Infant and Maternal Health in Texas: A Public Health Perspective

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June 23, 2016
Birth Rate in Texas and U.S.

Birth Rate in Texas and The United States, 2005-2014

*2014 Texas and United States data are preliminary
Source: 2005-2014 Texas Birth Files,
National Center for Health Statistics
Prepared by: Office of Program Decision Support
Sept 2015
Ethnic Disparities in Birth Rate

Distribution of Race/Ethnic Groups Among All Live Births, 2005-2014

*2014 Texas data are preliminary
Source: 2005-2014 Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Infant Mortality in Texas and U.S.

Infant Mortality Rate in Texas and the United States, 2005-2014

*2014 Texas and United States data are preliminary
Source: 2005-2014 Texas Birth and Death Files, National Center for Health Statistics
Prepared by: Office of Program Decision Support
May 2016
Ethnic Disparities in Infant Mortality

Infant Mortality Rate in Texas by Race/Ethnicity, 2005-2013

Source: 2005-2013 Birth & Death Files
Prepared by: Office of Program Decision Support
February 2016
Geographic Disparities in Infant Mortality

Infant Mortality Rate per 1,000 Live Births by Select Communities, 2013

Source: 2013 Birth & Death File
Prepared by the Office of Program Decision Support
Sept 2015
Leading Causes of Infant Death

Leading Causes of Infant Death, 2007 - 2013

Deaths per 10,000 Live Births

- Congenital Malformation
- Short Gestation & Low Birth Weight NOC
- Sudden Infant Death Syndrome
- Maternal Complications of Pregnancy
- Intentional Injuries
- Maternal Complications of Placenta
- Infections in the Perinatal Period

NOC: Not otherwise classified
Source: 2007-2013 Death & Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Ethnic Disparities in Causes of Infant Death

Leading Causes of Infant Death by Race/Ethnicity, 2013

Deaths per 10,000 Live Births

- Congenital Malformation
- Short Gestation & Low Birth Weight NOC
- Sudden Infant Death Syndrome
- Maternal Complications of Pregnancy
- Unintentional Injuries
- Maternal Complications of Placenta
- Infections in the Perinatal Period

NOC: Not otherwise classified
Source: 2013 Death & Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Neonatal Mortality in Texas and U.S.

Neonatal Mortality Rate in Texas and the United States, 2005-2014

*2014 Texas and United States data are preliminary
Source: 2005-2014 Texas Birth and Death Files, National Center for Health Statistics
Prepared by: Office of Program Decision Support
May 2016
Ethnic Disparities in Neonatal Mortality

Neonatal Mortality Rate in Texas by Race/Ethnicity, 2005-2013

Source: 2005-2014 Texas Birth and Death Files
Prepared by: Office of Program Decision Support
May 2016
Postneonatal Mortality in Texas and U.S.

Postneonatal Mortality Rate in Texas and the United States, 2005-2014

*2014 Texas and United States data are preliminary
Source: 2005-2014 Texas Birth and Death Files,
National Center for Health Statistics
Prepared by: Office of Program Decision Support
May 2016
Ethnic Disparities in Postneonatal Mortality

Postneonatal Mortality Rate in Texas by Race/Ethnicity, 2005-2013

Source: 2005-2014 Texas Birth and Death Files
Prepared by: Office of Program Decision Support
May 2016
Preterm Births in Texas and U.S.

Percent of Live Births Born Preterm (less than 37 weeks) in Texas and United States Using Obstetric Estimate of Gestation, 2005-2014

*2014 Texas and United States data are preliminary
Source: 2005-2014 Texas Birth Files,
National Center for Health Statistics
Prepared by: Office of Program Decision Support
Sept 2015
Ethnic Disparities in Preterm Births

Percent of Live Births Born Preterm (less than 37 weeks) in Texas by Race/Ethnicity Using Obstetric Estimate of Gestation, 2005-2014

*2014 Texas data are preliminary
Source: 2005-2014 Texas Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Geographic Disparities in Preterm Births

Percent of Live Births that Were Preterm (less than 37 weeks) Using Obstetric Estimate of Gestation, 2013

Source: 2013 Birth File
Prepared by the Office of Program Decision Support
Sept 2015
Low Birth Weight in Texas and U.S.

Percent of Births that are Low Birth Weight (less than 2500 g) in Texas and the United States, 2005-2014

*2014 Texas and United States data are preliminary

Source: 2005-2014 Texas Birth & Death Files, National Center for Health Statistics
Prepared by: Office of Program Decision Support
Sept 2015
Ethnic Disparities in Low Birth Weight

Percent of Births that are Low Birth Weight (less than 2500 g) in Texas by Race/Ethnicity, 2005-2014

*2014 Texas data are preliminary
Source: 2005-2014 Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Geographic Disparities in Low Birth Weight

Percent of Infants Born Low Birth Weight (less than 2500g), 2013

Source: 2013 Birth File
Prepared by the Office of Program Decision Support
Sept 2015
Medicaid Costs for Preterm Births/Low Birth Weight

• Approximately 53% of all Texas births (213,253) paid by Medicaid

• Over $3.5 billion per year for birth and delivery-related services for moms and infants in the first year of life

• Medicaid newborn average costs:
  - Prematurity/low birth weight complications $109,220
  - Full-term birth $572

• In FY2015, Medicaid paid over $402 million for newborns with prematurity and low birth weight. Care delivered in the neonatal intensive care unit (NICU) is now the costliest episode of medical care for the non-elderly population.
Women who never received care or received care for the first-time within 8 weeks of giving birth by race/ethnicity, 2009-2014

2014 Texas data are preliminary
Source: 2010-2014 Birth Files
Prepared by: Office of Program Decision Support
Geographic Disparities in Early Prenatal Care Usage

Percent of Live Births Not Receiving Prenatal Care in the First Trimester (Obstetric Estimate), 2013

Source: 2013 Birth File
Prepared by the Office of Program Decision Support
Sept 2015
Ethnic Disparities in Seeking Early Prenatal Care

Comparing Percent of Women Receiving Prenatal Care in First Trimester and Early as Wanted by Race/Ethnicity, PRAMS 2009-2011

Note: Prenatal care timing is self-reported in PRAMS and is not comparable to data from the birth file.
Source: 2009-2011 Texas PRAMS
Prepared by: Office of Program Decision Support
Sept 2015
Unintended Pregnancy

Percent of pregnancies that were reported to be unintended overall, by race/ethnicity, and by payer source, 2009-2011

Smoking During Pregnancy

Percent of Live Births Where Mother Smoked Cigarettes During Pregnancy, 2005-2014

*2014 Texas data are preliminary
Source: 2005-2014 Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Ethnic Disparities in Maternal Obesity

Maternal Pre-pregnancy Obesity by Race/Ethnicity, 2005-2014

*2014 Texas data are preliminary
Source: 2005-2014 Birth Files
Prepared by: Office of Program Decision Support
Sept 2015
Pregnant women with hypertension and/or diabetes by race/ethnicity, 2009-2013.
# Infant and Maternal Health in Smith County

## Data sources:
- 2014 Natality File, Provisional, Center for Health Statistics, DSHS, and 2014 Mortality File, Provisional, Center for Health Statistics, DSHS.
- Table prepared by: Office of Program Decision Support, Division for Family and Community Health Services, 05/20/2016, mk, kr

### *Indicates that the infant mortality rate is based on less than 15 infant deaths to Black mothers. Such low numbers may make individual cases identifiable; hence, these rates are suppressed due to HIPAA privacy concerns.

### Table 1: Infant and Maternal Health Indicators in Smith County, 2014

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Overall</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Live Births</strong></td>
<td>3,149</td>
<td>506 (16%)</td>
</tr>
<tr>
<td><strong>Infant Mortality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neonatal Mortality</td>
<td>9.2 per 1,000 births</td>
<td></td>
</tr>
<tr>
<td>Postneonatal Mortality</td>
<td>6.4 per 1,000 births *</td>
<td>&gt;9.2 per 1,000 births*</td>
</tr>
<tr>
<td><strong>Preterm Birth</strong></td>
<td>9.0%</td>
<td>15.5%</td>
</tr>
<tr>
<td><strong>Low Birth Weight</strong></td>
<td>7.3%</td>
<td>16.1%</td>
</tr>
<tr>
<td><strong>Early Prenatal Care</strong></td>
<td>47.1%</td>
<td>37.4%</td>
</tr>
<tr>
<td><strong>Maternal Hypertension</strong></td>
<td>8.3%</td>
<td>11.9%</td>
</tr>
<tr>
<td><strong>Maternal Diabetes</strong></td>
<td>6.3%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>
## Infant and Maternal Health in Hidalgo County

<table>
<thead>
<tr>
<th>2014</th>
<th>Overall</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Births</td>
<td>16,324</td>
<td>15,846 (97%)</td>
</tr>
<tr>
<td>Infant Mortality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neonatal Mortality</td>
<td>5.2 per 1,000 births</td>
<td>5.2 per 1,000 births</td>
</tr>
<tr>
<td>Postneonatal Mortality</td>
<td>3.3 per 1,000 births</td>
<td>3.4 per 1,000 births</td>
</tr>
<tr>
<td></td>
<td>1.9 per 1,000 births</td>
<td>1.8 per 1,000 births</td>
</tr>
<tr>
<td>Preterm Birth</td>
<td>10.9%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>7.8%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Early Prenatal Care</td>
<td>71.8%</td>
<td>71.6%</td>
</tr>
<tr>
<td>Maternal Hypertension</td>
<td>6.3%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Maternal Diabetes</td>
<td>7.0%</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

Data sources: 2014 Natality File, Provisional, Center for Health Statistics, DSHS, and 2014 Mortality File, Provisional, Center for Health Statistics, DSHS.

Table prepared by: Office of Program Decision Support, Division for Family and Community Health Services, 05/20/2016, mk, kr
Next Steps in Public Health Approach

• DSHS Title V-Funded Community Needs Assessments of Infant and Maternal Health in Smith and Hidalgo Counties:
  ➢ Contract with UTHSC-Tyler and UT System Population Health for FY 2017
  ➢ Scientific analysis of archival data will be complemented with findings from community outreach surveys and focus groups
  ➢ Goal is to inform and improve infant and maternal health in Smith and Hidalgo Counties, and help guide Healthy Families Project.