	164	3.7	0.6	6.1	15.7	20.9
14024	Wyoming	67	4.5	3.1	14.9	17.5	30.7
14037	Wyoming	26	0	4	0	11.1	22.2
14066	Wyoming	43	9.3	7	46.5	19.6	29.4
14082	Wyoming	15	6.7	0	0	*	*
14113	Wyoming	21	4.8	5	0	*	*
14145	Wyoming	38	2.6	2.6	0	0	0
14167	Wyoming	40	0	2.5	0	6.5	26.1

ZIP Code	County	Total Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate	Teen Birth Rate	Teen Pregnancy Rate
14427	Wyoming	62	6.5	0	0	22.6	50.8
14530	Wyoming	202	4.5	1.5	0	25.2	44.6
14536	Wyoming	29	0	0	0	*	*
14550	Wyoming	60	5	5.1	16.7	35.5	56.7
14569	Wyoming	200	5	2.1	0	22.2	25.9
14591	Wyoming	49	8.2	4.1	0	0	4.5
Average	Wyoming	80.33	4.58	2.62	6.32	16.15	28.56

Appendix C – Maps













