# Texas Pre-Pregnancy Obesity PRAMS 2009-2011

Pre-Pregnancy Obesity and the Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS is a population based surveillance system designed by Center for Disease Control and Prevention (CDC). Surveillance is conducted via surveys sent to mothers who have recently given birth on various health topics such as prenatal care, pregnancy intention, alcohol use, smoking as well as others. In Texas, the PRAMS survey provides the most comprehensive population-based data on maternal health before, during, and after pregnancy. According to CDC, recent studies suggest that the heavier a woman is before she becomes pregnant, the greater her risk of pregnancy complications[1]. Maternal obesity is a risk factor for pregnancy complications such as gestational diabetes, preeclampsia, cesarean sections, and increased use of health care[2]. Using 2009-2011 combined PRAMS data, this factsheet shows prevalence of pre-pregnancy obesity by several demographic characteristics, as well as prevalence of perinatal complications, risk behaviors, and stressful life events by pre-pregnancy obesity status.

Figure 1: Pre-Pregnancy Obesity by Demographic Characteristics

*p-value < 0.05 **p-value < 0.01
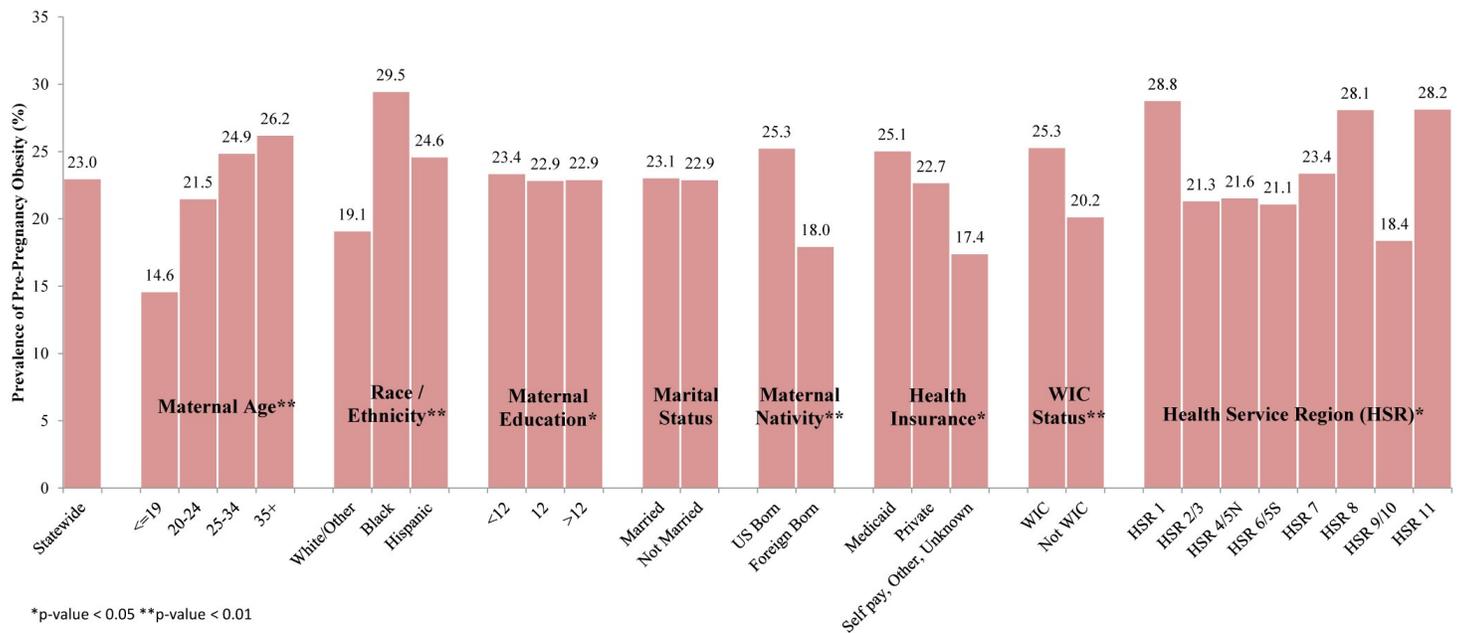
The overall prevalence of pre-pregnancy obesity among Texas mothers was 23.0%. Demographic characteristics that were significantly associated with pre-pregnancy obesity include age, race/ethnicity, maternal nativity (or maternal birth place), Women, Infant, and Child (WIC) Food and Nutrition Services status, maternal education, type of health insurance at birth, and health service regions. Mothers aged 35 years or older (26.2%), who were Black (29.5%), who were born in the United States (25.3%), who had Medicaid insurance at birth (25.1%), and who were on WIC (25.3%) had higher prevalence's of pre-pregnancy obesity than their counterparts.

Figure 2: Prevalence of Perinatal Complications by Pre-Pregnancy Body Mass Index (BMI)
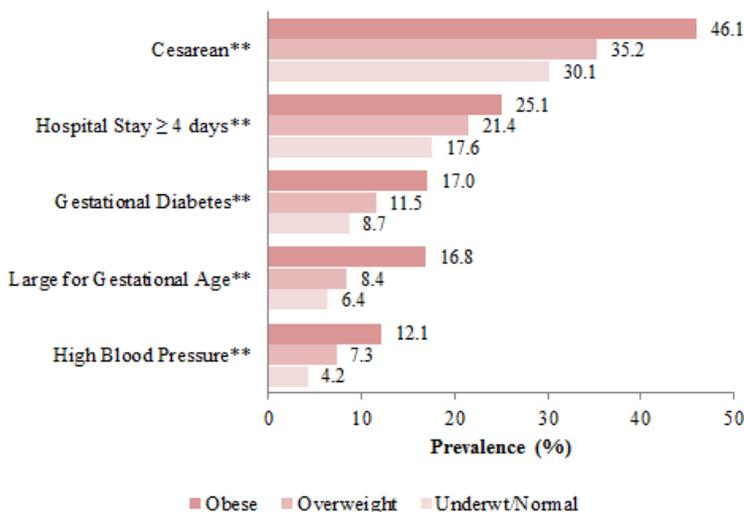
Perinatal is defined as the period during or around the time of birth. Figure 2 shows how pre-pregnancy body mass index (BMI) is associated with selected perinatal complications. Texas women who had a pre-pregnancy BMI classified as obese were significantly more likely to have had perinatal complications including a cesarean birth (46.1%), gestational diabetes (diabetes diagnosed during pregnancy) (17.0%), a baby who was born weighing more than the usual amount for the number of weeks of pregnancy (a large for gestational age infant) (16.8%), and high blood pressure (12.1%) when compared to their counterparts with either an overweight or underweight/ normal BMI.

(*p-value <0.05 **p-value <0.01)

Figure 3: Risk Behaviors by Pre-Pregnancy Body Mass Index (BMI)


Obese (BMI ≥ 30)   Not Obese (BMI ≤ 30)
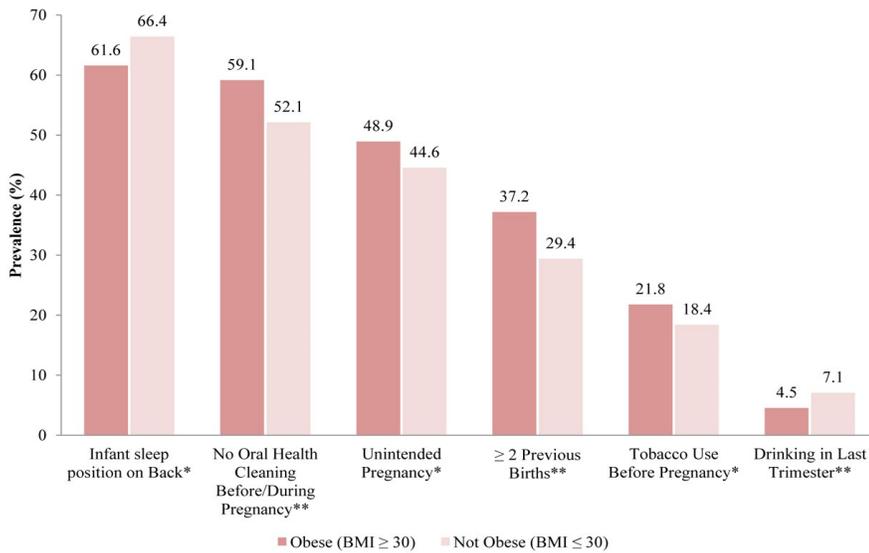
Compared to mothers who were not obese prior to pregnancy, mothers with pre-pregnancy obesity were significantly more likely to report having no oral health cleaning before or during pregnancy (59.1% vs. 52.1%), to have an unintended pregnancy (48.9% vs. 44.6%), have two or more previous births (37.2% vs. 29.4%) and to use tobacco before pregnancy (21.8% vs. 18.4%). Mothers with pre-pregnancy obesity were significantly less likely to put their infant to sleep on their back (61.6% vs. 66.4%) and significantly less likely to drink in the last three months of their pregnancy (4.5% vs. 7.1%) than mothers who were not obese.

(*p-value <0.05 **p-value <0.01)

Figure 4: Stressful Life Events by Pre-Pregnancy Body Mass Index (BMI)

Stressful life events are defined as events or experiences that disrupt an individual's usual activities, causing a substantial change and readjustment in one's life. Examples of life events include marriage, divorce, illness or injury, and changing or losing a job. According to the PRAMS survey, Texas women with pre-pregnancy obesity were significantly more likely to report having one or more stressful life events 12 months before pregnancy(79.5%) than mothers who were not obese prior to pregnancy (70.7%). Life events reported by Texas mothers, that were significantly associated with pre-pregnancy obesity included not being able to pay bills (30.3%), arguing with a husband or partner more than usual (29.8%), having a close family member sick or in the hospital (22.4%), losing a job even though they wanted to keep working (14.6%), and having a spouse or partner that did not want them to get pregnant (9.3%).

(*p-value <0.05 **p-value <0.01)

Obese (BMI ≥ 30)   Not Obese (BMI ≤ 30)
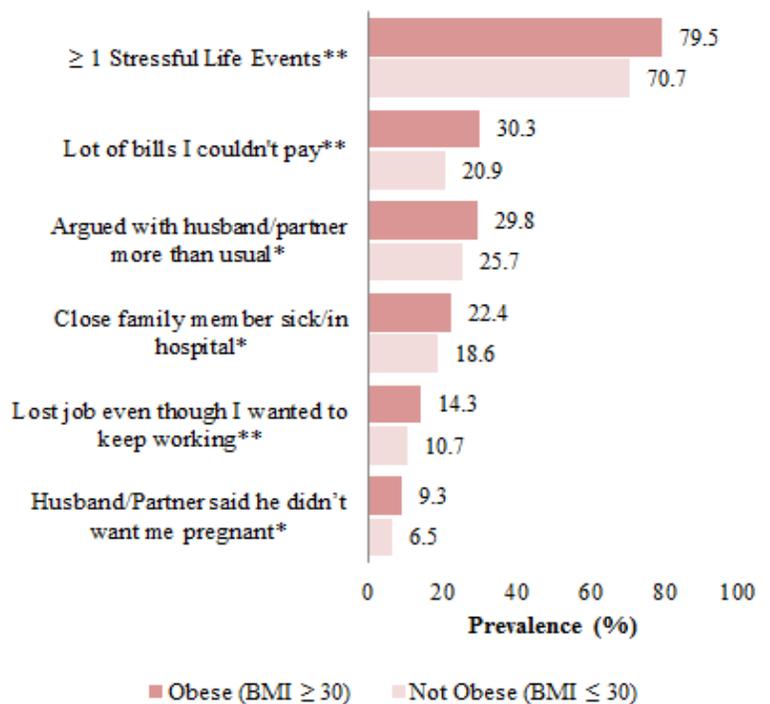
Resources

1.Center for Disease Control and Prevention (CDC). Available from: http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregcomplications.html

2. Weiss JL, et al. Obesity, obstetric complications and cesarean delivery rate-a population-based screening study. ACOG 2004;190:1091-7.