

Scientific Analysis of the Current State and Needs of the Maternal and Child Health Population in Texas

The Office of Program Decision Support (OPDS) conducted a scientific analysis of the current state and needs of the maternal and child health population in Texas. The analysis was designed to have three complimentary components: 1) analysis of existing data; 2) community outreach surveys designed to assess what parents and people in the community think are their needs and strengths; and 3) qualitative data from focus groups and stakeholder meetings that build on the community outreach surveys. OPDS was responsible for analyzing existing data, and for developing and analyzing the results of the community outreach surveys. The focus groups and stakeholder meetings were conducted by SUMA Social Marketing, Inc., the findings from which were appended to the report by OPDS.

The approach governing analysis of existing data, and this scientific investigation, more generally, was grounded in four guiding principles. First, all analyses were informed by, and used, a life course perspective. Rooted in the sciences, the life course perspective takes into account how a person grows and changes throughout the course of their life, and how historical events and cultural shifts affect an individual's evolution over their lifetime. Second, children and youth with special health care needs have the same needs as their communities where they live. Children and youth with special health care needs live in the communities in which we all live; however, it is also clear that they have special needs. Third, given the complexity, diversity, and fluidity of the maternal and child population, complex analyses are required to understand their complex needs. Fourth, the results of all data analyses were benchmarked to an existing target whenever possible — either a national target, a target set by state statute, or a target set by federal guidelines. When a target did not exist, all regional and county analyses were benchmarked to the state average or a key reference group.

Using these four guiding principles, existing data were analyzed, first to provide an overview of Texas (Chapter 2), including geographic, population, and socioeconomic characteristics. Data on out-of-state and in-state mobility/migration were also analyzed and presented, as were existing data on health insurance coverage and access to health care in Texas.

Next, analysis of existing data on pre-pregnancy health is provided (Chapter 3), with a concentration on obesity and chronic disease, smoking and other risk behaviors, mental health, and planning and pregnancy spacing.

Data related to pregnancy and birth were analyzed (Chapter 4), including demographics of the birth cohort, prenatal care, diabetes and hypertension, oral health care utilization, smoking during pregnancy, stress and maternal risk during pregnancy, and intimate partner violence. Data on maternal morbidity and mortality were also analyzed.

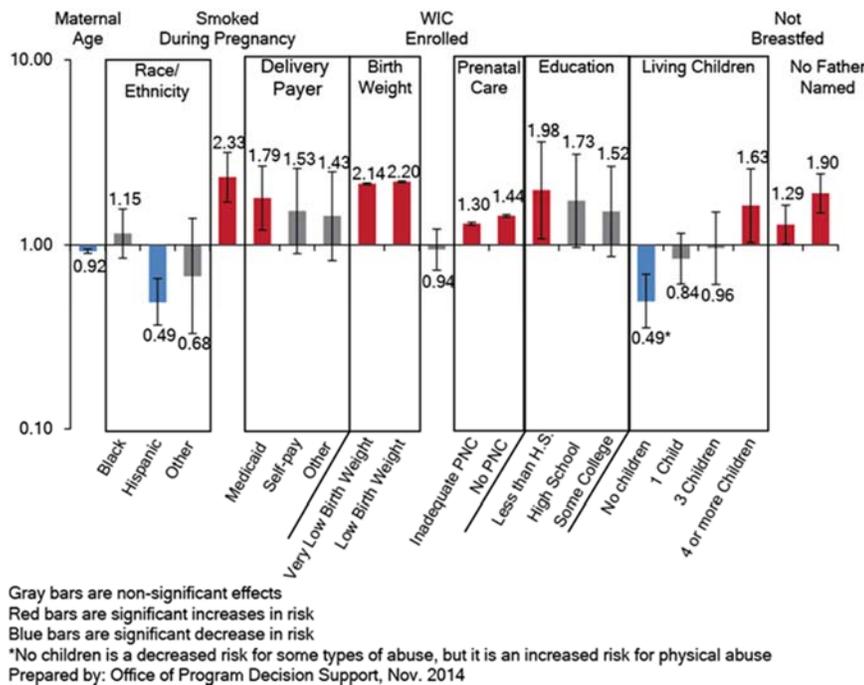
Birth and infancy were also of focus (Chapter 5), with data presented on the preterm birth rate, low birth weight, breast feeding, congenital abnormalities, birth defects, and Cerebral Palsy. Additionally, infant mortality, including fetal death, was assessed by focusing on care received during perinatal and maternal periods of risk.

Data are most useful when they are effectively turned into information, which is then used to take action by decision makers.

The *Data to Action Bulletin* (bi-annual) shows you how data from the Office of Program Decision Support are used to inform policy and practice in Family and Community Health Services.

Also presented in the chapter on birth and infancy, are the results of an analysis performed by OPDS that focused on newborn and infant death. While SIDS/sudden unexplained infant death is the leading cause of death, another concerning cause of death during this period of risk is homicide, which includes infants that died 28 days or more after their birthdate. Of all deaths investigated by the Department of Family and Protective Services (DFPS) between 2010 and 2012 and found to have substantiated abuse or neglect, 38 percent were deaths to infants. In 2015, DFPS and the Department of State Health Services (DSHS) developed a strategic plan to coordinate prevention and family support services administered by each agency to prevent child abuse and neglect fatalities. The plan, presented jointly by DFPS and DSHS staff at [DSHS Grand Rounds](#) on September 2nd, was driven by an in-depth analysis by OPDS that linked cases of substantiated abuse and neglect with death and birth certificate data. The results of these analyses showed that there are clear risks at birth that put the infant at a higher risk of dying from abuse or neglect (see *Figure 5.29*).

Figure 5.29
Risk Model for Abuse or Neglect Fatalities



There are two major findings from this analysis. One finding is that the type of abuse is important for understanding key risks at birth. For example, smoking is significantly related to both physical abuse and sleep related deaths, but it is a much higher risk for sleep related abuse and neglect deaths. Not having other children at home is protective against neglect related deaths, but it is an increased risk for physical abuse deaths.

The second major finding is that many of the factors in the Texas data that put infants at risk for child abuse and neglect fatality are also risks identified in the research literature for intimate partner violence. Intimate partner violence prior to and during pregnancy is a strong indicator of violence in the home, as well as future violence once the child is present in the home.

Analysis of data on childhood is presented next (Chapter 6), including findings on child fatalities, as well as the conditions of child asthma and childhood obesity. Data on the importance of oral health and having a medical home are also presented here.

Next, existing data are analyzed as they relate to adolescents (Chapter 7), with a focus on fatalities, substance use, sexual behaviors, obesity, transition to adulthood, and the importance of positive youth development.

Finally, a stand alone needs assessment for the Children with Special Health Care Needs program is presented (Chapter 8), with emphasis on the need for services and help to transition into adult care, as well as the need for a medical home for ongoing, coordinated care.

The scientific analysis of the current state and needs of the maternal and child health population in Texas was conducted to inform and guide public health priorities for the Title V Maternal and Child Health Block Grant for the next five years. Without a doubt, the report can also be used to direct public health interventions and strategies for improving maternal and child health. For example, the above risk model for abuse and neglect fatalities has allowed DFPS and DSHS to develop a strategic plan to address child fatalities in Texas, including those that are caused by abuse or neglect.

To access the complete scientific report, completed in February 2015, click on this [link](#).