2014 HEALTHY TEXAS BABIES: DATA BOOK

Prepared by: Department of State Health Services, Office of Program Decision Support

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PURPOSE & OVERVIEW

The purpose of this data book is to provide an in-depth analysis of infant and maternal health in Texas. The data book is not meant to repeat data found in other places; rather, it is meant to bring these sources together to be analyzed in a way that creates a more nuanced view of the state of maternal and infant health in Texas. The data that are presented in this report are from vital records including the Birth, Death, and linked Birth-Death Files. The findings from the vital records are also supported with results from the Pregnancy Risk Assessment Monitoring System (PRAMS).

It is important to understand that, as with all public health data sources, there are limitations to the data presented here. The vital records files are a rich source of data; however, the quality of that data is inherently reliant on the procedures in the hospital for completing the birth record. Several efforts in other states have shown reporting and quality variations in how the birth file is completed among hospitals, especially in regard to maternal health information.[4] These studies suggest that the birth file underreports the prevalence of many maternal health indicators. Data from the birth and death file become available before they are finalized. These data have not been thoroughly cleaned and as such we place limitations on how they are presented. For this report, geographic information is not analyzed for any preliminary data. Additionally, race/ethnicity is not presented for preliminary death data. In this report 2013 data are preliminary and all other data are final.

The PRAMS survey is administered by Texas A&M University as a subcontract with the Department of State Health Services (DSHS), Family and Community Health Services (FCHS) Division, and the Office of Program Decision Support (OPDS). OPDS receives a grant from the Centers for Disease Control and Prevention (CDC) to oversee the administration of the national survey questions, as well as certain state specific questions. The full methodology of PRAMS can be found in the PRAMS annual report. Because PRAMS is a survey that includes approximately 1,500 mothers, it can only approximate the prevalence of health indicators in the population; it is not a true measure of the population. Additionally, PRAMS is self-reported data; therefore, the quality of the data is affected by the mother's understanding of the health question she is being asked and her willingness to truthfully report that behavior or condition. As with the vital statistics data, there may be systematic under- or over-reporting of some of the health indicators in PRAMS.[1] 2011 is the most recent PRAMS data.

Despite these limitations, it is important to point out that the vital records and PRAMS are considered invaluable sources of data on the status of maternal risk and health pre-pregnancy, during pregnancy, and post-pregnancy. These sources provide a rich understanding of maternal and infant health and can provide a starting point for understanding the scope of several risk factors in the state and identify possible avenues for intervention to improve the health of mothers and infants in Texas.

DATA TERMS

Communities: In this report the term "communities" refers to core base statistical areas (CBSA) as defined by the Census Bureau. CBSAs are micropolitan and metropolitan areas. CBSAs are multi-county communities that are defined by a high degree of social and economic integration between the counties. To be consistent with *2013 Health Texas Babies: Databook*, this report uses the CBSA definitions released in 2013 with two exceptions. (1) The traditional metropolitan area of Dallas-Fort Worth was divided into three areas: Fort Worth-Arlington, Dallas-Plano, and the remaining outlying counties of the metropolitan area. (2) The county of Galveston was removed from the Houston-The Woodlands CBSA so that county could be analyzed separately.

Gestational Age: Gestational age is used in the calculation of preterm births as well as calculations of when the mother received prenatal care. However, gestational age is inherently unknown and must be estimated. One way to estimate it is by calculating the time that has passed from the mother's last menses to the date of the delivery. Another way is by using the clinical estimation of gestation that is reported on the birth certificate. This report follows the recommendation from the National Center for Health Statistics and utilizes both estimates. The calculated gestation from the mother's last menses is preferred and is used when available. When it is not available or out of range based on the baby's birth weight, the clinical estimation is used. It is important to emphasize that other reports may not use this same procedure; therefore, the rates in those reports may be different than the rates that are reported here and so would not be comparable.

Infant Mortality: Infant mortality rate (IMR) is the number of infants who died in a given year divided by the number of live births in that same year. This number is then multiplied by 1,000 to calculate the IMR. All of the births that comprise this rate are restricted to women who listed Texas as their state of residence.

Medicaid: Several analyses presented in the report utilize a variable called "Medicaid." This variable is taken from the birth file for both the PRAMS and birth file analyses. Women were only considered to be on Medicaid if the birth certificate indicated that Medicaid paid for the delivery, not if Medicaid was pending. This approach was taken to estimate how many women had their prenatal care paid for by Medicaid. The number of women who received prenatal care through Medicaid is lower than the number of women whose delivery is ultimately paid for by Medicaid.

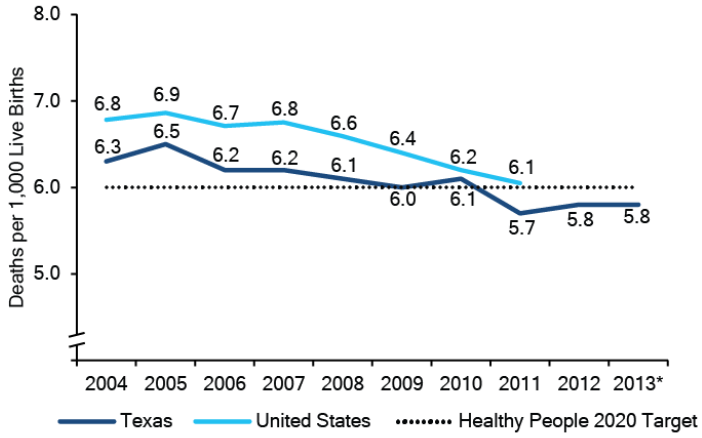
Race/Ethnicity: The race/ethnicity reported throughout this report refers to the mother, not the infant. White and black women are those women who identified themselves as only white or black and indicated that they were not Hispanic. Hispanic women are those women who identified as Hispanic regardless of the race designation. Women who were classified in the "other" category were all other races including multiracial women as long as the woman did not self-identify as Hispanic. The "other" category is not homogeneous and there have been shifts in the demographics of the women who are in this category. The shifts within this group need to be studied more, but it is clear that since 2004 there has been a decrease in the number of Vietnamese women in this category and an increase in the number of women identified as multiracial.

INFANT MORTALITY & MORBIDITY

INFANT MORTALITY

The infant mortality rate (IMR) in Texas has been below the national rate for the past ten years (see Figure 1). However, it has only been since 2008 that the state has approached or met the Healthy People 2020 (HP2020) target of 6.0 deaths per 1,000 live births. In 2011, there was a decline in the IMR in Texas, which allowed the state to exceed the HP2020 target. Preliminary 2013 data suggest that this low IMR has persisted.

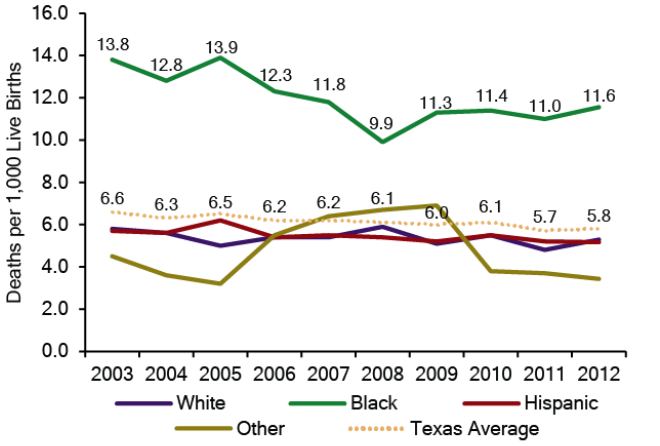
Figure 1.
Infant Mortality Rate for Texas and the United States, 2004-2013



*2013 Texas data are preliminary
Source: Texas 2004-2013 Birth Files and Death Files
National Center for Health Statistics Vital Records Report
Prepared by: Office of Program Decision Support

Despite this decrease in the IMR, the racial-ethnic disparity in IMR has persisted (see Figure 2). The IMR for black mothers is more than two times higher than those of white and Hispanic mothers.

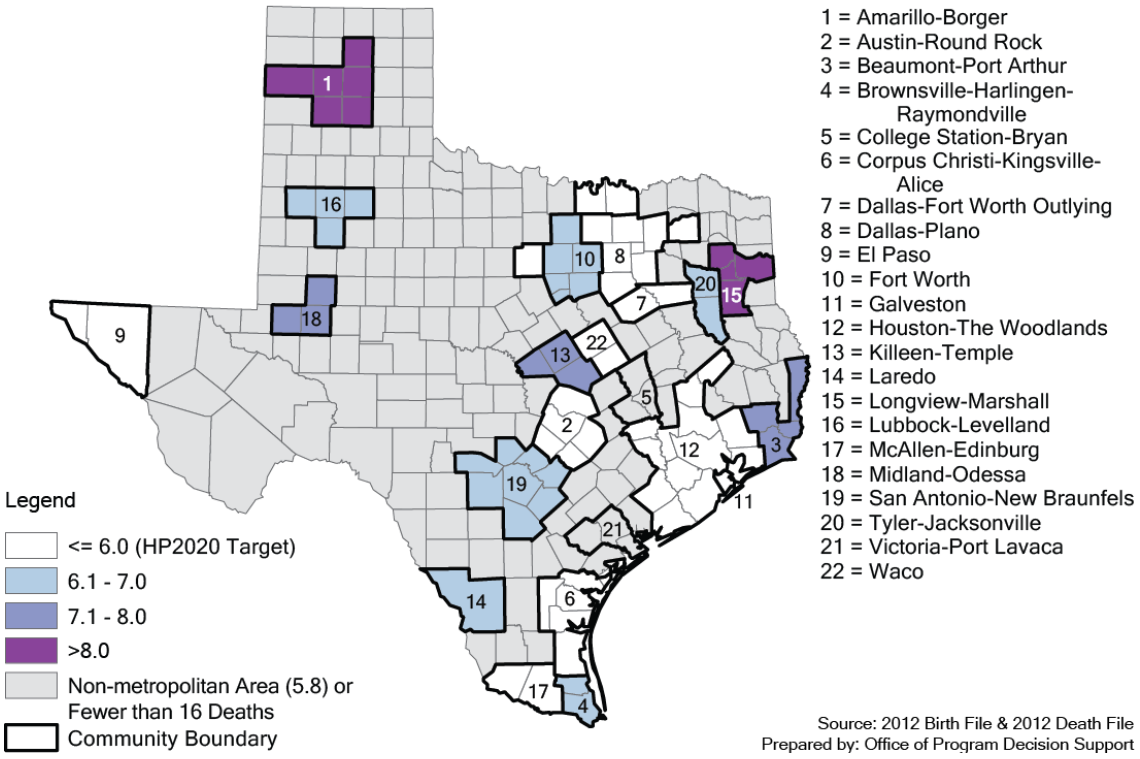
Figure 2.
Infant Mortality Rate by Race/Ethnicity, Texas 2003-2012



Source: 2004-2012 Birth Files and Death Files
Prepared by: Office of Program Decision Support

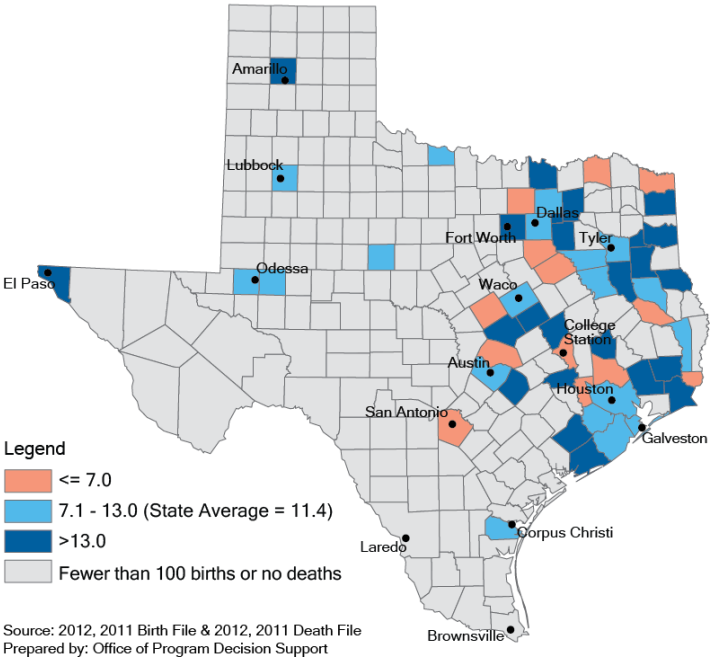
In addition to the racial gap, substantial regional disparities persist within the state. In 2012, nine of the twenty largest communities in the state with a calculated IMR were meeting the HP2020 target including Houston-The Woodlands and Dallas-Plano area, which are the two most populous communities in the state (see Figure 3). Five communities had IMRs above 7.0 infants per 1,000 live births in 2012. While the state as a whole is moving towards a decrease in IMR, there are still communities that are lagging behind this state-level trend.

Figure 3.
Infant Mortality Rate (per 1,000 Births) by Select Communities (CBSA), 2012



A concerning trend in the IMR is the persistently high IMR for black women. The high rate for black women is especially puzzling because the Houston-Woodlands and the greater Dallas-Fort Worth metropolitan areas are home to almost 75% of the state's urban-dwelling black population. Therefore, it is reasonable to expect that the overall decreases in IMR in these communities should also result in a decrease in the state IMR for black women.

Figure 4.
Black Infant Mortality Rate (per 1,000 Births), 2011 & 2012



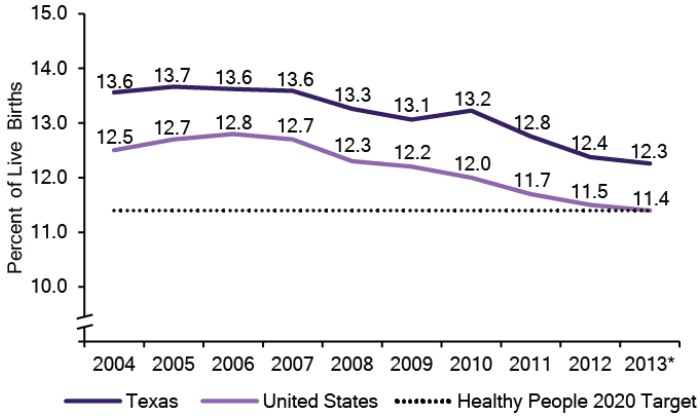
Source: 2012, 2011 Birth File & 2012, 2011 Death File
Prepared by: Office of Program Decision Support

In order to assess regional differences in IMR for black women, 2011 and 2012 data were combined and the black-IMR was calculated at the county level when there were more than 100 births to a black woman in the county (see Figure 4). This analysis revealed stark and substantial regional differences in black-IMR. Births to black women living in the counties with IMR below 7.1 made up 11.3 percent of births in 2011 and 2012. Births to women living in counties with IMR greater than 13.0 made up 21.7 percent of births. Just like with IMR generally, there are substantial regional differences in the black-IMR. Understanding the differential strengths and risks between these areas will help us understand points of intervention and opportunity to possibly reduce the black-IMR statewide.

PRETERM BIRTH

Preterm births are those that occur prior to 37 weeks of gestation. The preterm birth rate in Texas has consistently been higher than the national average over the past ten years (see Figure 5). From 2004 to 2013, the preterm birth rate decreased by 9.6 percent. However, Texas is still far from meeting the HP2020 preterm birth rate target of less than 11.4 percent.

Figure 5.
Preterm Births for Texas and the United States, 2004-2013

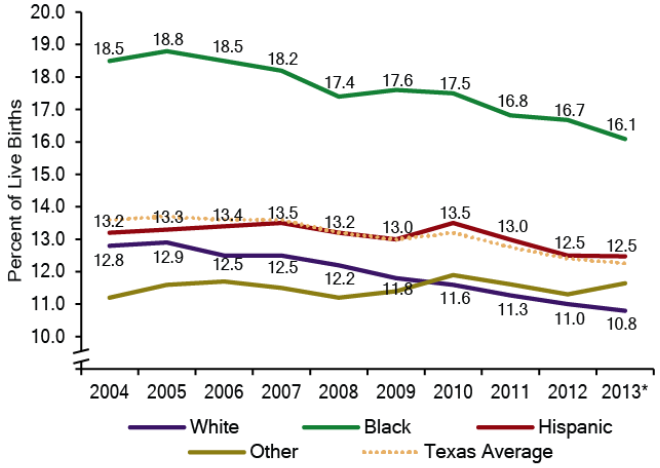


*2013 Texas data are preliminary
Source: 2004-2013 Birth Files
National Center for Health Statistics Vital Records Report
Prepared by: Office of Program Decision Support

As with the IMR, there are substantial racial/ethnic disparities in the preterm birth rate, with black women having a high preterm birth rate (see Figure 6). However, unlike the IMR, there have been significant

decreases in preterm births for black women. The rate has decreased among all racial/ethnic groups, with the largest gains being made among infants born to black mothers.

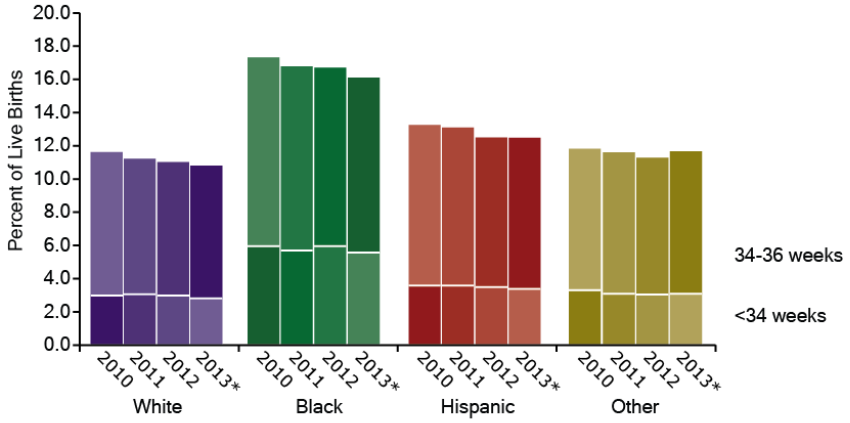
Figure 6.
Preterm Births by Race/Ethnicity, Texas 2004-2013



*2013 Texas data are preliminary
Source: 2004-2013 Birth Files
Prepared by: Office of Program Decision Support

The preterm birth rate can be further divided into infants born at 34-36 weeks and those born at less than 34 weeks gestation. The declines in preterm birth have mainly been driven by decreases in the percent of infants being born in the 34-36 week gestation range (See Figure 7).

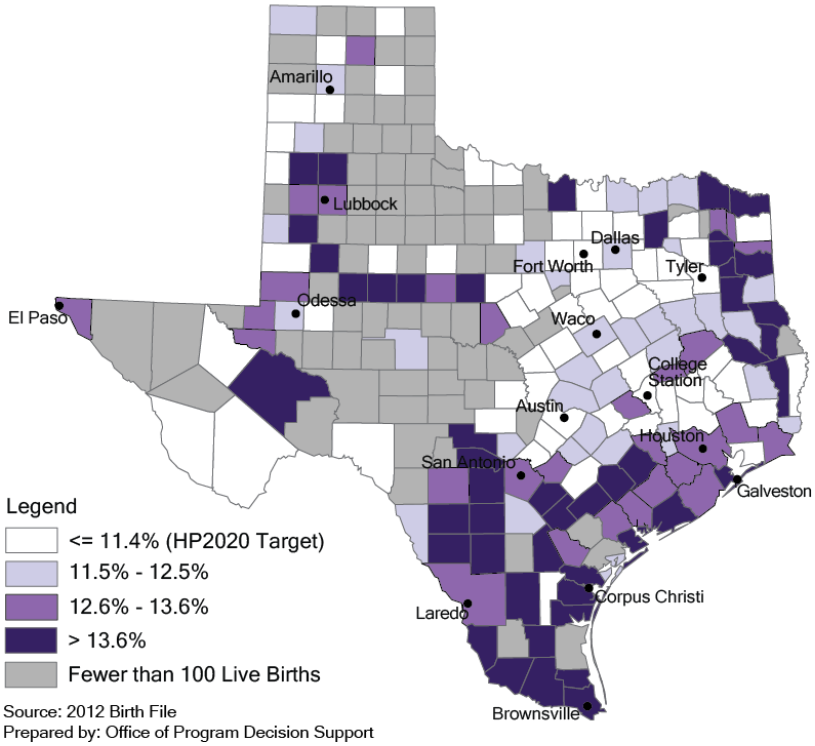
Figure 7.
Preterm Births by Category, Race/Ethnicity 2010-2013



*2013 Texas data are preliminary
Source: 2010-2013 Birth Files
Prepared by: Office of Program Decision Support

There are communities within the state that are meeting, or are close to meeting, the HP2020 target for preterm birth (see Figure 8). However, there are regional differences. The border regions of the state and East Texas have high percentages of infants born preterm.

Figure 8.
Percent of Births that are Preterm, 2012

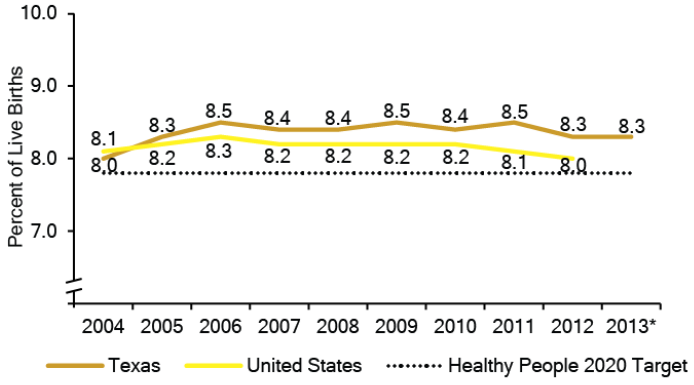


Source: 2012 Birth File
Prepared by: Office of Program Decision Support

LOW BIRTH WEIGHT

The percentage of babies born weighing less than 2500 grams has not meaningfully changed since 2006. Texas is above the national average and is not meeting the HP2020 target of less than 7.8 percent of live births weighing less than 2500 grams (see Figure 9).

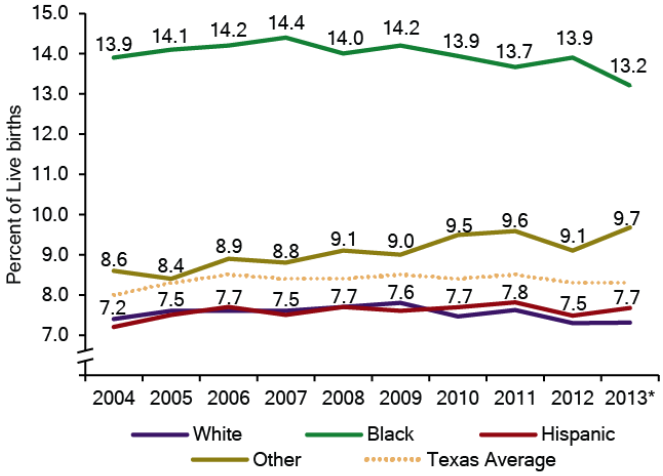
Figure 9.
Low Birth Weight for Texas and the United States, 2004-2013



*2013 Texas data are preliminary
Source: 2004-2013 Birth Files
National Center for Health Statistics Vital Records Report
Prepared by: Office of Program Decision Support

As with IMR and preterm births, black mothers have a disproportionately high percentage of low birth weight infants (see Figure 10). Additionally, the low birth weight rate is high among mothers in the "other" race/ethnic category. Demographic shifts in the makeup of this group may be contributing to the slow, but steady increase in the rate since 2004.

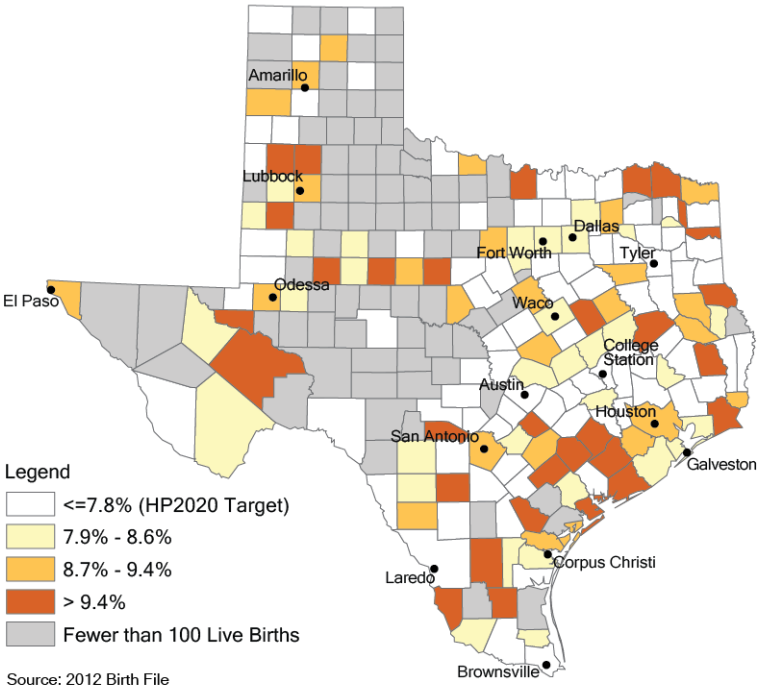
Figure 10.
Low Birth Weight by Race/Ethnicity, Texas 2004-2013



*2013 Texas data are preliminary
Source: 2004-2013 Birth Files
Prepared by: Office of Program Decision Support

Throughout the state, there are individual counties that are meeting the HP2020 target, but they are not clustered (see Figure 11). There are also no clear patterns for how the low birth weight rate is distributed across regions in the state.

Figure 11.
Percent of Births that are Low Birth Weight, 2012

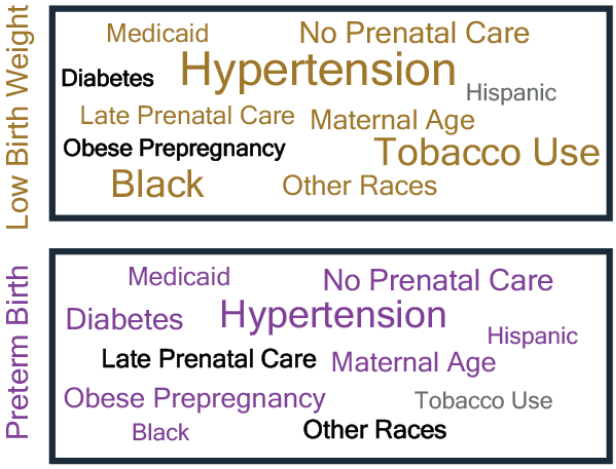


Source: 2012 Birth File
Prepared by: Office of Program Decision Support

A confusing and concerning aspect of the low birth weight rate is that preterm births are decreasing but low birth weight is not. Birth weight and gestational age are strongly correlated meaning that shorter gestation ages are associated with lighter birth weights. Therefore, it is reasonable to expect that as one decreases, the other would also decrease, even if slightly.

In order to understand whether there are differing factors that may contribute to low birth weight and preterm birth, the relationship between several maternal risk factors and low birth weight and preterm birth were assessed (see Figure 12). Generally, the risk factors that predicted low birth weight predicted gestational age also. The differential relation that tobacco use and late

Figure 12.
Maternal Characteristics Associated with
Low Birth Weight & Preterm Birth, Texas 2012



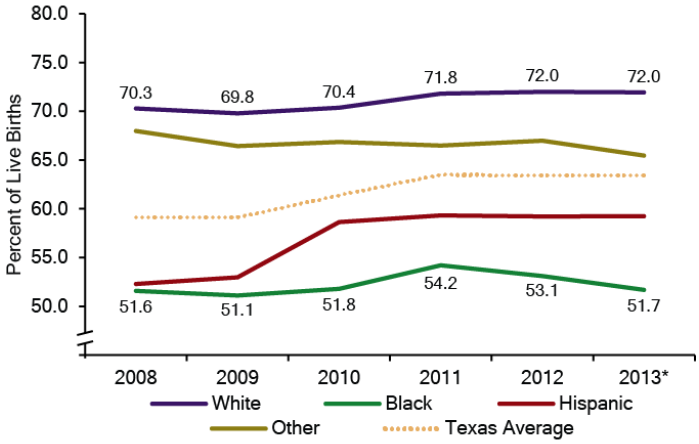
Larger words had higher odds of the outcome
Brown and Purple factors were associated with a significant increased risk, p<.05.
Black factors were associated with a significant decreased risk, p<.05.
Grey factors were not significant predictors.
The model was assessed with all factors included and controlling for gestational age or birth weight, respectively.
Prepared by: Office of Program Decision Support

prenatal care had with low birth weight and preterm birth might explain some of the differences in trends for these two birth outcomes. Further study and monitoring of these factors will help elucidate why preterm birth and low birth weight have not been showing similar trends over time.

PRENATAL CARE

The HP2020 target for prenatal care entry is for 77.9 percent of women to begin prenatal care in the first trimester of pregnancy. Texas, as a whole, is not meeting the HP2020 target for the percent of mothers who enter prenatal care within the first trimester of pregnancy.

Figure 13.
First Trimester Entry Into Prenatal Care by Race/Ethnicity,
Texas 2005-2013



*2013 Texas data are preliminary
Source: 2005-2013 Birth Files
Prepared by: Office of Program Decision Support

On time prenatal care access has increased in Texas since 2008, but rates within the state are far below HP2020 target, with only 64.5 percent of women having their first visits within the first trimester (see Figure 13). The rates are also disparate between race/ethnic groups. White women have the highest rate of

receiving care on time and black women have the lowest rate. Only a little more than half of black women begin prenatal care in the first trimester.

Late entry into prenatal care is a state-wide problem. In 2012, only three urban Texas counties were meeting the HP2020 target for women entering prenatal care in the first trimester (see Figure 14).

Figure 14.
Late Entry into Prenatal Care, 2012

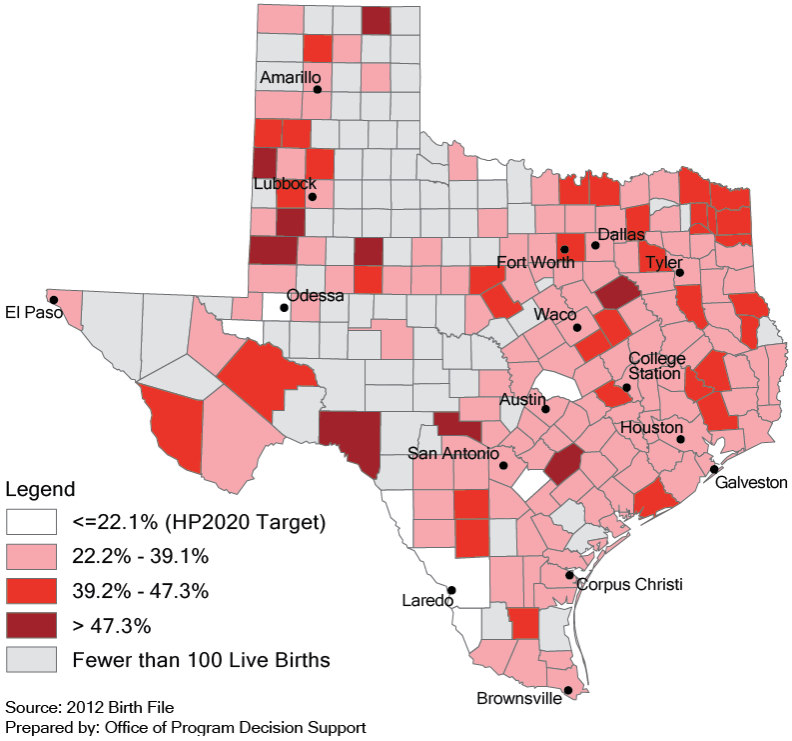
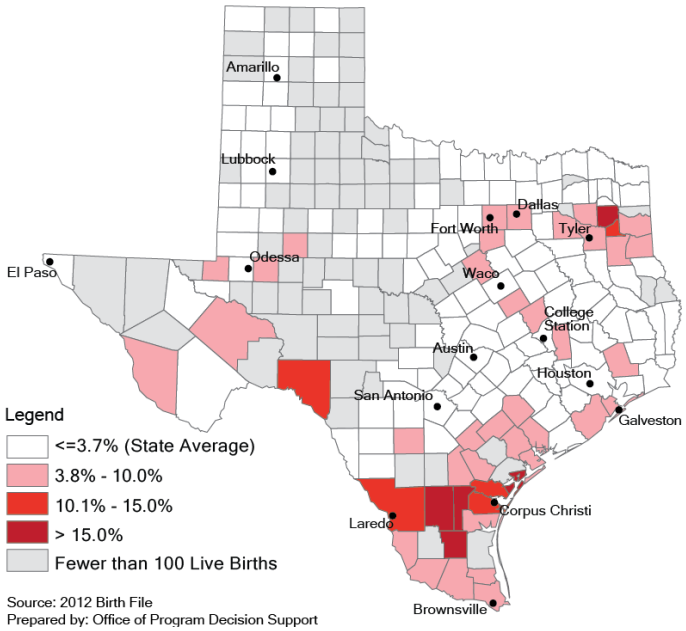


Figure 15.
No Entry into Prenatal Care, 2012



It is important to consider whether the communities with a high percentage of women not receiving prenatal care within the first trimester have a high proportion of women who never receive care or if these women are receiving care late. According to the Texas Birth File, there are pockets of the state in which a substantial proportion of women never receive prenatal care (see Figure 15). These areas are clustered in northeast Texas and in the southern parts of the state. These clusters show that in some parts of the state, not only do women not enter care during the first trimester, but many women are not engaged in care at all.

It is critical to examine the barriers associated with not receiving timely care. The 2011 PRAMS data were analyzed to assess what characteristics predicted whether women entered prenatal care within the first trimester (see Figure 16).

Figure 16.
PRAMS 2011: Factors Predicting Receiving Late or No Prenatal Care

Larger words had higher odds of the outcome
Red factors were associated with a significant increased risk, p<.05.
Grey factors were not significant predictors.
The model was assessed with all factors included.
Prepared by: Office of Program Decision Support

Women who received Medicaid, according to the birth file, were significantly more likely to enter prenatal care late than those who are not receiving Medicaid. Waiting for Medicaid eligibility determination was the most frequently cited reason that women gave in the PRAMS survey for not receiving prenatal care as early as they wanted. Black women and Hispanic women were also significantly more likely to enter care late regardless of their Medicaid status, although black women had higher odds of not receiving care than Hispanic women. However, a large predictor of whether the mother received prenatal care in the first trimester was if the pregnancy was intended, even after controlling for all other factors. Women who had an unintended pregnancy had an increased risk of not receiving care in the first trimester compared to women whose pregnancy was intended.

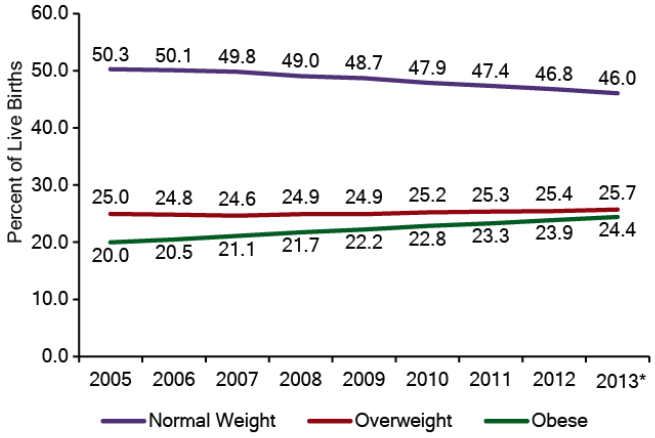
One of the challenges with increasing prenatal care access is the pull between understanding if women are not receiving care because they do not seek it, or because they do not have access to it. While access is clearly a barrier, PRAMS data indicate that the mother's want to seek care may also be an obstacle to on-time entry into care. There is a gap for Hispanics and black women between the percent who received care on-time and the percent that received care as early as they wanted. In the 2011 Texas PRAMS data, 65.2 percent of black mothers received care in the first trimester; however, 75.5 percent said they received care as early as they wanted. This discrepancy suggests that many women were not seeking care in the first trimester.

MATERNAL HEALTH

PRE-PREGNANCY OBESITY

Obesity is a risk factor for developing hypertension, diabetes, and a variety of other medical problems during pregnancy[2, 5]. Additionally, Texas data also shows that obese women are at higher risk than non-obese women for preterm birth or experiencing infant death. There has been a rise in the percent of women who are obese before becoming pregnant. The percent of women with a Body Mass Index (BMI) in the obese range has increased 22 percent since 2005 (see Figure 17).

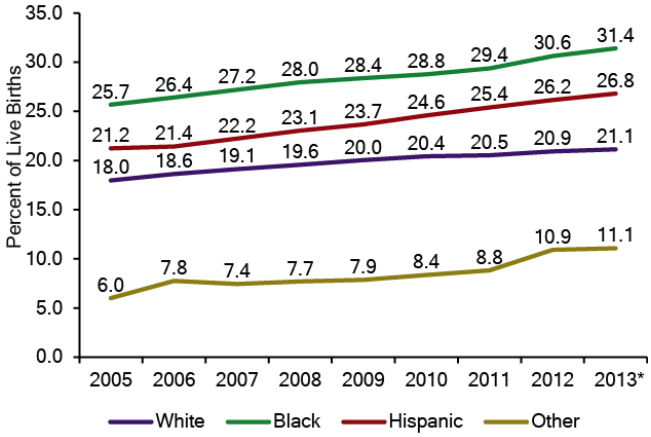
Figure 17.
Distribution of Pre-Pregnancy Body Mass Index, Texas 2005-2013



*2013 Texas data are preliminary
Source: 2005-2013 Birth Files
Prepared by: Office of Program Decision Support

The increase in the percent of the birth cohort in the obese range has been large for black and Hispanic women (see Figure 18). Each of these groups has seen more than a 22 percent increase in the rate of obesity since 2005 compared to a 17.2 percent increase for white mothers. It is also important to note that women classified in the "other" race/ethnic category have seen an 85 percent increase in the obesity rate since 2005.

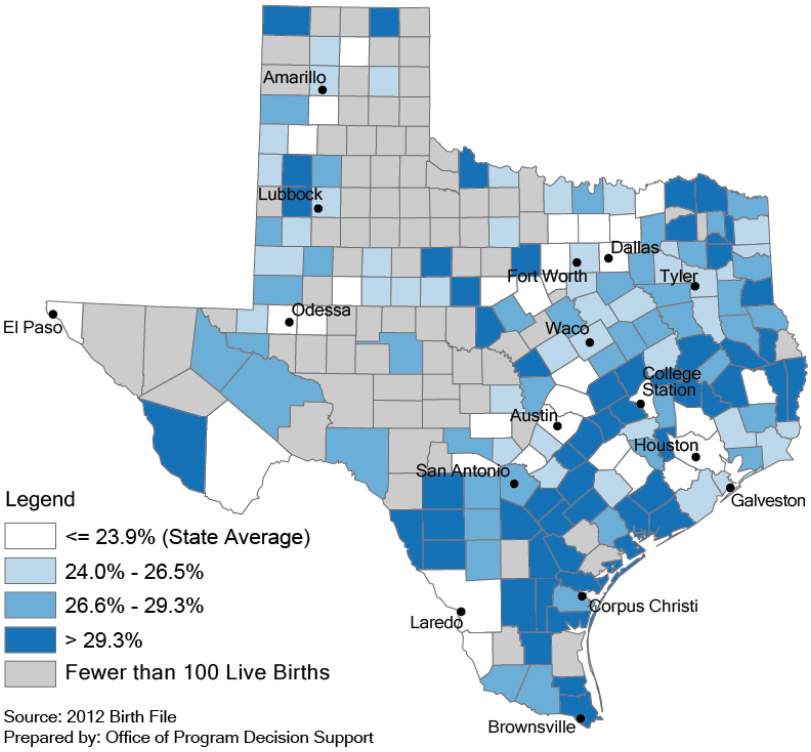
Figure 18.
Pre-Pregnancy Obesity, Race/Ethnicity 2005-2013



*2013 Texas data are preliminary
Source: 2005-2013 Birth Files
Prepared by: Office of Program Decision Support

With few exceptions, rural and suburban areas have higher concentrations of obese women (see Figure 19). It is known that within-county variations can be rather large with issues of access to parks and sidewalks as well as to healthy food choices.[6]

Figure 19.
Percent of Births to an Obese Mother, 2012



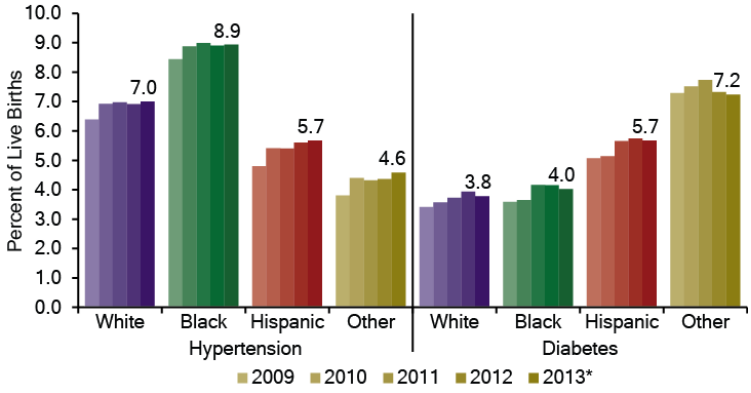
In 2009 and 2010, the CDC assessed the retail food environment of all census tracts in the United States to develop a modified retail food environment index.[7] This index quantifies the ratio of health food choices to un-health food choices. Areas with no healthy food outlets are classified as "food desserts." According to this classification, a higher than statistically expected number of women with pre-pregnancy obesity resided in food deserts in 2010. However, the relation between retail food environment and obesity is not straightforward and the analyses showed substantial variation between race/ethnic groups. Hispanic and white women who were obese pre-pregnancy were overrepresented in food deserts. However, black women with pre-pregnancy obesity were *not* overrepresented in food deserts and there was little statistical relation between pre-pregnancy BMI category and their food environment.

DIABETES & HYPERTENSION

In 2013, 4.9 percent of live births were to a mother identified as having diabetes pre-pregnancy or as developing it over the course of the pregnancy. Women with diabetes and their infants have an increased risk for a variety of complications, including infant or fetal death.

Much like diabetes, 6.4 percent of all live births were to mothers that were identified on the birth certificate as having some form of hypertension prior to pregnancy or as developing it over the course of the pregnancy. While a relatively small proportion (fewer than six percent) of the women who deliver each year have some form of hypertension, these women experience a disproportionately high percent of fetal and infant deaths (about 11 percent of all the fetal and infant deaths).

Figure 20.
Pregnant Women with Hypertension and/or Diabetes,
Race/Ethnicity 2009-2013



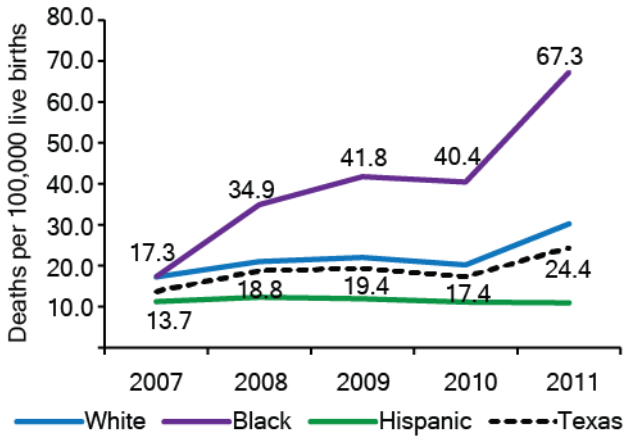
*2013 Texas data are preliminary; data label is 2013 rate
Source: 2009-2013 Birth Files
Prepared by: Office of Program Decision Support

Rates of both hypertension and diabetes are slowly rising in Texas (see Figure 20). However, there are racial/ethnic differences between women who have diabetes, hypertension, or both. A high percentage of Hispanic women and women in the "other" category have a diabetes diagnosis. In contrast, a high percentage of white and black women have a hypertension diagnosis. Despite these differences, obesity is associated with both, as is seen in the literature.[2, 5] In 2013, 18.4 percent of obese women in the birth cohort had either hypertension, diabetes, or both. This rate is in contrast to the 6.6 percent of women with normal pre-pregnancy BMI that were hypertensive, diabetic, or both.

MATERNAL MORTALITY & MORBIDITY

The maternal mortality rate has been rising since 2000. There is controversy as to whether that increase is due to death certificate coding changes or a true increase in the incidence of these events.[3] However, it is clear that the gap in the maternal mortality rate between black women and all other racial/ethnic groups has grown dramatically since 2007 (see Figure 21).

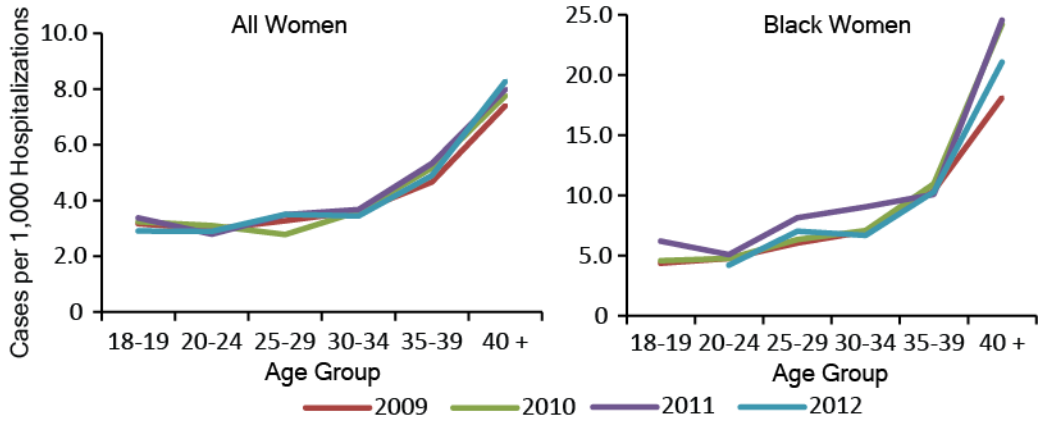
Figure 21.
Maternal Mortality Rate by Race/Ethnicity, Texas 2007-2011



Source: Vital Statistics Death Files: ICD10 O00-O959, O98-O999, A34 & Check Box
Prepared by: Office of Program Decision Support, FCHS, DSHS, 2014

Rates of hospitalizations with severe maternal morbidity are also increasing in Texas, especially among older women. Severe morbidity is identified through Texas' Hospital Discharge Public Uses File. These cases are those with an obstetric procedure code where the woman's risk of mortality was identified as being high or extreme. When race/ethnicity is also considered, it is clear that black women have a disproportionately high rate of severe morbidity and this risk escalates with maternal age (see Figure 22).

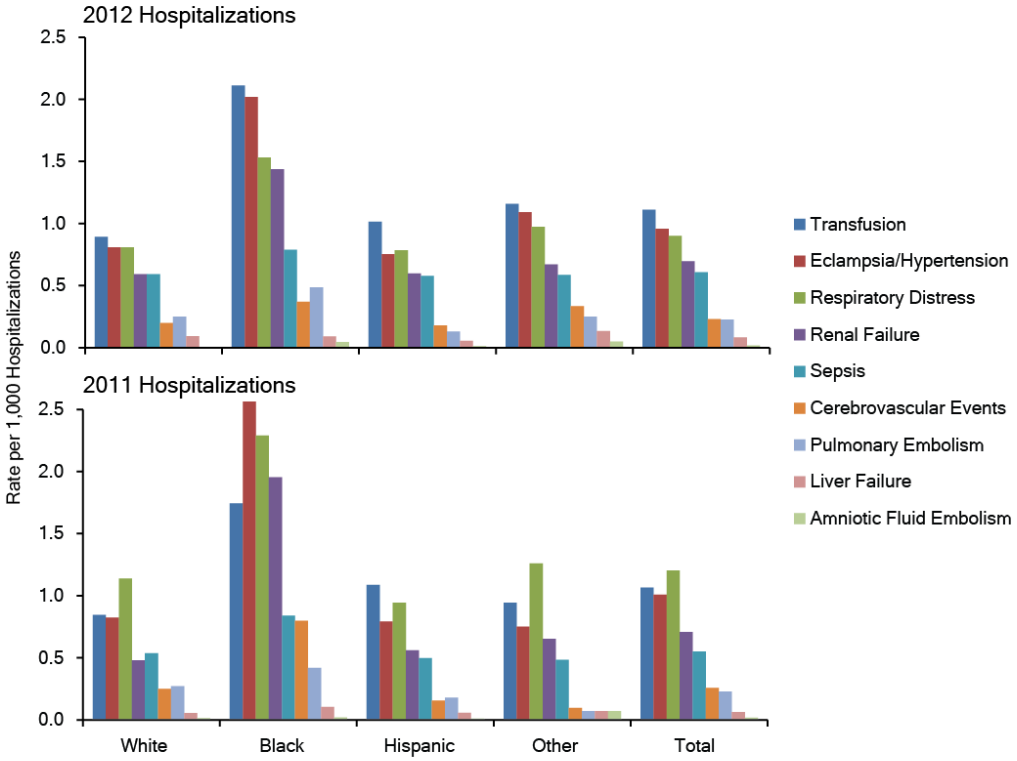
Figure 22.
2005-2012 Distribution of Severe Morbidity by Age Group



Source: 2005-2012 Texas Hospital Discharge Public Use Data:
Risk of Mortality High & Extreme for Identified Deliveries
Prepared by: Office of Program Decision Support, FCHS, DSHS, 2014

For all women, the leading diagnoses in women with a severe morbidity at the time of birth are hemorrhage (as indicated by transfusion), eclampsia and other hypertensive complications, and respiratory distress (see Figure 23). Black women are disproportionately affected by hypertension/eclampsia.

Figure 23.
2011 & 2012, Rates* of Different Severe Morbidity Diagnoses by Race/Ethnicity



*Rates are not mutually exclusive as the majority of women have more than one diagnosis
Source: Texas Hospital Discharge Public Use Data:
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CONCLUSION

This report is an overview of maternal and infant health in Texas. It is not an exhaustive presentation of all maternal health and infant risk factors, but focuses on a subset of birth outcomes and maternal risks that are often indicators of health in the community. It is through analyzing these factors that multi-year trends, points of intervention, and points of success can been seen.

MORE INFORMATION ON INFANT AND MATERNAL HEALTH IN TEXAS

www.hhsc.state.tx.us/reports/2014/SB1-Gestational-Diabetes.pdf

Recent report focusing on the rates and costs of gestational diabetes in the Texas Medicaid population. This study shows that the rate of diabetes among pregnant women enrolled in Medicaid is underestimated on the birth certificate and provides a clearer estimate of the impact of gestational diabetes on this population.

www.dshs.state.tx.us/chs/datalist.shtm

Contains vital statistics reports providing basic health-related data at the state and county level. The online query tool allows you to look at multi-year trends and maps of different indicators.

http://soupfin.tdh.state.tx.us/birth05.htm

This on-line query tool from DSHS allows you to create tables of basic birth statistics at the state or county level. The tool can be used to compare race/ethnicities, education level, marital status, and a variety of other demographics across major birth outcome indicators.

www.dshs.state.tx.us/mch/

Contains the PRAMS annual reports as well as links to other information about maternal and child health and community-based initiatives

www.HealthyTexasBabies.org/

Contains important information about Healthy Texas Babies including the final version of this report and previous reports, listed under “Texas Data”

www.marchofdimes.com/peristats/Peristats.aspx

Online query tool from the March of Dimes that covers a variety of infant health indicators that can be compared across different states in the country or across years for single regions/states

http://www.citymatch.org/projects/perinatal-periods-risk-ppor

Website that contains online presentations that describe the Perinatal Periods of Risk approach and the advantages to using it when developing interventions

www.SomedayStartsNow.com

The public awareness campaign of Healthy Texas Babies contains information for men and women of childbearing age, parents, providers and community stakeholders. There are toolkits for outreach, life and birth planning tools, social media tools and a page devoted to the Texas Collaborative for Healthy Mothers and Babies.

CITATIONS

1. Ahluwalia, I. B., Helms, K., & Morrow, B. (2013). Assessing the validity and reliability of three indicators self-reported on the pregnancy risk assessment monitoring system survey. *Public Health Reports (Washington, DC: 1974), 128*(6), 527.

2. Galtier-Dereure, F., Boegner, C., & Bringer, J. (2000). Obesity and pregnancy: complications and cost. *The American Journal of Clinical Nutrition*, 71(5), 1242s-1248s.

3. Hoyert DL. Maternal mortality and related concepts. National Center for Health Statistics. *Vital Health Stat* 3(33). 2007.

4. *see* Kane, D. J., & Sappenfield, W. M. (2013). Ascertainment of Medicaid payment for delivery on the Iowa Birth Certificate: Is accuracy sufficient for timely policy and program relevant analysis? *Maternal and Child Health Journal*, 1-8.

5. Kim, C., Kim, S. Y., Sappenfield, W., Wilson, H. G., Salihu, H. M., & Sharma, A. J. (2013). Are Gestational Diabetes Mellitus and Preconception Diabetes Mellitus Less Common in Non-Hispanic Black Women than in Non-Hispanic White Women? *Maternal and Child Health Journal*, 1-9.

6. *2014 State Indicator Report on Physical Activity*
http://www.cdc.gov/physicalactivity/downloads/pa_state_indicator_report_2014.pdf

7. *Census Tract level State maps of the Modified Retail Food Environment Index*
ftp://ftp.cdc.gov/pub/Publications/dnpao/census-tract-level-state-maps-mrfei_TAG508.pdf

APPENDIX A: FULL LOGISTIC REGRESSION RESULTS

Factors Predicting Low Birth Weight (<2500 grams), 2012

			95% Confidence Limits	
Parameter	**Reference**	**Odds Ratio**	**Lower**	**Upper**
Gestation <34 weeks	Full Term	635.396	525.769	767.880
Gestation 34-36 weeks	Full Term	19.271	18.737	19.820
Maternal Age		1.003	1.001	1.005
Medicaid	Non-Medicaid	1.029	0.997	1.062
Diabetes	No Diabetes	0.824	0.774	0.876
Hypertension	No Hypertension	2.570	2.462	2.683
Obese	Not obese	0.804	0.777	0.832
Black	Non-Hispanic White	1.753	1.677	1.833
Hispanic	Non-Hispanic White	0.991	0.957	1.025
"Other" race/ethnicity	Non-Hispanic White	1.421	1.340	1.507
Late Prenatal Care[v]	On-time Prenatal Care*	1.059	1.026	1.093
No Prenatal Care	On-time Prenatal Care*	1.438	1.351	1.530
Tobacco use during pregnancy	No Tobacco Use	1.708	1.605	1.817

Factors Predicting Preterm Birth (<=36 weeks gestation), 2012

Birth weight < 1500 g	Birth weight =>2500 g	272.769	236.788	314.218
Birth weight 1500-2499 g	Birth weight =>2500 g	16.836	16.356	17.329
Maternal Age		1.010	1.008	1.012
Medicaid	Non-Medicaid	1.204	1.173	1.235
Diabetes	No Diabetes	1.437	1.372	1.505
Hypertension	No Hypertension	1.816	1.746	1.888
Obese	Not obese	1.056	1.028	1.085
Black	Non-Hispanic White	1.156	1.112	1.203
Hispanic	Non-Hispanic White	1.161	1.130	1.194
'Other" race/ethnicity	Non-Hispanic White	0.912	0.865	0.960
Late Prenatal Care[v]	On-time Prenatal Care*	0.810	0.789	0.831
No Prenatal Care	On-time Prenatal Care*	1.510	1.432	1.591
Tobacco use during pregnancy	No Tobacco Use	1.043	0.985	1.104

PRAMS 2011: Factors Predicting Not Receiving Prenatal Care in the First Trimester

Parameter	Reference	Estimate	Standard Error	p-value	Odds Ratio	95% Confidence Limits Lower	Upper
Intercept		-1.60	0.56	0.004			
Maternal Age	*(continuous)*	-0.03	0.02	0.092	0.97	0.94	1.01
Medicaid	non-Medicaid	0.94	0.23	<0.001	2.55	1.63	3.98
Low Birth Weight	Healthy Birth Weight	0.14	0.16	0.387	1.15	0.84	1.56
Black	Non-Hispanic White	0.69	0.21	0.001	1.99	1.31	3.01
Hispanic	Non-Hispanic White	0.59	0.21	0.005	1.80	1.20	2.72
"Other" race/ethnicity	Non-Hispanic White	0.50	0.36	0.171	1.65	0.81	3.36
Obese	Normal/Overweight	-0.35	0.22	0.115	0.71	0.46	1.09
Rural Residence	Urban Residence	0.30	0.28	0.277	1.35	0.79	2.33
Unintended Pregnancy	Intended Pregnancy	0.67	0.18	<0.001	1.95	1.37	2.79