Florida Prematurity Summit:
Where are the State and Counties with Preterm Birth?

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2015 Florida Prematurity Summit: Where are the State and Counties with Preterm Birth?

Purpose: This overview provides a brief introduction to preterm birth in Florida for the 2015 Florida Prematurity Summit. Preterm birth is defined as a live birth before 37 completed weeks of gestation based on the best clinical/obstetrical estimate reported on the birth certificate. This overview focuses on available preterm birth rates and trends, identified risk factors, maternal characteristics, and select counties. The intent is to provide summit participants with sufficient information on the patterns of preterm birth in Florida in order to develop a successful state strategic plan. Information on four select counties is provided to show the commonalities and differences across communities in the state: Miami-Dade, Duval, Gadsden, and Hillsborough Counties.

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Data Sources: Available data were used for background and comparison purposes (see reference section, p 13). Vital statistics on live births (2004-2014) from Florida CHARTS were used for preterm birth rates, risk factors and characteristics for the state and select counties. 2011-2014 birth certificate files were used to generate state and county maps. Linked birth certificate and hospital discharge data files for births 2004-2006 and 2011-2013 were used for examination of prevalence and preterm rates for select medical conditions and complications. Other data sources were used for other select items.

State and County Maps: Florida and four county maps were generated from 2011-2014 Florida birth certificate files by the Family Data Center and the Institute for Child Health Policy at the University of Florida with support from the March of Dimes. Additional county maps will be made available through the internet by the time of the Summit.

Table of Contents:

2015 Florida Prematurity Summit: Where are the State and Counties with Preterm Birth?

Introduction

Preterm birth is associated with substantial individual and societal burden. Preterm birth is a leading cause of death worldwide in children before 5 years of age.[1] Among survivors, preterm birth is associated with substantially increased risks for developmental delay and disability—particularly for babies born before 32 completed week's gestation.[2-10] In addition to contributing to substantial psychological and financial burden at the individual and family level, preterm birth exacts a health toll on communities and societies with respect to short- and long-term health care costs as well as loss in potential productivity. The cost of preterm birth has been estimated at more than $26 billion annually in the United States alone.[11]

The burden of preterm birth differs greatly among the regions of the world. Rates of 15% or more are often seen in developing countries, including Malawai, Pakistan, and Botswana, while rates below 10% occur more often in areas such as Canada and Western Europe.[12,13] In 2013, the overall rate of preterm birth in the United States was 12.7% with the highest observed rates (above 15%) in Alabama and Louisiana. The lowest rates (below 9%) in the United States were observed in Vermont and California.[14] According to the 2014 March of Dimes Preterm Birth Report Card, which used gestational age based on last menstrual period, Florida had a preterm birth rate of 13.6% making it the highest rate of the five most populous states (Florida, Illinois, New York, California, and Texas).

It is well known in the health community that the United States's preterm birth rates are much higher than they should be. The World Health Organization, along with many other organizations nationally and globally, have set standards for preterm birth rates that the United States has not yet been able to meet.[15] Nationally, there are many initiatives looking to reduce preterm birth rates including the Healthy People 2020 initiative and the March of Dimes. As of 2013, the United States has reached the Healthy People 2020 goal of 11.4%, but is still far from the March of Dimes goal of 9.6%.[16,17]

Measuring Preterm Birth

One of the considerable challenges in monitoring and addressing preterm birth rates globally and in the United States is the metric by which gestational age is measured. Preterm birth can be measured clinically by using dating-based last menstrual period, measuring uterine growth, or accessing fetal size using ultrasound early in pregnancy. An obstetric provider uses these and other information to generate the best obstetric gestational age estimate. On a population basis, birth certificate information in the United States is used to estimate preterm birth rates as it is the only data source uniformly available for providing fairly accurate estimates. In the past, gestational age and preterm birth rates were estimated based primarily on last menstrual period. The National Center for Health Statistics and the March of Dimes now uses the best clinical/obstetrical estimate for estimating gestational age and preterm birth rates as researchers have shown this to be a more accurate measure of gestational age and preterm birth on a population basis in this country. (In published studies, this approach slightly underestimates the preterm birth rate).[18-20]

Failure to adopt this new standard in population-level preterm birth reporting has been shown to over report the preterm birth rates in many locations. This has been hypothesized to occur because of differences in ovulation patterns and menstrual cycle length as well as problems with maternal recall.[21,22] This pattern of over reporting has been observed in Florida, wherein rates based on last menstrual period calculation are much higher than rates based on clinical/obstetric estimate. The Florida rates presented in this overview are primarily derived using the new US standard, best clinical/obstetric estimate.

After many years of increasing rates, Florida's preterm birth rate has declined slowly from 11.2% in 2005 to 9.9% in 2014 as measured by best clinical/obstetric estimate (see Figure 1). This represents an

almost 12% decline in preterm births. In 2014, 21,804 of the state's 219,905 live births were preterm or before 37 completed weeks of gestation. Consequently, these preterm babies may face the many complications that arise from being born too early.

Figure 1. Percent of Preterm Live Births Based on Last Menstrual Period or Clinical/Obstetric Estimate, Florida Residents, 2005-2014

Figure 2. Percent of Preterm Birth[1] by Gestational Age Florida Residents, 2005-2014

[1] Based on clinical/obstetrical estimate
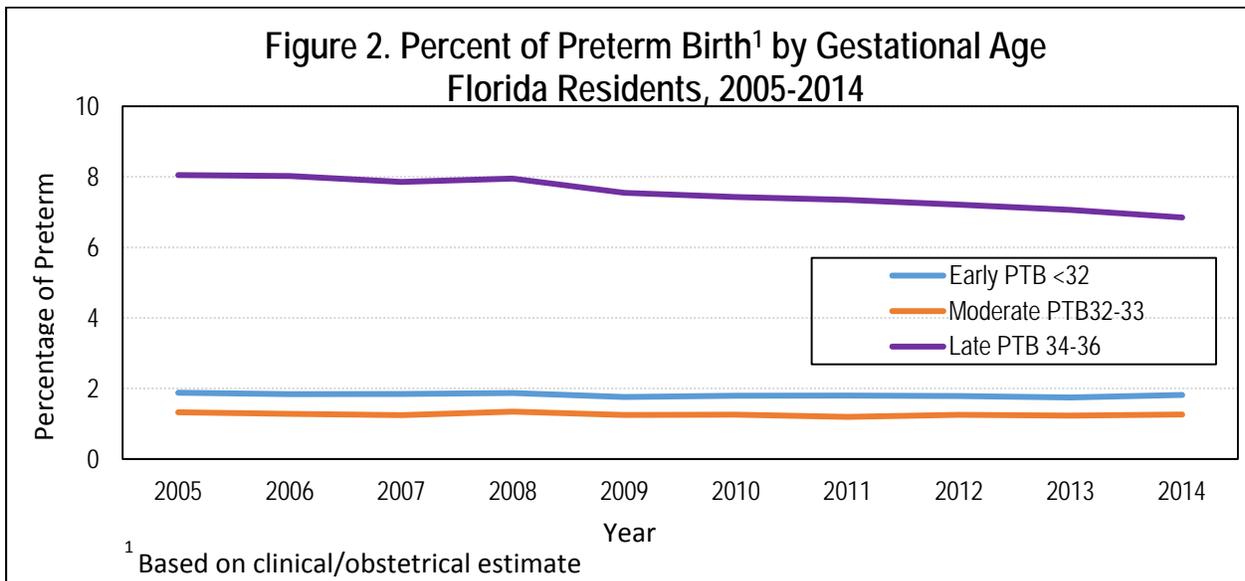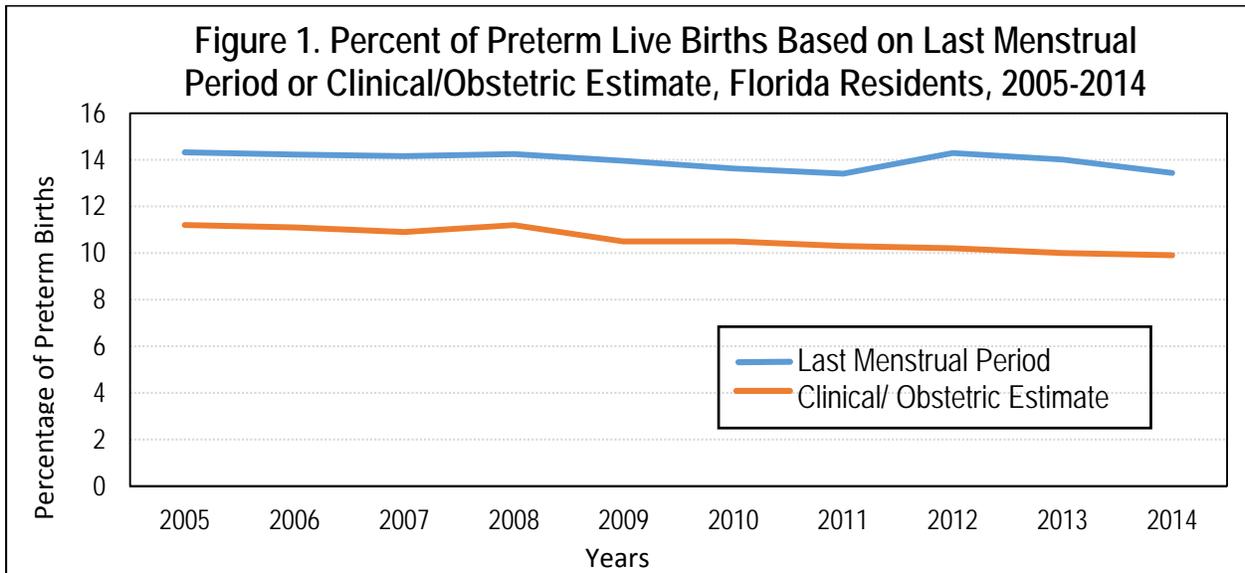
Preterm Births in Florida (Figures 1 and 2)
- Based on last menstrual period, Florida's preterm birth rate began a downward trend in 2012.
- Based on best clinical/obstetric estimate, Florida's preterm birth rate is substantially lower than the previously reported rate, and the rate has decreased 12%–consistently and significantly–since 2005.
- The decrease in Florida's preterm birth rate has largely occurred among late preterm births—births occurring at 34 to 36 weeks gestation. The group represents the largest percentage of all preterm births.
- The early and moderate preterm birth rates have changed little over the last 10 years.

Figure 3. Percent of Preterm Births by Race and Ethnicity of Mother Florida Residents, 2005-2014

Figure 4. Percent of Preterm Births by Insurance Type Florida Residents, 2005-2014
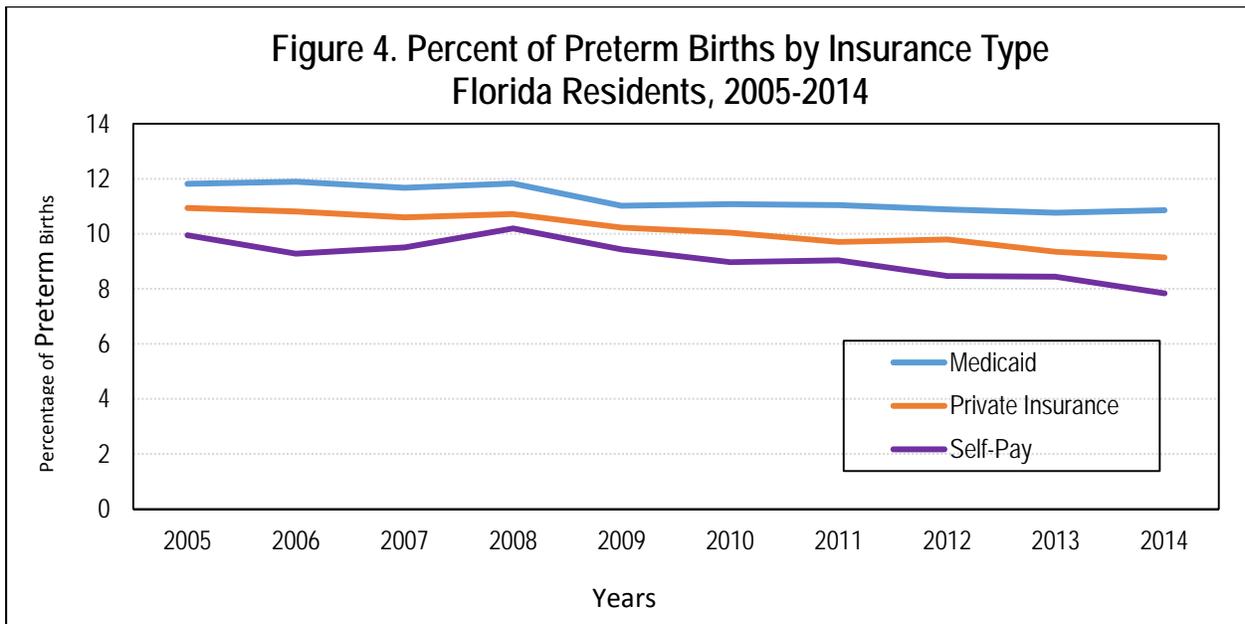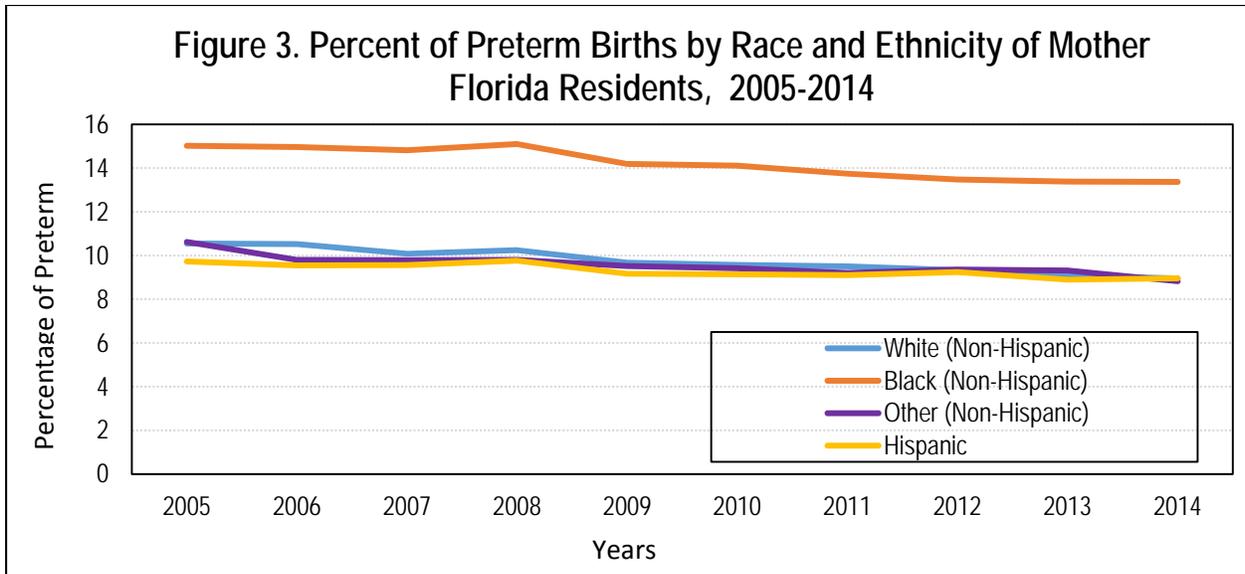
Preterm Births in Florida Using Clinical/Obstetrical Estimate by Race/Ethnicity and Delivery Insurance Type (Figures 3 and 4)

- Non-Hispanic Black mothers have by far the highest preterm birth rate when compared to Non-Hispanic White, Hispanic and Other Non-Hispanic mothers.
- The consistent decrease in rates by maternal race and ethnicity was similar for groups. However, the percent of decline in preterm rates from 2005 to 2014 was lower for Hispanic (-7.2%) and Non-Hispanic Black (-10.7%) mothers compared to Non-Hispanic White (-15.2%) and Other (-17%) mothers. This is problematic as Non-Hispanic Black mothers have the highest preterm birth rate.
- Mothers whose deliveries were paid for by Medicaid had higher preterm birth rates than those paid for by private insurance or self-pay.
- The decrease in preterm birth rates by insurance type were similar in direction. However, the percent of decline in preterm rates from 2005 to 2014 was lower for Medicaid (-8.3%) than private (-18.2%) and self-pay (-20%). This is problematic as Medicaid mothers had the highest preterm birth rate.

4

	2004-06 Percent of All Births (%)	2012-14 Percent of All Births (%)	Change [6]	2004-06 Preterm Birth Rate (%)	2012-14 Preterm Birth Rate (%)
Table 1. Prevalence of Preterm Birth Risk Factors and Respective Preterm Birth Rates Potentially Contributing to Florida's Preterm Birth Rate, Florida, 2004-2006 and 2012-2014[22]					
Preterm Birth Rates[1]					
Overall Preterm Birth Rate (<37 wks)	11.2	10.1	-1.1	-	-
Early Preterm (<32 wks)	1.9	1.8	-0.1	-	-
Moderate Preterm (32-33 wks)	1.3	1.3	0.0	-	-
Late Preterm (34-36 wks)	8.0	7.0	-1.0	-	-
Term (37 plus wks)	88.8	89.9	1.1	-	-
Late Preterm (34-36 wks) [4,5]					
Spontaneous Delivery	3.7	3.3	-0.4	-	-
Provider Initiated Delivery	4.5	4.1	-0.4	-	-
Other Preterm (<34 wks) [4,5]					
Spontaneous Delivery	1.2	1.1	-0.1	-	-
Provider Initiated Delivery	1.9	1.9	0.0	-	-
Early Term Births (37-38 wks)[4,5]					
Non-Medically Indicated Early Term Births	13.4	6.5	-6.9	-	-
Early Term Births	33.5	25.6	-7.9	-	-
Pre-pregnancy BMI					
Underweight (<18.5)	5.4	4.6	-0.8	12.9	11.3
Normal Weight (18.5-24.9)	51.9	47.6	-4.3	10.4	9.0
Overweight (25.0-29.9)	23.7	25.5	1.8	10.6	9.8
Obese I (30.0-34.9)	11.1	12.7	1.6	11.5	10.7
Obese II (35.0-39.9)	4.8	5.8	1.0	12.5	11.6
Obese III (> 40.0)	3.1	3.8	0.8	13.9	12.7
Smoking[2]					
Yes	9.4	6.6	-2.8	12.8	13.4
No	90.6	93.4	2.8	11.0	9.9
Assistive Reproductive Technology (ART)[3]	0.8	1.2	0.4	-	-
Multiple Births					
Singletons	96.9	96.7	-0.1	9.4	8.4
Twins	3.0	3.2	0.2	64.7	59.7
Triplets or more	0.1	0.1	0.0	98.3	98.1
Inter-pregnancy Interval					
<18 Months	22.9	21.7	-1.1	10.5	9.2
18 or more Months	38.0	40.9	2.9	9.5	8.6
No Prior Pregnancy	39.2	37.4	-1.7	12.6	11.3
Mother's Age					
10-17	3.6	1.8	-1.8	12.9	10.3
18-34	82.0	82.5	0.6	10.7	9.7
35 or older	14.5	15.7	1.2	13.2	12.1

	2004-06 Percent of All Births (%)	2012-14 Percent of All Births (%)	Change [6]	2004-06 Preterm Birth Rate (%)	2012-14 Preterm Birth Rate (%)
Table 1 (Continued). Prevalence of Preterm Birth Risk Factors and Respective Preterm Birth Rates Potentially Contributing to Florida's Preterm Birth Rate, Florida, 2004-2006 and 2012-2014[22]					
Hypertension[4,5]					
Pre-existing Hypertension	2.9	3.7	0.8	26.4	25.2
Gestational Hypertension/ Pre-Eclampsia	7.7	8.7	1.0	25.6	23.6
Diabetes[4,5]					
Diabetes Mellitus	1.2	1.5	0.3	25.1	25.8
Gestational Diabetes	5.4	7.0	1.6	15.5	14.5

[1] Data based on clinical/obstetric estimate
[2] Data item reported on the birth certificate changed over time
[3] Only data for midpoint years reported (i.e., data from 2005 and 2013)
[4] Results collected from linked birth certificate and hospital discharge data
[5] Reporting period is 2011-2013 as data for 2012-2014 was not currently available
[6] The risk factor prevalence in 2012-14 minus the prevalence in 04-06. This may be off by 0.1 due to rounding

Preterm Birth Risk Factors Potentially Contributing to Florida's Preterm Birth Rate (Table 1)
- The decrease in Florida's preterm births was predominantly among late preterm births (34 to 36 weeks gestation).
- Non-medically indicated deliveries have dropped substantially in Florida; the relationship to the decreased rate of preterm births is not clear. Preterm rates in Florida dropped among both spontaneous and physician induced deliveries.
- On the positive side for preterm birth risk factors, Florida's mothers are now more likely to smoke less, wait 18 months before their next pregnancies, and not be teenagers.
- On the negative side for preterm births, Florida's mothers are now more likely to be obese, have births because of ART, be over 35 years of age, and have hypertension or diabetes.

Table 2. Estimated Change in the Preterm Birth Rate Due to a Change in Risk Factor Prevalence Unadjusted for Other Risk Factors, Florida, 2004-2006 to 2012-2014.	
Risk Factor	Estimated Change in Preterm Rate Over Time Period
Overall	-1.10%
Early Elective Delivery	-
Body Mass Index	0.06%
Smoking	-0.07%
ART	-
Multiple Births	0.07%
Interpregnancy Interval	-0.03%
Maternal Age	0.00%
Hypertension	0.29%
Diabetes	0.11%

This table provides estimates of the potential change in Florida's preterm birth rate from 2004-2006 due to the change in prevalence of select risk factors in 2012-2014. These population impact estimates are not adjusted for the impact of other risk factors simultaneously. Positive estimates mean the preterm rate would have increased that estimated amount and negative estimates mean the preterm rates would have decreased that amount.

- The change in Florida's overall preterm birth rate from 2004-2006 to 2012-2014 is an absolute decrease of 1.10%.
- Risk factors that could have contributed to the largest increases were hypertension (0.29), diabetes (0.11), and multiple births (0.07).
- Risk factors that could have contributed to the largest decreases were smoking (-0.07) and interpregnancy interval (-0.03).
- None of the risk factors were of sufficient impact to explain the decrease in Florida's preterm birth rate.

Table 3. Prevalence of Maternal and Family Characteristics for All Births Florida, 2004-2006 and 2012-2014			
	2004-06 Percent of All Births (%)	2012-14 Percent of All Births (%)	Change[6]
Maternal and Family Characteristics			
Race/Ethnicity			
White (non-Hispanic)	46.3	44.9	-1.4
Black (non-Hispanic)	21.0	22.2	1.2
Other (non-Hispanic)	4.3	5.1	0.8
Hispanic	28.3	27.7	-0.6
Education			
8th Grade or Less	6.0	3.4	-2.7
9-12th Grade, No Diploma	15.1	11.0	-4.0
High School Diploma or GED	31.8	31.1	-0.7
Some College, No Degree	17.4	19.6	2.2
Associates Degree or Higher	29.7	34.9	5.3
Single Mothers	42.9	48.0	5.1
Father Listed on Birth Certificate			
Yes	89.8	86.1	-3.7
No	10.2	13.9	3.7
Unintended Pregnancy[1,5]	46.3	46.1	-0.2
Non-U.S. Nativity	31.1	30.3	-0.8
Maternal Health & Health Care			
Health Insurance			
Medicaid	44.1	51.1	7.0
Private Insurance	45.9	40.6	-5.2
Self-Pay	9.1	7.1	-2.0
Other	1.0	1.2	0.2
Prenatal Care			
Adequate Plus Prenatal Care	31.2	29.6	-1.6
Adequate Prenatal Care	41.3	40.5	-0.8
Intermediate Prenatal Care	13.2	16.1	2.9
Inadequate Prenatal Care	14.3	13.8	-0.5
Number of Births Prior to Delivery[2]			
0	41.9	40.5	-1.4
1	32.2	32.1	-0.1
2	15.9	16.1	0.2
3+	10.0	11.2	1.2
Women Health and Health Care (15-44 yrs)			
Uninsured [1,3,5]	27.2	29.7	2.5

Table 3 (Continued). Prevalence of Maternal and Family Characteristics for All Births Florida, 2004-2006 and 2012-2014			
Socioeconomic Status			
	2005 Population	2013 Population	Change[7]
Families Living Below Poverty Level[1]	15.0	21.0	6.0
Median Family Income[1]	$49,100	$49,500	-
Unemployed[1]	3.8	7.2	3.4

[1] Data collected from a population data source other than CHARTS
[2] Based on singleton births
[3] Data presented is for 2010-2012 as 2012-2014 data was not available
[4] Only data for midpoint years reported (i.e., data from 2005 and 2013)
[5] Midpoint data available from 2011 as 2013 data in not available.
[6] The risk factor prevalence in 2012-14 minus the prevalence in 04-06. This may be off by 0.1 due to rounding

Maternal Characteristics Related to Florida's Preterm Birth Rate (Table 2)
- The percent of births to mothers who are Non-Hispanic Black and Other races has increased in Florida while the percent of births to mothers who are Non-Hispanic White and Hispanic has decreased. The percent of mothers born in other countries has also decreased slightly.
- Compared to 2004-2006, Florida mothers in 2012-2014 were more likely to have more years of education, to be single, and to not list the father's name on the birth certificate. They were also more likely to be on Medicaid, to not participate adequately in prenatal care, and to be uninsured. And, these mothers were more likely to come from households living in poverty or having someone unemployed.

All FL Births
835,735

< 37 weeks gestational age
83,613
State mean 10.0%

Estimate of premature births per sq mile

	0 - 10
	11 - 35
	36 - 50
	51 - 100
	101 - 150
	151 - 200
	201 - 300
	301 - 400
	401 - 600
	601 - 850

% Percent preterm

Water

N E S W

Preterm Births 2011-2014   march of dimes   **Florida 2011 - 2014**

10.07% 10.97% 8.51% 8.57% 9.84% 8.77% 9.33%
11.05% 11.52% 9.79% 10.98% 10.55% 8.73%
13.17% 11.34% 10.02% 9.16% 9.78%
13.15% 9.61% 8.29% 1.54% 9.50% 10.19%
9.90% 10.11% 11.34% 10.98% 9.69% 10.18% 6.51% 10.55% 9.77%
10.56% 7.94% 9.48% 9.55% 8.15% 8.43% 9.06% 8.16%
12.50% 10.45% 10.16% 9.26% 9.00% 9.90%
13.04% 9.21% 9.38% 10.57%
11.43%
14.14%
13.01% 11.01% 9.23%
11.07% 14.62%
11.40% 9.16%
11.04%
9.36%
9.50% 9.90%
9.49%
10.04%
10.93%
13.60%

0 20 40 80 120 160 Miles

Data Source: Florida Department of Health - 2015

Florida Map of Preterm Births, 2011-2014
- This map provides two types of information on the occurrence of preterm births in Florida.
- First—Density: the map provides the number of preterm births per square mile. As Florida's geographic areas change from green to orange, the occurrence of preterm births increases.
    - White and Green, at 0-10 and 11-35 preterm births per square mile respectively, represents the lowest concentrations of where preterm births are occurring over this four year period.
    - Orange, at 601-850 preterm births per square mile, represents the largest concentrations of where preterm births are occurring over this four year period.
    - Yellow to orange represent the highest concentrations of preterm births predominantly because these are the locations where most people live in Florida and the largest number of all births occur in these locations.
- Second—Percent of preterm birth: the percent reported for each Florida county is the county's percent of preterm birth from 2011-2014. The percent reflects the number of preterm births per 1,000 live births for a county for the same time period.
    - Of those Florida counties with visible orange geographic areas, Escambia, which includes Pensacola, has the highest reported percent of preterm births, and Pinellas, which includes St. Petersburg and Clearwater, has the lowest percent. Escambia and Pinellas are not the highest and lowest among all counties.

References

1. Liu L, Johnson HL, Cousens S et al. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. Lancet 2012;379:2151-2161.

2. Vohr BR, Wright LL, Poole WK, McDonald SA. Neurodevelopmental outcomes of extremely low birth weight infant <32 weeks' gestation between 1993 and 1998. Pediatrics 2005;116:635-643.

3. Tomashek KM, Shapiro-Mendoza CK, Davidoff MJ, Petrini JR. Differences in mortality between late-preterm and term singleton infants in the United States, 1995-2002. J Pediatr 2007;151:450-6, 456.

4. Swamy GK, Ostbye T, Skjaerven R. Association of preterm birth with long-term survival, reproduction, and nextgeneration preterm birth. JAMA 2008;299:1429-1436.

5. Melamed N, Klinger G, Tenenbaum-Gavish K et al. Short-term neonatal outcome in low-risk, spontaneous, singleton, late preterm deliveries. Obstet Gynecol 2009;114:253-260.

6. Doyle LW, Roberts G, Anderson PJ. Outcomes at age 2 years of infants < 28 weeks' gestational age born in Victoria in 2005. J Pediatr 2010;156:49-53.

7. Stoll BJ, Hansen NI, Bell EF et al. Neonatal outcomes of extremely preterm infants from the NICHD Neonatal Research Network. Pediatrics 2010;126:443-456.

8. Crump C, Sundquist K, Sundquist J, Winkleby MA. Gestational age at birth and mortality in young adulthood. JAMA 2011;306:1233-1240.

9. Leone A, Ersfeld P, Adams M, Schiffer PM, Bucher HU, Arlettaz R. Neonatal morbidity in singleton late preterm infants compared with full-term infants. Acta Paediatr 2012;101:e6-10.

10. Parkinson JR, Hyde MJ, Gale C, Santhakumaran S, Modi N. Preterm birth and the metabolic syndrome in adult life: a systematic review and meta-analysis. Pediatrics 2013;131:e1240-e1263.

11. Institute of Medicine. Preterm Birth: Causes, consequences, and prevention. 2007. Washington DC, National Academy Press.

12. March of Dimes PStCW. Born Too Soon: The Global Action Report on Preterm Birth. Howson M, Kinner M, Lawn J, editors. 2012. Geneva, World Health Organization.

13. Blencowe H, Cousens S, Chou D et al. Born too soon: the global epidemiology of 15 million preterm births. Reprod Health 2013;10 Suppl 1:S2.

14. Martin JA, Hamilton BE, Osterman MJ, Curtin SC, Matthews TJ. Births: final data for 2013. Natl Vital Stat Rep 2015;64:1-68.

15. World Health Organization. (2012). Born too soon: The global action report on preterm birth. Retrieved from http://www.who.int/pmnch/media/news/2012/201204_borntoosoon-report.pdf

16. Healthy People 2020. (2015). Maternal, infant, and child health: objectives MICH-9.1. Retrieved from http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

17. March of Dimes. (2014 a). 2014 premature birth report card. Retrieved from http://www.marchofdimes.org/materials/premature-birth-report-card-united-states.pdf

18. Ambrose CS, Rizzo C, Caspard, H. Methods to estimate gestational age can significantly affect study results. JAMA. 2014; 168(4) : 388-390.

19. Ambrose CS, Caspard H, Rizzo C, Stepka EC, Keenan G. Standard methods based on last menstrual period dates misclassify and overestimate US preterm births. Am J Perinatol. 2015; 35: 411-414.

20. Callaghan WM, Dietz PM. Differences in birth weight for gestational age distributions according to the measures used to assign gestational ages. Am J Epidemiol. 2010; 171(7): 826-836.

21. Curtis M., Troyan J., Song N., Yang J., & Members of Summit Planning Committee. (2015). Data and introduction to preterm birth in california and in target counties: Overview for the California summit on preterm birth. San Francisco, CA

22. McCabe, E. R., Carrino, G. E., Russell, R. B., & Howse, J. L. (2014). Fighting for the next generation: US prematurity in 2030. *Pediatrics*, *134*(6), 1193-1199.

Appendix A.   Where is <u>Miami-Dade County</u> with Preterm Birth?

The following graphs and tables represent county level data retrieved from Florida CHARTS and show what is contributing to the county preterm birth decline, as well as what is working against the preterm birth decline. The graphs represent single year trend data results. The tables represent 3 year trends focused on the beginning of the chosen time period (2004-2006) and the ending of the chosen time period (2012-2014). The information shown below represents factors that have been proven to be most representative of preterm birth in Florida and the United States.

The preterm birth rate in Miami-Dade has slowly declined as measured by best clinical/obstetric estimate (see Figure 1). In 2014, 3,108 of the county's 31,990 live births were preterm or before 37 completed weeks of gestation. Consequently, these preterm babies may face the many complications that arise from being born too early.

Percent of Preterm Births Based on Last Menstrual Period or Clinical/Obstetric Estimate, Miami-Dade County, Florida Residents, 2005-2014

Percent of Preterm Births by Race and Ethnicity of Mother, Miami-Dade County, Florida Residents, 2005-2014

15
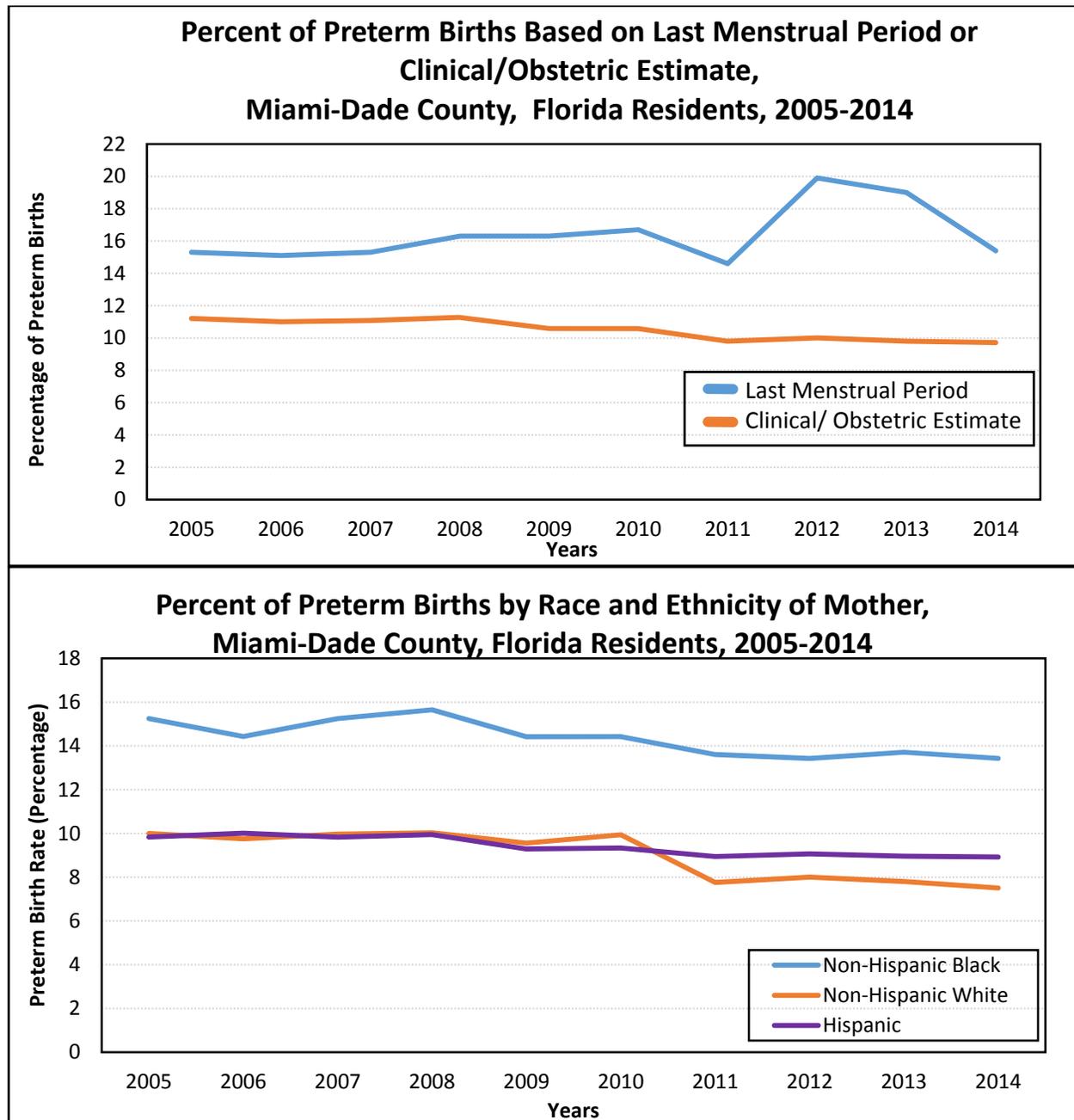
Percent of Preterm Births by Gestational Age, Miami-Dade County, Florida Residents, 2005-2014

Early Preterm Birth (<32 wks)
Moderate Preterm Birth (32-33 wks)
Late Preterm Birth (34-36 wks)
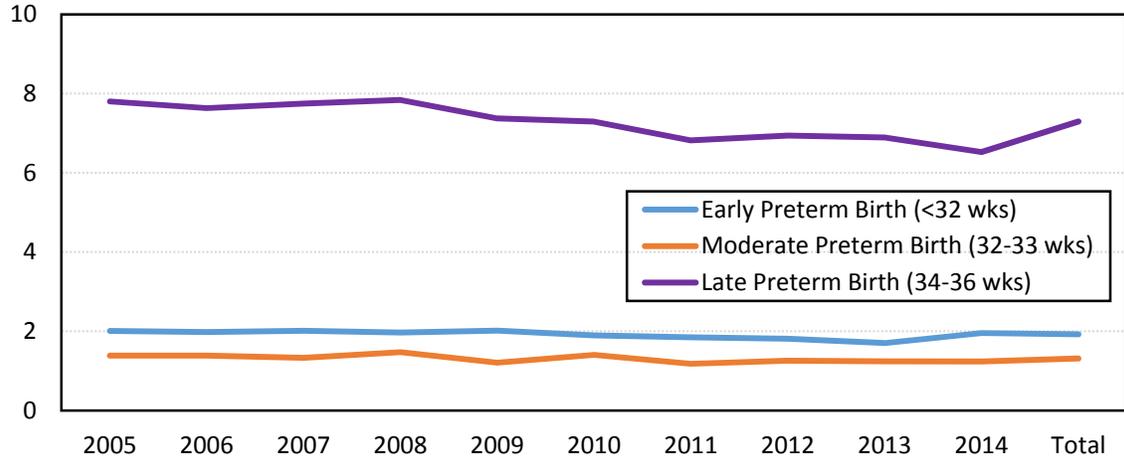
Percent of Preterm Births by Insurance Type, Miami-Dade County, Florida Residents, 2005-2014

Medicaid
Private Insurance
Self-Pay

16
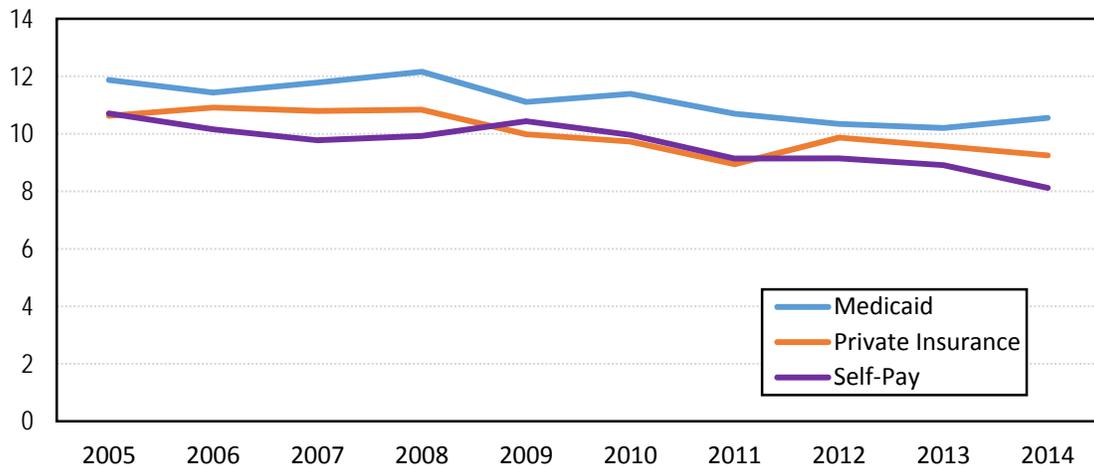
	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Table 1. Prevalence of Risk Factors Among Live Births Potentially Contributing to Miami-Dade County's Decline in Preterm Births, 2004-2006 and 2012-2014			
Preterm Birth Rates[1]			
Overall Preterm Birth Rate (< 37 wks)	10.9	9.9	-1.0
Early Preterm (<32 wks)	1.9	1.8	-0.1
Moderate Preterm (32-33 wks)	1.4	1.3	-0.1
Late Preterm (34-36 wks)	7.6	6.8	-0.8
Term (37 plus wks)	89.1	90.2	1.0
Early Term Births (37-38 wks)[3,5]			
Non-Medically Indicated Early Term Births	14.1	7.3	-6.8
Early Term Births	34.2	27.1	-7.1
Pre-pregnancy BMI			
Underweight (<18.5)	4.9	4.4	-0.5
Normal Weight (18.5-24.9)	54.2	50.9	-3.2
Overweight (25.0-29.9)	24.3	26.3	2.0
Obese I (30.0-34.9)	10.3	11.3	1.0
Obese II (35.0-39.9)	4.0	4.4	0.4
Obese III (> 40.0)	2.4	2.7	0.3
Smoking[2]			
Yes	1.3	0.6	-0.7
No	98.7	99.4	0.7
Multiple Births			
Singletons	96.9	96.5	-0.3
Twins	3.0	3.3	0.3
Triplets or more	0.1	0.1	0.0
Inter-pregnancy Interval			
(<18 Months)	19.2	16.9	-2.3
18 or more Months	40.0	42.6	2.6
No Prior Pregnancy	40.8	40.5	-0.3
Mother's Age			
10-17	3.2	1.4	-1.8
18-34	79.6	78.3	-1.4
35 or older	17.2	20.4	3.2

Hypertension [3,4,5]			
Pre-existing Hypertension	2.4	3.2	0.8
Gestational Hypertension/ Pre-Eclampsia	7.3	8.5	1.2
Diabetes [3,4,5]			
Diabetes Mellitus	0.9	1.0	0.1
Gestational Diabetes	4.7	5.3	0.6

[1] Data based on clinical/obstetric estimate
[2] Reported birth certificate data item changed over time
[3] Results collected from linked birth certificate and hospital discharge data
[4] Only data for midpoint years reported (i.e., data from 2005 and 2013)
[5] 3 yr trend data from 2011-2013 in place of 2012-2014
[6] May not add to 0 due to rounding

Table 2. Prevalence of Maternal and Family Characteristics for All Births in Miami-Dade County, Florida 2004-2006 and 2012-2014			
	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[3]
Maternal and Family Characteristics			
Race/Ethnicity of Mother			
White (non-Hispanic)	10.9	12.5	1.6
Black (non-Hispanic)	23.7	22.5	-1.2
Other (non-Hispanic)	2.0	2.2	0.2
Hispanic	63.4	62.8	-0.6
Education of Mother			
8th Grade or Less	6.4	3.6	-2.9
9-12th Grade, No Diploma	11.8	8.1	-3.7
High School Diploma or GED	35.9	34.9	-1.0
Some College, No Degree	13.5	14.6	1.2
Associates Degree or Higher	32.4	38.8	6.4
Single Mother	45.3	50.0	4.7
Father Listed on Birth Certificate			
Yes	87.8	87.4	-0.4
No	12.2	12.6	0.4
Non-U.S. Nativity	58.9	58.2	-0.7
Maternal Health & Health Care			
Health Insurance			
Medicaid	43.5	48.1	4.6
Private Insurance	42.3	37.3	-5.0
Self-Pay	13.8	13.2	-0.6
Other	0.5	1.4	0.9
Prenatal Care			
Adequate Plus Prenatal Care	35.5	41.7	6.2
Adequate Prenatal Care	40.5	36.6	-3.9
Intermediate Prenatal Care	15.1	13.4	-1.7
Inadequate Prenatal Care	9.0	8.3	-0.7
Number of Births Prior to Delivery[1]			
0	44.9	44.1	-0.8
1	32.8	33.5	0.6
2	14.3	14.2	-0.1
3+	8.0	8.2	0.3

Table 2 (Continued). Prevalence of Maternal and Family Characteristics for All Births in Miami-Dade County, Florida 2004-2006 and 2012-2014			
Socioeconomic Status			
	2005 Population	2013 Population	Change[7]
Unemployed[2]	4.5	9.7	5.2
[1] Based on singleton births [2]Based on population data [3]May not add to 0 due to rounding			

Premature Births 2011-2014 march of dimes® **MIAMI-DADE County, Florida**
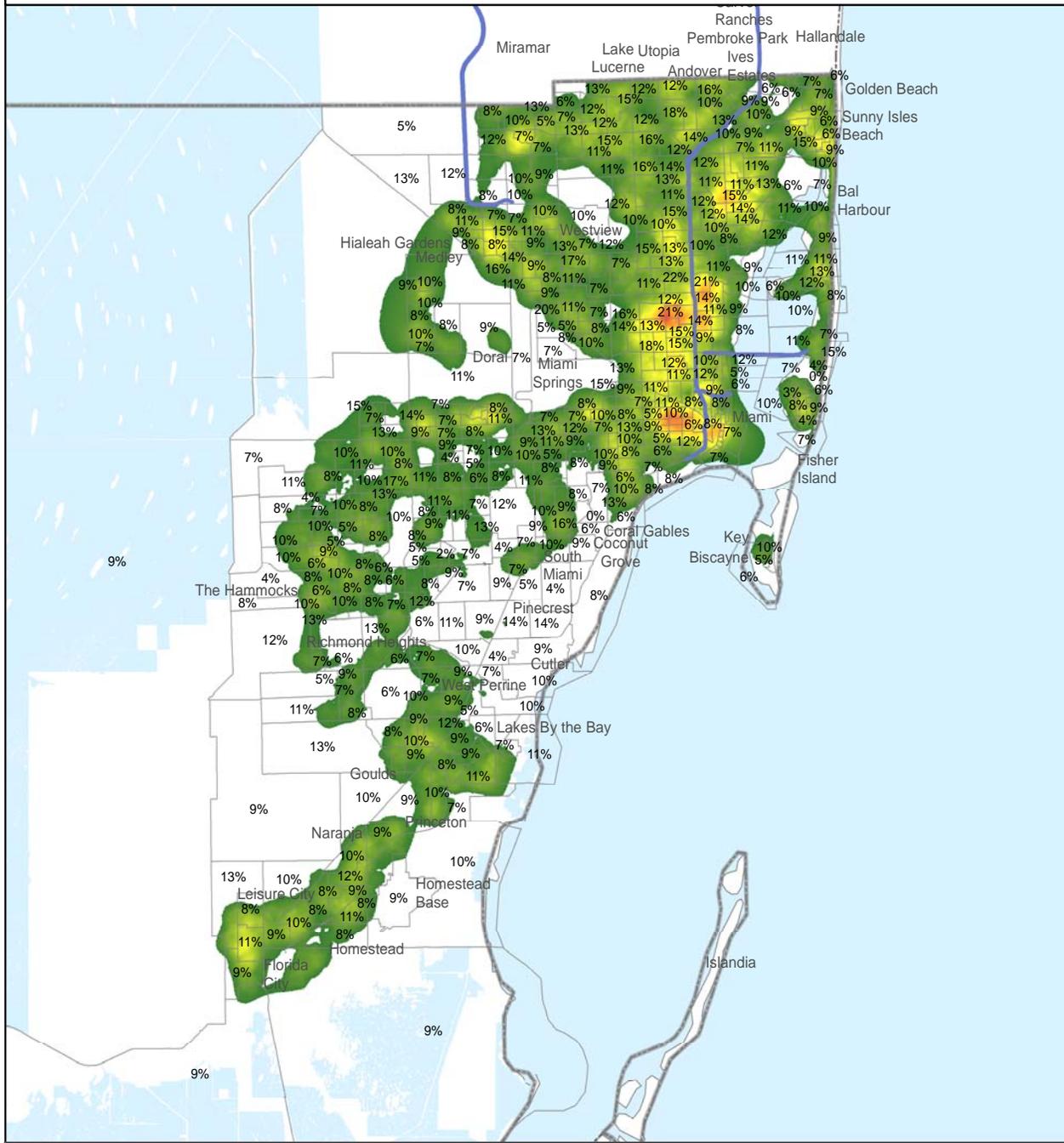
All Births 2011-14
Count: 122850
Rank: 1

< 37 weeks gest. age
Count: 12003
Percent: 9.8%
Rank*: 28
rank out of 67 FL counties
*low rank is low rate

Estimate of premature births per sq mile

0   4.1   11.7   19.4   27.1   34.8   42.5   50

Percent premature by Census Tract
County
Water
Interstates

0   1.5   3   6   9   12 Miles

Data Source: Florida Department of Health - 2015

21

Appendix B. Where is <u>**Duval County**</u> with Preterm Birth?

The following graphs and tables represent county level data retrieved from Florida CHARTS and show what is contributing to the county preterm birth decline, as well as what is working against the preterm birth decline. The graphs represent single year trend data results. The tables represent 3 year trends focused on the beginning of the chosen time period (2004-2006) and the ending of the chosen time period (2012-2014). The information shown below represents factors that have been proven to be most representative of preterm birth in Florida and the United States.

Although fluctuating some in recent years, the preterm birth rate in Duval County has slowly decreased as measured by best clinical/obstetric estimate (see Figure 1). In 2014, 1,394 of the county's 12,514 live births were preterm or before 37 completed weeks of gestation. Consequently, these preterm babies may face the many complications that arise from being born too early.

Percent of Preterm Births Based on Last Menstrual Period or Clinical/Obstetric Estimate, Duval County, Florida Residents, 2005-2014

Percent of Preterm Births by Race and Ethnicity of Mother, Duval County, Florida Residents, 2005-2014
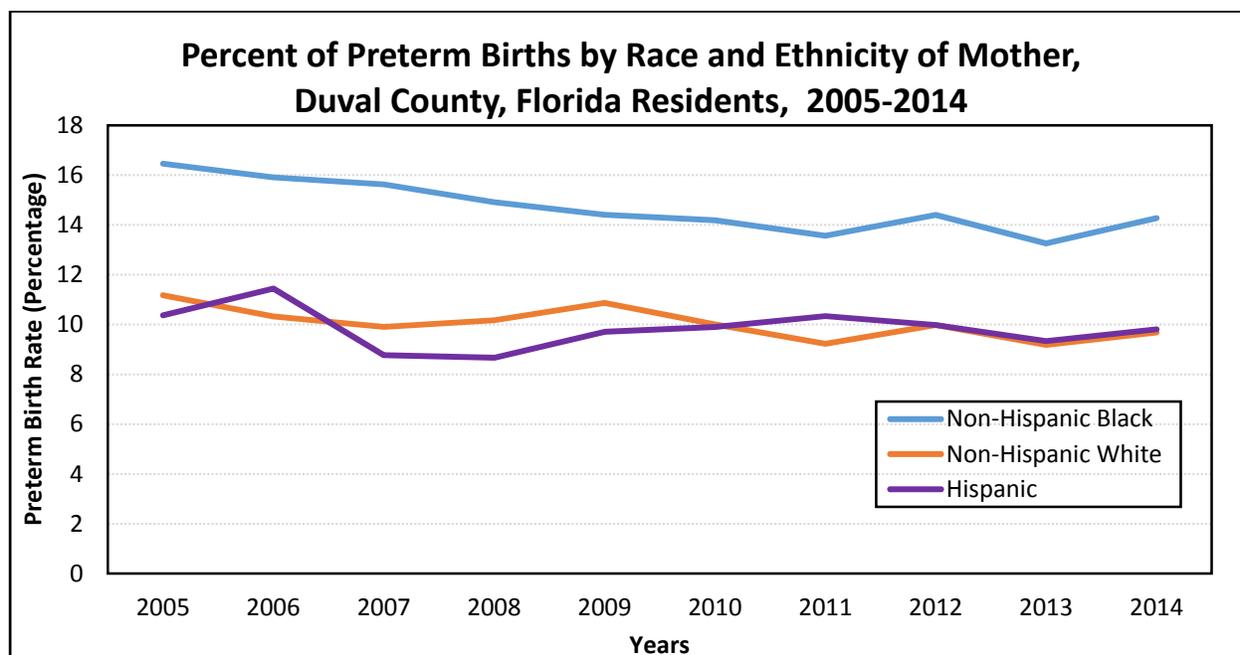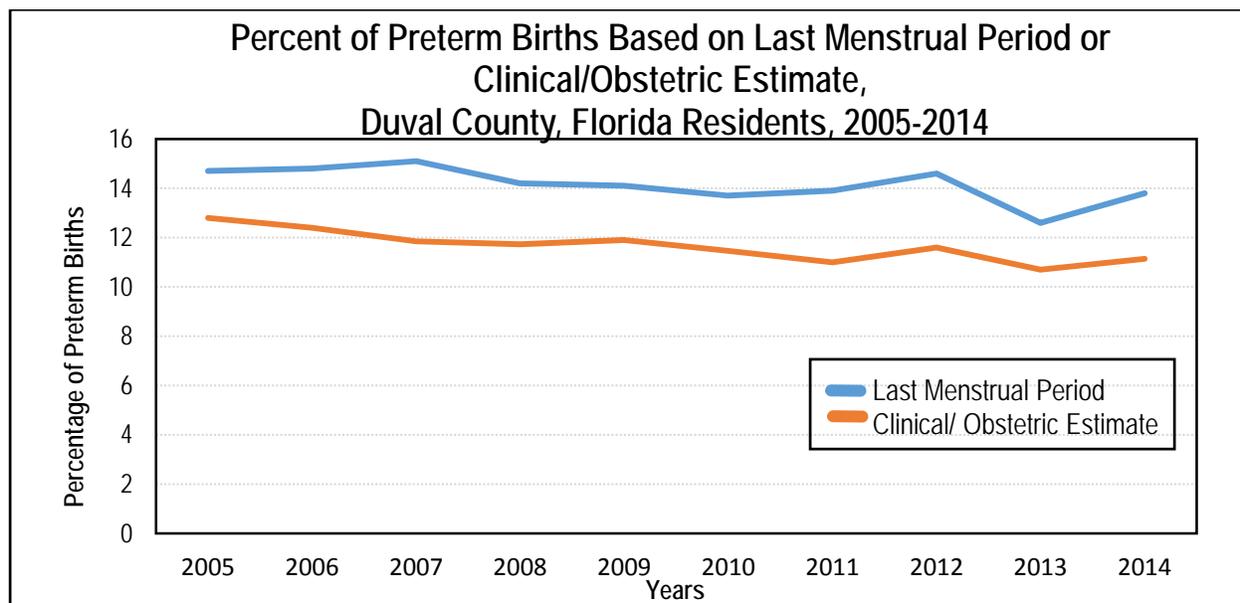
Percent of Preterm Births by Gestational Age, Duval County, Florida Residents, 2005-2014
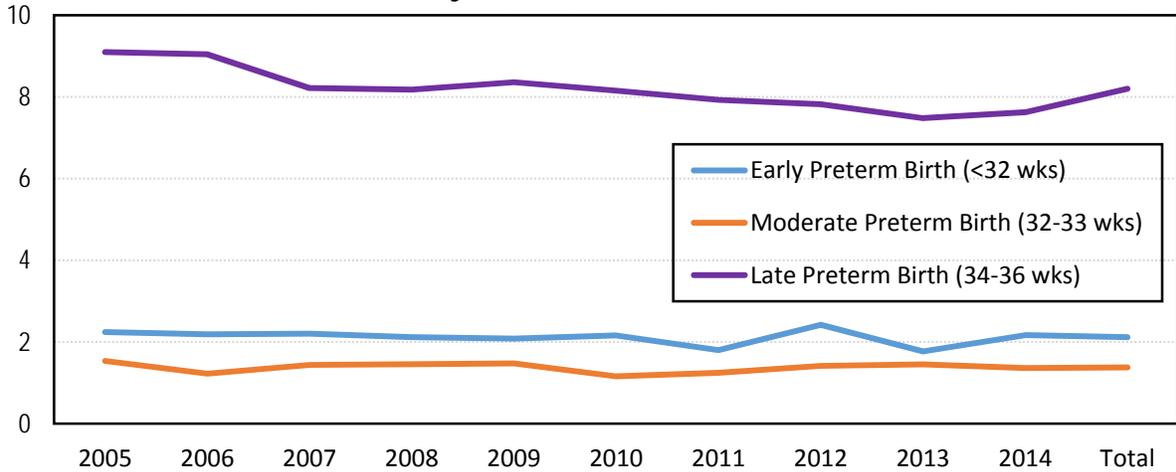
Percent of Preterm Births by Insurance Type, Duval County, Florida Residents, 2005-2014

	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Table 1. Prevalence of Risk Factors Among Live Births Potentially Contributing to Duval County's Decline in Preterm Births, 2004-2006 and 2012-2014			
Preterm Birth Rates[1]			
Overall Preterm Birth Rate (< 37 wks)	12.8	11.2	-1.6
Early Preterm (<32 wks)	2.2	2.1	-0.1
Moderate Preterm (32-33 wks)	1.5	1.4	-0.1
Late Preterm (34-36 wks)	9.1	7.6	-1.5
Term (37 plus wks)	87.2	88.8	1.6
Early Term Births (37-38 wks)[3,5]			
Non-Medically Indicated Early Term Births	9.0	5.0	-4.0
Early Term Births	32.1	26.5	-5.6
Pre-pregnancy BMI			
Underweight (<18.5)	5.1	4.0	-1.1
Normal Weight (18.5-24.9)	49.4	44.0	-5.3
Overweight (25.0-29.9)	24.0	25.6	1.6
Obese I (30.0-34.9)	12.1	13.9	1.8
Obese II (35.0-39.9)	5.5	7.2	1.6
Obese III (> 40.0)	3.8	5.3	1.4

|	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Table 1 (Continue). Prevalence of Risk Factors Among Live Births Potentially Contributing to Duval County's Decline in Preterm Births, 2004-2006 and 2012-2014			
Smoking[2]			
Yes	10.8	7.3	-3.5
No	89.2	92.7	3.5
Multiple Births			
Singletons	96.5	96.4	-0.1
Twins	3.3	3.4	0.1
Triplets or more	0.2	0.2	0.0
Inter-pregnancy Interval			
(<18 Months)	25.7	24.7	-1.0
18 or more Months	35.9	39.3	3.4
No Prior Pregnancy	38.3	36.0	-2.3
Mother's Age			
10-17	3.7	1.9	-1.8
18-34	85.0	85.6	0.6
35 or older	11.3	12.6	1.3
Hypertension [3,4,5]			
Pre-existing Hypertension	4.5	6.0	1.5
Gestational Hypertension/ Pre-Eclampsia	11.1	12.4	1.3
Diabetes [3,4,5]			
Diabetes Mellitus	1.9	2.0	0.1
Gestational Diabetes	6.2	7.2	1.0

[1] Data based on clinical/obstetric estimate
[2] Reported birth certificate data item changed over time
[3] Results collected from linked birth certificate and hospital discharge data
[4] Only data for midpoint years reported (i.e., data from 2005 and 2013)
[5] 3 yr trend data from 2011-2013 in place of 2012-2014
[6] May not add to 0 due to rounding

Table 2. Prevalence of Maternal and Family Characteristics for All Births in Duval County, Florida 2004-2006 and 2012-2014			
	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[3]
Maternal and Family Characteristics			
Race/Ethnicity of Mother			
White (non-Hispanic)	50.8	47.3	-3.5
Black (non-Hispanic)	34.8	35.1	0.4
Other (non-Hispanic)	5.9	8.1	2.2
Hispanic	8.6	9.5	0.9
Education of Mother			
8th Grade or Less	3.4	3.0	-0.4
9-12th Grade, No Diploma	14.6	11.1	-3.5
High School Diploma or GED	34.0	28.9	-5.1
Some College, No Degree	20.5	24.5	4.0
Associates Degree or Higher	27.5	32.5	5.0
Single Mother	44.1	48.5	4.4
Father Listed on Birth Certificate			
Yes	87.3	84.1	-3.2
No	12.7	15.9	3.2
Non-U.S. Nativity	14.5	17.1	2.6
Maternal Health & Health Care			
Health Insurance			
Medicaid	43.1	50.9	7.8
Private Insurance	54.8	46.4	-8.4
Self-Pay	2.0	2.0	0.0
Other	0.1	0.7	0.6
Prenatal Care			
Adequate Plus Prenatal Care	38.8	27.2	-11.6
Adequate Prenatal Care	33.3	34.6	1.4
Intermediate Prenatal Care	12.8	18.6	5.8
Inadequate Prenatal Care	15.1	19.6	4.5
Number of Births Prior to Delivery[1]			
0	42.3	40.5	-1.8
1	31.4	31.1	-0.3
2	15.9	16.3	0.4
3+	10.4	12.1	1.6

| Table 2 (Continue). Prevalence of Maternal and Family Characteristics for All Births in Duval County, Florida 2004-2006 and 2012-2014			
Socioeconomic Status			
	2005 Population	2013 Population	Change[7]
Unemployed[2]	4.3	8.9	4.6

[1] Based on singleton births
[2]Based on population data
[3]May not add to 0 due to rounding

Premature Births 2011-2014 march of dimes® **DUVAL County, Florida**

Estimate of premature births per sq mile
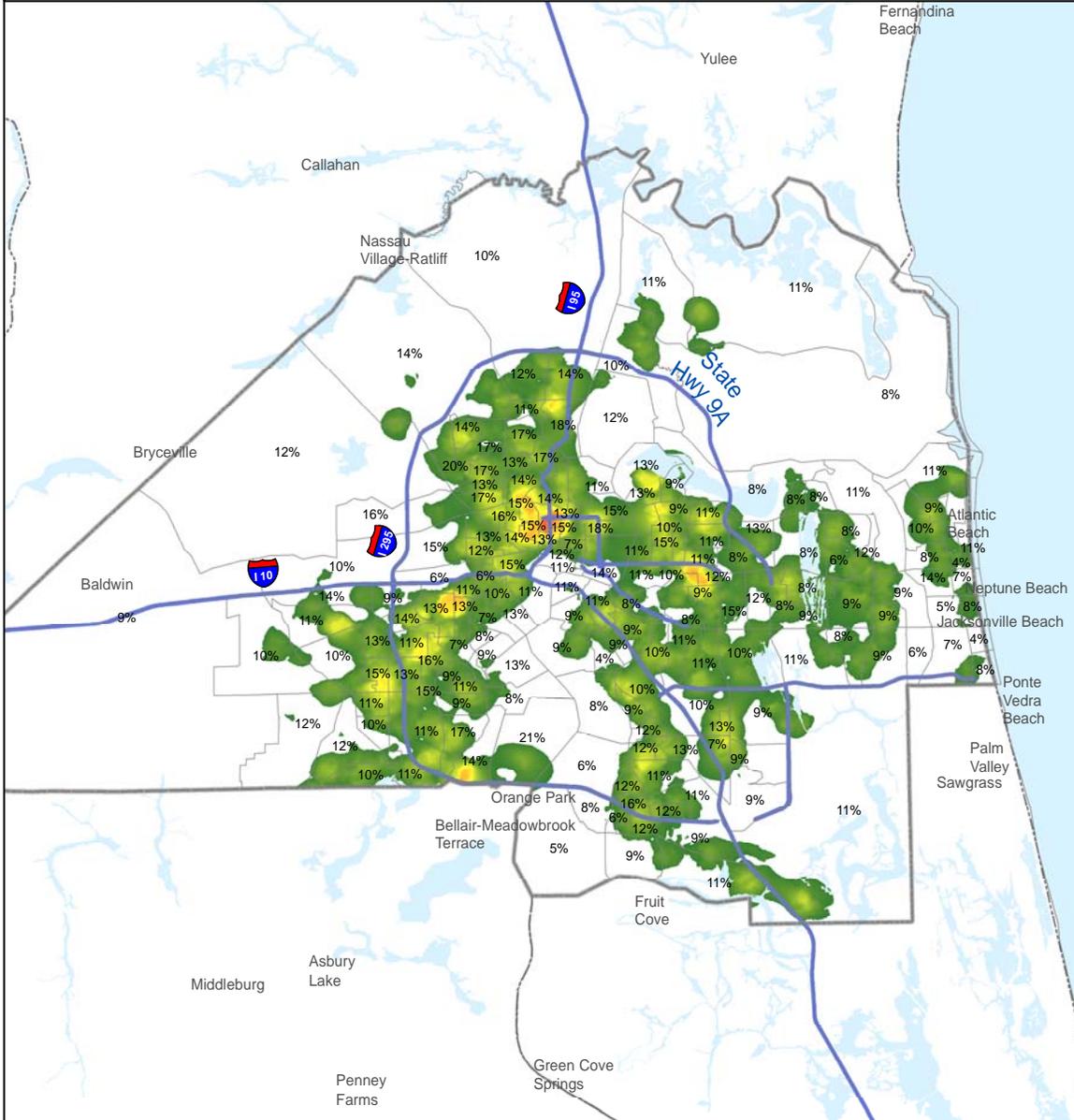
All Births 2011-14
Count: 48397
Rank: 6
< 37 weeks gest. age
Count: 5309
Percent: 11.0%
Rank*: 49
rank out of 67 FL counties
*low rank is low rate
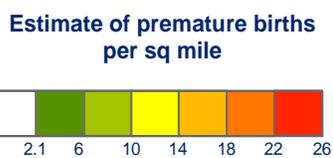
Percent premature by Census Tract
County
Water
Interstates

0 2.1 6 10 14 18 22 26

0 1.75 3.5 7 10.5 14 Miles

Data Source: Florida Department of Health - 2015

29
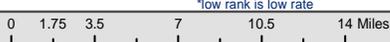
Appendix C. Where is <u>Gadsden County</u> with Preterm Birth?

   The following graphs and tables represent county level data retrieved from Florida CHARTS and show what is contributing to the county preterm birth trends. The graphs represent single year trend data results. The tables represent 3 year trends focused on the beginning of the chosen time period (2004-2006) and the ending of the chosen time period (2012-2014). The information shown below represents factors that have been proven to be most representative of preterm birth in Florida and the United States.

   After a relative steady decline besides for a one year increase, the preterm birth rate in Gadsden county has been on an upward trend from 10.9% in 2010 to 17.8% in 2014 as measured by best clinical/obstetric estimate (see Figure 1). This represents an increase of just over 63% in preterm births. In 2014, 80 of the county's 535 live births were preterm or before 37 completed weeks of gestation. Consequently, these preterm babies may face the many complications that arise from being born too early.

Percent of Preterm Births Based on Last Menstrual Period or Clinical/Obstetric Estimate, Gadsden County, Florida Residents, 2005-2014

Percent of Preterm Births by Race and Ethnicity of Mother, Gadsden County, Florida Residents, 2005-2014
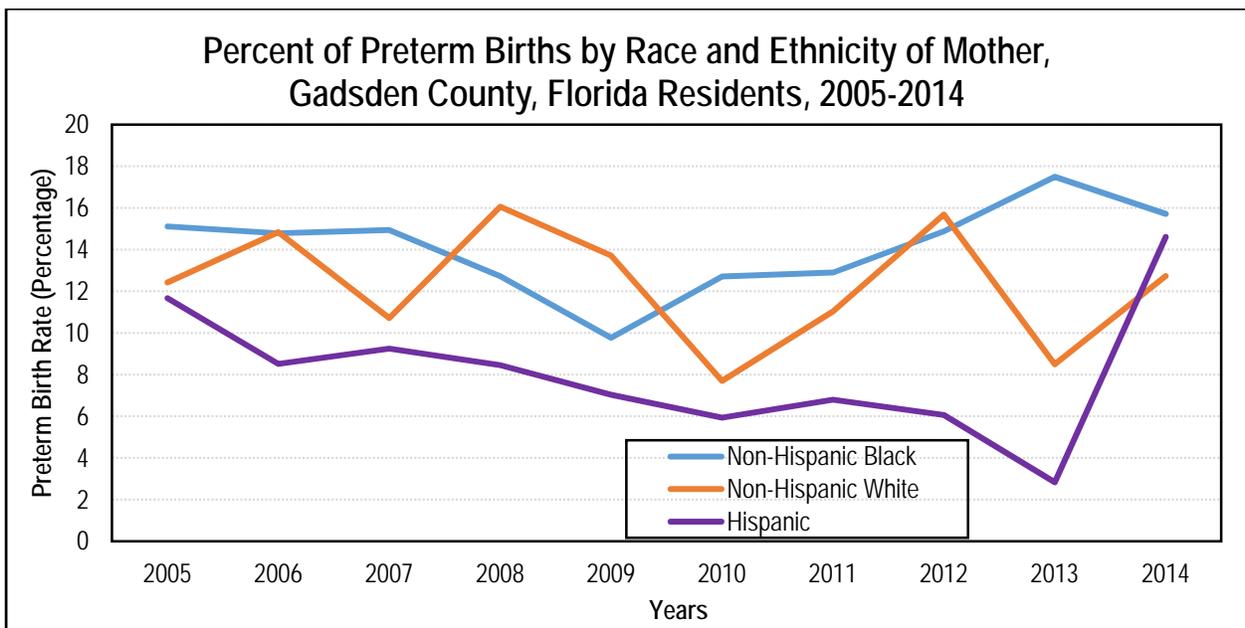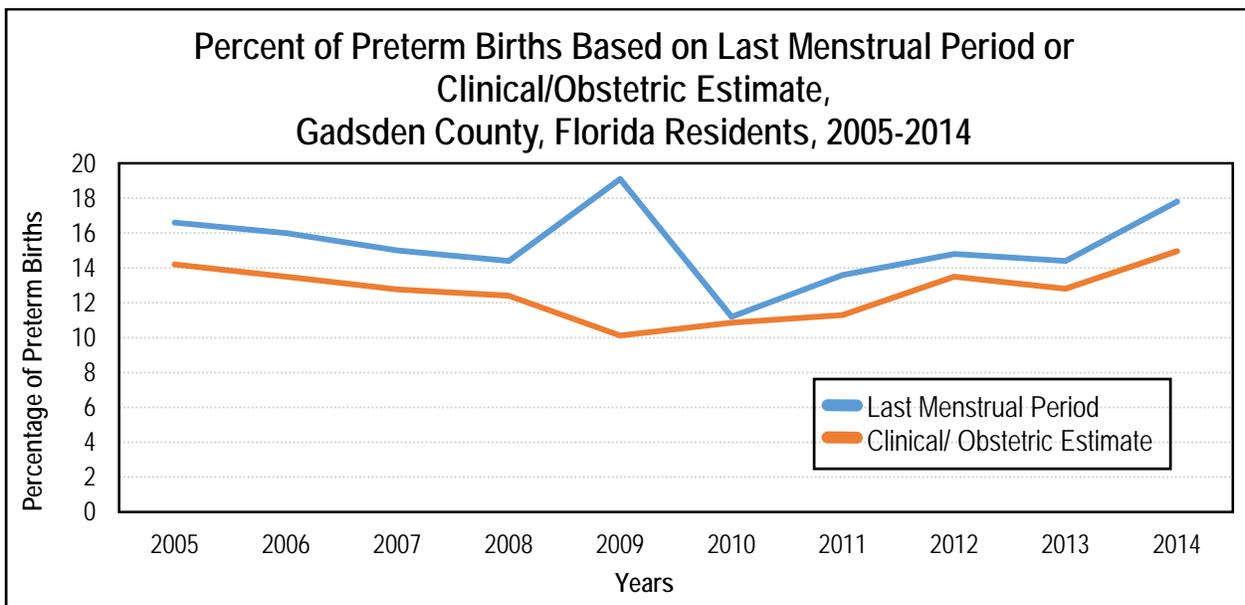
Percent of Preterm Births by Gestational Age, Gadsden County, Florida Residents, 2005-2014

Legend:
- Early Preterm Birth (<32 wks)
- Moderate Preterm Birth (32-33 wks)
- Late Preterm Birth (34-36 wks)
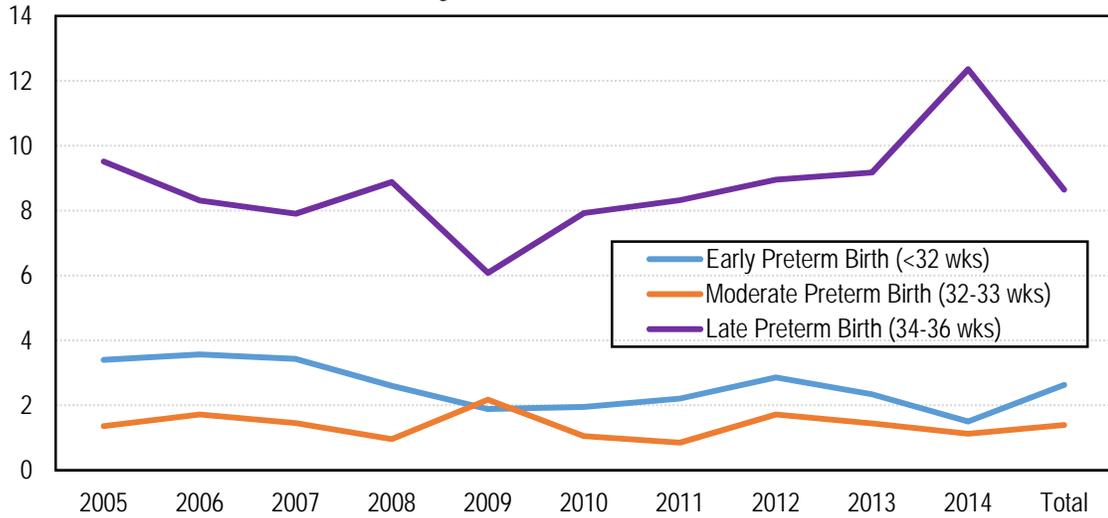
Percent of Preterm Births by Insurance Type, Gadsden County, Florida Residents, 2005-2014

Legend:
- Medicaid
- Private Insurance
- Self-Pay

Table 1. Prevalence of Risk Factors Among Live Births Potentially Contributing to Gadsden County's Decline in Preterm Births, 2004-2006 and 2012-2014			
	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Preterm Birth Rates[1]			
Overall Preterm Birth Rate (< 37 wks)	13.9	13.8	-0.1
Early Preterm (<32 wks)	3.3	2.2	-1.1
Moderate Preterm (32-33 wks)	1.3	1.4	0.1
Late Preterm (34-36 wks)	9.3	10.2	0.8
Term (37 plus wks)	86.1	86.2	0.1
Early Term Births (37-38 wks)[3,5]			
Non-Medically Indicated Early Term Births	9.3	3.4	-5.8
Early Term Births	31.8	29.0	-2.8
Pre-pregnancy BMI			
Underweight (<18.5)	4.1	3.0	-1.2
Normal Weight (18.5-24.9)	40.3	39.5	-0.8
Overweight (25.0-29.9)	23.9	20.2	-3.7
Obese I (30.0-34.9)	16.2	18.4	2.2
Obese II (35.0-39.9)	9.2	8.9	-0.3
Obese III (> 40.0)	6.3	10.1	3.8

|	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Table 1 (Continued). Prevalence of Risk Factors Among Live Births Potentially Contributing to Gadsden County's Decline in Preterm Births, 2004-2006 and 2012-2014			
Smoking[2]			
Yes	8.3	5.4	-2.9
No	91.8	94.6	2.9
Multiple Births			
Singletons	96.2	96.2	0.0
Twins	3.8	3.8	0.0
Triplets or more	-	-	
Inter-pregnancy Interval			
(<18 Months)	24.1	20.0	-4.1
18 or more Months	37.6	44.5	6.9
No Prior Pregnancy	38.2	35.5	-2.8
Mother's Age			
10-17	6.6	3.5	-3.1
18-34	87.1	86.1	-1.0
35 or older	6.4	10.4	4.1
Hypertension [3,4,5]			
Pre-existing Hypertension	3.5	6.3	2.8
Gestational Hypertension/ Pre-Eclampsia	14.9	20.2	5.3
Diabetes [3,4,5]			
Diabetes Mellitus	1.3	2.7	1.4
Gestational Diabetes	5.6	7.9	2.3

[1] Data based on clinical/obstetric estimate
[2] Reported birth certificate data item changed over time
[3] Results collected from linked birth certificate and hospital discharge data
[4] Only data for midpoint years reported (i.e., data from 2005 and 2013)
[5] 3 yr trend data from 2011-2013 in place of 2012-2014
[6] May not add to 0 due to rounding

	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[3]
Table 2. Prevalence of Maternal and Family Characteristics for All Births in Gadsden County, Florida 2004-2006 and 2012-2014			
Maternal and Family Characteristics			
Race/Ethnicity of Mother			
White (non-Hispanic)	21.1	19.6	-1.5
Black (non-Hispanic)	60.6	61.1	0.5
Other (non-Hispanic)	1.0	1.2	0.2
Hispanic	17.3	18.0	0.7
Education of Mother			
8th Grade or Less	9.6	8.4	-1.1
9-12th Grade, No Diploma	23.0	20.7	-2.3
High School Diploma or GED	36.8	30.7	-6.2
Some College, No Degree	17.2	23.2	6.0
Associates Degree or Higher	13.3	17.0	3.7
Single Mother	65.2	68.7	3.5
Father Listed on Birth Certificate			
Yes	83.4	72.9	-10.5
No	16.6	27.1	10.5
Non-U.S. Nativity	16.6	15.5	-1.1
Maternal Health & Health Care			
Health Insurance			
Medicaid	65.9	74.1	8.2
Private Insurance	29.4	24.5	-4.9
Self-Pay	2.7	0.8	-1.9
Other	2.0	0.6	-1.4
Prenatal Care			
Adequate Plus Prenatal Care	28.9	19.2	-9.7
Adequate Prenatal Care	53.7	47.4	-6.3
Intermediate Prenatal Care	7.3	14.5	7.2
Inadequate Prenatal Care	10.1	18.9	8.8
Number of Births Prior to Delivery[1]			
0	39.2	32.0	-7.2
1	29.8	29.2	-0.6
2	18.4	21.8	3.4
3+	12.6	17.0	4.4

Table 2 (Continued). Prevalence of Maternal and Family Characteristics for All Births in Gadsden County, Florida 2004-2006 and 2012-2014			
Socioeconomic Status			
	2005 Population	2013 Population	Change[7]
Unemployed[2]	4.2	9	4.8

[1] Based on singleton births
[2]Based on population data
[3]May not add to 0 due to rounding

Premature Births 2011-2014   march of dimes   GADSDEN County, Florida
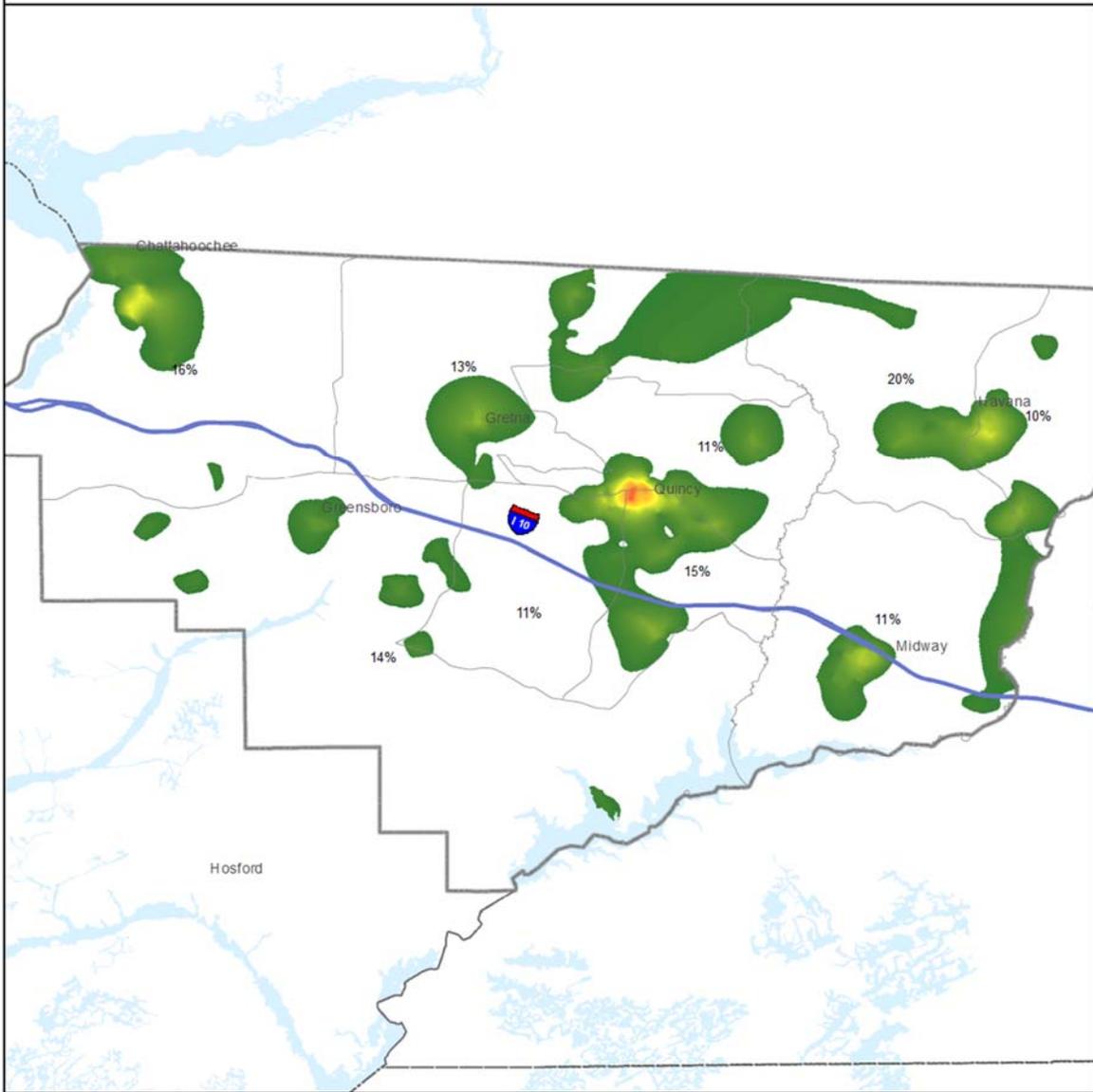
All Births 2011-14
Count: 2098
Rank: 38

< 37 weeks gest. age
Count: 273
Percent: 13.0%
Rank*: 61

rank out of 67 FL counties
*low rank is low rate
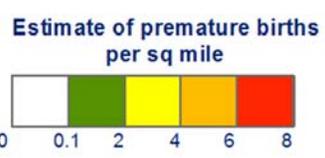
Estimate of premature births
per sq mile

0   0.1   2   4   6   8

Percent premature by
Census Tract

County

Water

Interstates

UF | UNIVERSITY of FLORIDA
Family Data Center

0   1.25   2.5   5   7.5   10 Miles

Data Source: Florida Department of Health - 2015

Appendix D. Where is <u>**Hillsborough County**</u> with Preterm Birth?

The following graphs and tables represent county level data retrieved from Florida CHARTS and show what is contributing to the county preterm birth decline, as well as what is working against the preterm birth decline. The graphs represent single year trend data results. The tables represent 3 year trends focused on the beginning of the chosen time period (2004-2006) and the ending of the chosen time period (2012-2014). The information shown below represents factors that have been proven to be most representative of preterm birth in Florida and the United States.

The preterm birth rate in Hillsborough County has slowly declined over the years, especially in recent years (see Figure 1). In 2014, 1,702 of the county's 16,846 live births were preterm or before 37 completed weeks of gestation. Consequently, these preterm babies may face the many complications that arise from being born too early.

Figure 1. Percent of Preterm Births Based on Last Menstrual Period or Clinical/Obstetric Estimate, Hillsborough County, Florida Residents, 2005-2014

Percent of Preterm Births by Race and Ethnicity of Mother, Hillsborough County, Florida Residents, 2005-2014
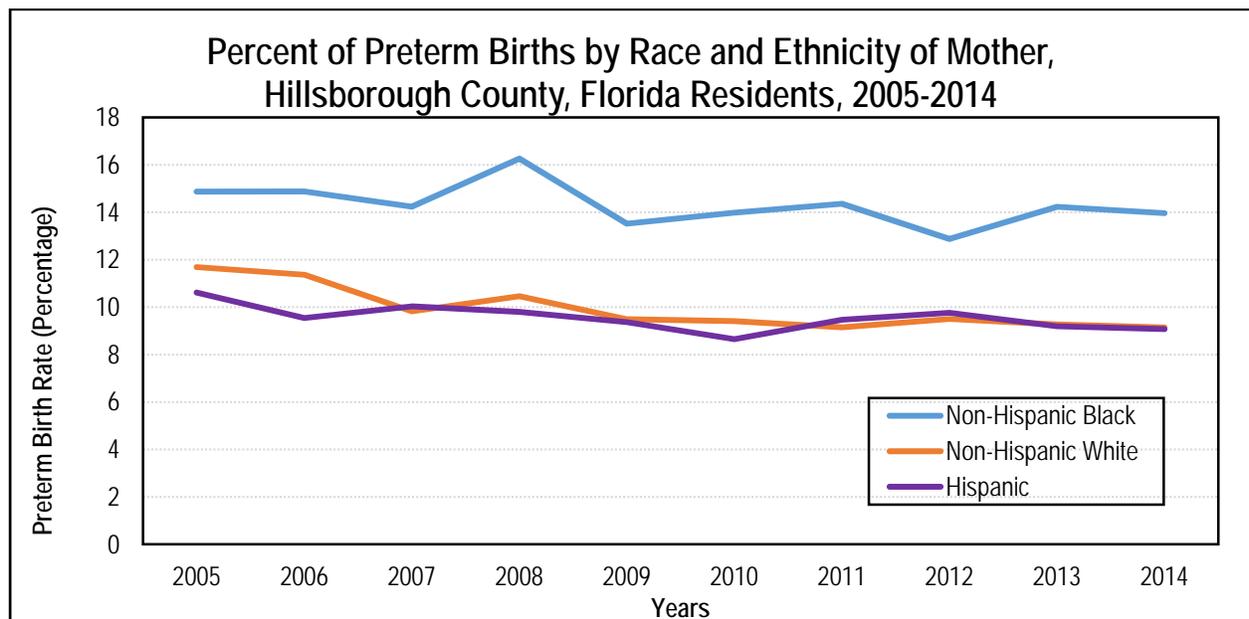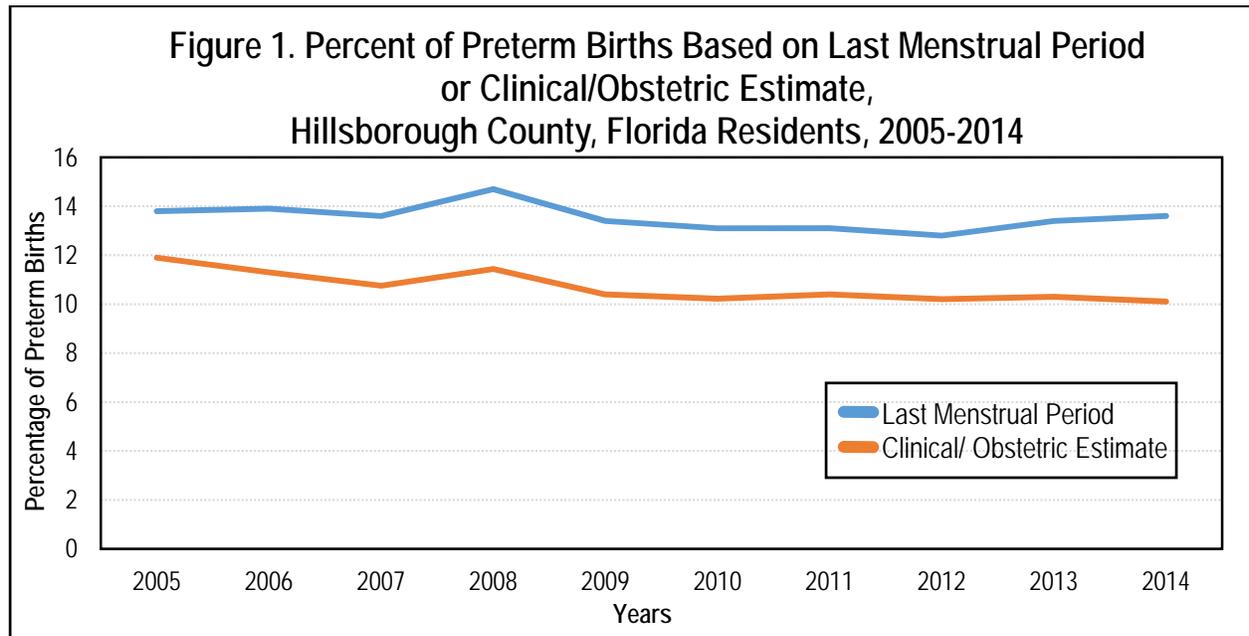
Percent of Preterm Births by Gestational Age, Hillsborough County, Florida Residents, 2005-2014

Legend:
- Early Preterm Birth (<32 wks)
- Moderate Preterm Birth (32-33 wks)
- Late Preterm Birth (34-36 wks)
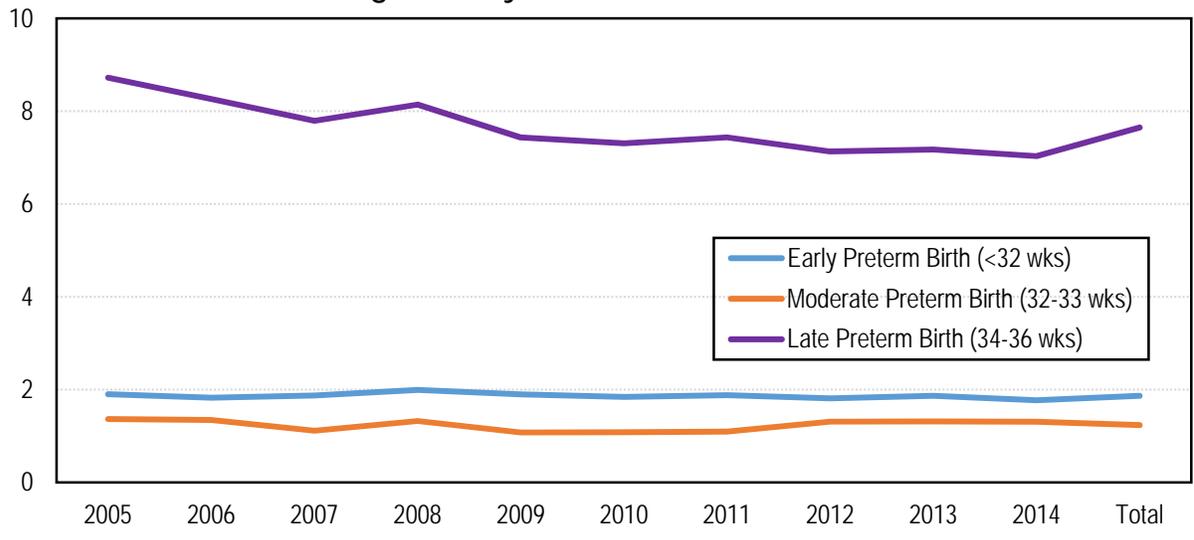
Percent of Preterm Births by Insurance Type, Hillsborough County, Florida Residents, 2005-2014

Legend:
- Medicaid
- Private Insurance
- Self-Pay

	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Preterm Birth Rates[1]			
Overall Preterm Birth Rate (< 37 wks)	11.9	10.2	-1.6
Early Preterm (<32 wks)	1.9	1.8	-0.1
Moderate Preterm (32-33 wks)	1.3	1.3	0.0
Late Preterm (34-36 wks)	8.7	7.1	-1.6
Term (37 plus wks)	88.1	89.8	1.6
Early Term Births (37-38 wks)[3,5]			
Non-Medically Indicated Early Term Births	13.9	5.2	-8.7
Early Term Births	35.9	24.1	-11.9
Pre-pregnancy BMI			
Underweight (<18.5)	5.5	4.7	-0.8
Normal Weight (18.5-24.9)	52.9	49.1	-3.9
Overweight (25.0-29.9)	22.9	24.7	1.8
Obese I (30.0-34.9)	10.8	12.4	1.6
Obese II (35.0-39.9)	4.8	5.6	0.8
Obese III (> 40.0)	3.1	3.6	0.5
Smoking[2]			
Yes	7.4	5.0	-2.4
No	92.6	95.0	2.4

Table 1. Prevalence of Risk Factors Among Live Births Potentially Contributing to Hillsborough County's Decline in Preterm Births, 2004-2006 and 2012-2014

|	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[6]
Table 1 (Continued). Prevalence of Risk Factors Among Live Births Potentially Contributing to Hillsborough County's Decline in Preterm Births, 2004-2006 and 2012-2014			
Multiple Births			
Singletons	96.9	96.6	-0.2
Twins	3.0	3.3	0.3
Triplets or more	0.1	0.1	0.0
Inter-pregnancy Interval			
(<18 Months)	24.3	24.9	0.7
18 or more Months	37.5	40.7	3.2
No Prior Pregnancy	38.3	34.4	-3.9
Mother's Age			
10-17	3.9	2.1	-1.9
18-34	82.2	83.3	1.1
35 or older	13.9	14.6	0.7
Hypertension [3,4,5]			
Pre-existing Hypertension	2.5	3.4	0.9
Gestational Hypertension/ Pre-Eclampsia	9.4	9.2	-0.2
Diabetes [3,4,5]			
Diabetes Mellitus	1.0	1.2	0.2
Gestational Diabetes	7.0	9.9	2.9

[1] Data based on clinical/obstetric estimate
[2] Reported birth certificate data item changed over time
[3] Results collected from linked birth certificate and hospital discharge data
[4] Only data for midpoint years reported (i.e., data from 2005 and 2013)
[5] 3 yr trend data from 2011-2013 in place of 2012-2014
[6] May not add to 0 due to rounding

Table 2. Prevalence of Maternal and Family Characteristics for All Births in Hillsborough County, Florida 2004-2006 and 2012-2014			
	2004-2006 Percent of All Births (%)	2012-2014 Percent of All Births (%)	Change[3]
Maternal and Family Characteristics			
Race/Ethnicity of Mother			
White (non-Hispanic)	44.8	44.1	-0.7
Black (non-Hispanic)	18.9	20.8	1.9
Other (non-Hispanic)	5.1	5.8	0.7
Hispanic	31.3	29.3	-2.0
Education of Mother			
8th Grade or Less	7.5	3.1	-4.4
9-12th Grade, No Diploma	16.5	12.8	-3.8
High School Diploma or GED	27.3	32.1	4.9
Some College, No Degree	17.6	18.0	0.4
Associates Degree or Higher	31.1	34.0	2.9
Single Mother	43.6	48.7	5.1
Father Listed on Birth Certificate			
Yes	90.3	84.4	-5.9
No	9.7	15.6	5.9
Non-U.S. Nativity	27.7	27.2	-0.5
Maternal Health & Health Care			
Health Insurance			
Medicaid	41.0	51.2	10.2
Private Insurance	47.4	40.9	-6.5
Self-Pay	11.5	7.8	-3.7
Other	0.2	0.1	0.0
Prenatal Care			
Adequate Plus Prenatal Care	36.0	22.9	-13.1
Adequate Prenatal Care	44.4	48.6	4.2
Intermediate Prenatal Care	10.4	20.5	10.1
Inadequate Prenatal Care	9.2	8.0	-1.2
Number of Births Prior to Delivery[1]			
0	42.2	40.6	-1.6
1	31.9	31.8	-0.1
2	15.7	15.8	0.1
3+	10.2	11.8	1.6

Table 2 (Continued). Prevalence of Maternal and Family Characteristics for All Births in Hillsborough County, Florida 2004-2006 and 2012-2014			
Socioeconomic Status			
	2005 Population	2013 Population	Change[7]
Unemployed[2]	3.6	8.7	5.1

[1] Based on singleton births
[2] Based on population data
[3] May not add to 0 due to rounding

New Port Richey Trinity Odessa East Lake Keystone Westchase Oldsmar Safety Harbor Lutz Lake Magdalene Wesley Chapel Pebble Creek Chapel South West Zephyrhills South Zephyrhills North Crystal Springs Thonotosassa Veterans Expy Suncoast Pkwy S

South Highpoint Feather Sound Gandy Pinellas Park Kenneth City West and East Lealman Gulfport St Petersburg Mango East Lake-Orient Park Seffner Dover Plant City Valrico Brandon Palm River-Clair Mel Progress Village Bloomingdale Lithia Gibsonton Boyette Fish Hawk Apollo Beach Ruskin Sun City Center Wimauma Parrish
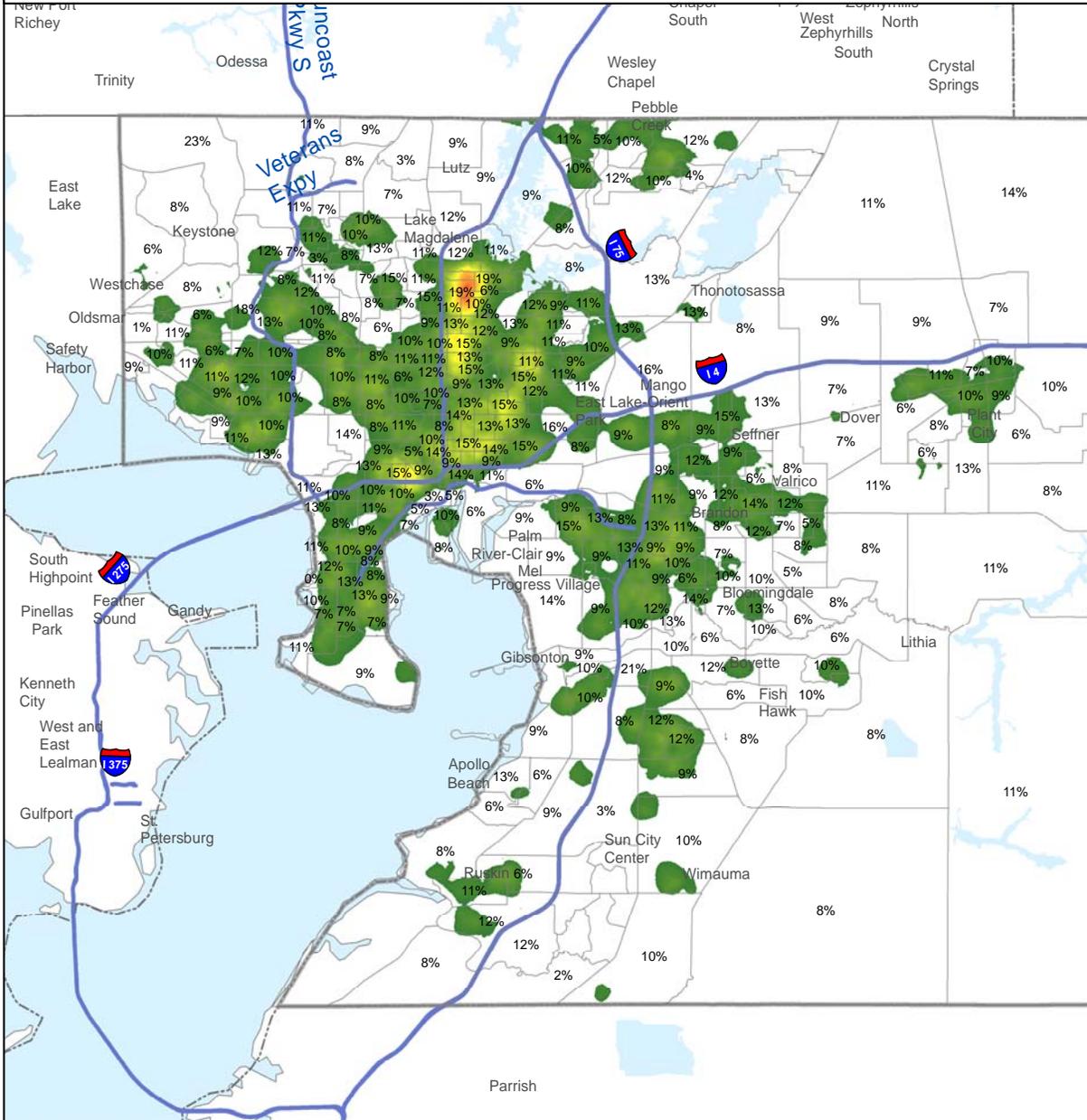
All Births 2011-14
Count: 64314
Rank: 3
< 37 weeks gest. age
Count: 6535
Percent: 10.2%
Rank*: 40
rank out of 67 FL counties
*low rank is low rate

Estimate of premature births per sq mile

0   3.1   10.5   18   25.5   33   40.5   48

Percent premature by Census Tract
County
Water
Interstates

UF UNIVERSITY of FLORIDA
Family Data Center

0 1.5 3 6 9 12 Miles

Data Source: Florida Department of Health - 2015