NM PRAMS – Preterm Birth Issue 2018-01



Preterm Birth - New Mexico PRAMS

by MCH Epidemiology, Family Health Bureau, PHD-NM Department of Health

Preterm birth is the birth of an infant prior to 37 completed weeks of gestation. Preterm birth is the leading cause of neonatal death, and is associated with birth defects and long-term health and developmental problems including lung disease, cerebral palsy, learning difficulties, and vision and hearing problems. The earlier a baby is born, the more severe his or her health problems are likely to be. The rate of preterm births in NM has been lower than the overall United States rate for most years during 2007-2016 (Figure 1.). NM preterm births ranged from 9.1% to 10.3% during the ten-year period.

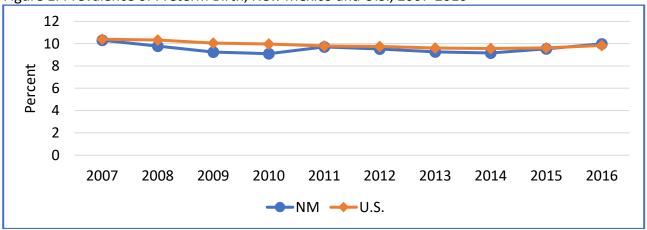


Figure 1. Prevalence of Preterm Birth, New Mexico and U.S., 2007-2016

Source: National Center for Health Statistics, CDC Wonder Natality¹

Preterm birth occurs more frequently in multiple pregnancies than in singleton pregnancies.

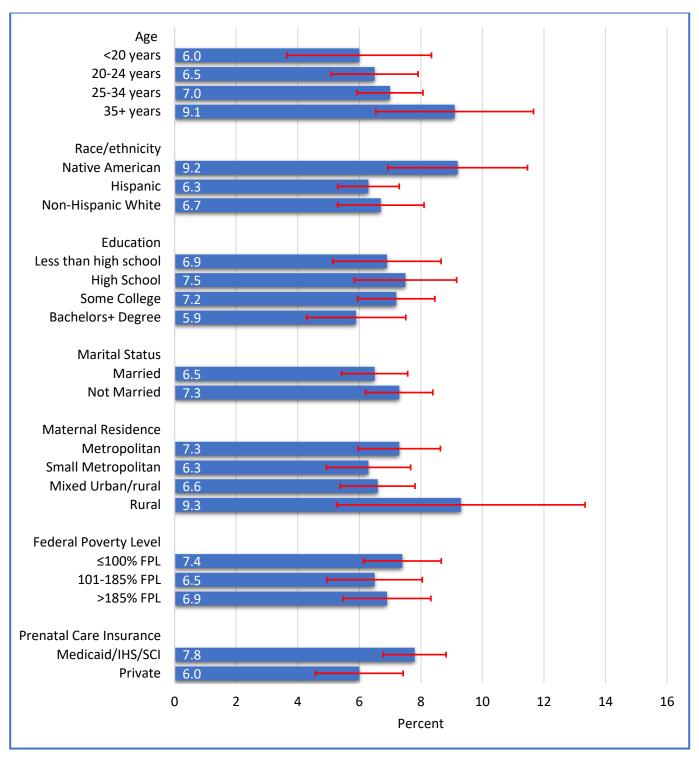
- 8.2% of singleton births to NM resident mothers during 2014-2016 were preterm¹.
- 63.0% of multiple births to NM resident mothers during 2014-2016 were preterm¹.

New Mexico Pregnancy Risk Assessment Monitoring System (NM PRAMS) is an ongoing public health surveillance system of maternal behavior and experiences before, during and shortly after pregnancy. NM PRAMS provides information that is representative of NM resident women who have given live birth in NM. The surveillance system is sponsored by the Centers for Disease Control and Prevention (CDC) and the NM Department of Health (NM DOH). PRAMS is New Mexico's only source of representative birth population data.

For this report, gestational age was based on obstetric estimate of gestation at delivery. Since the rate of preterm multiple births was 7.7 times higher than the rate of preterm singleton births the analyses for this report excluded multiple pregnancies.

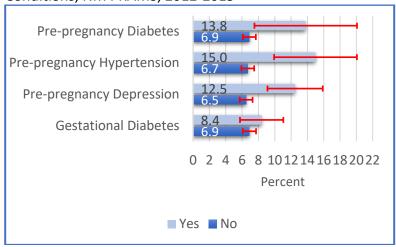
NM PRAMS – Preterm Birth Issue 2018-01





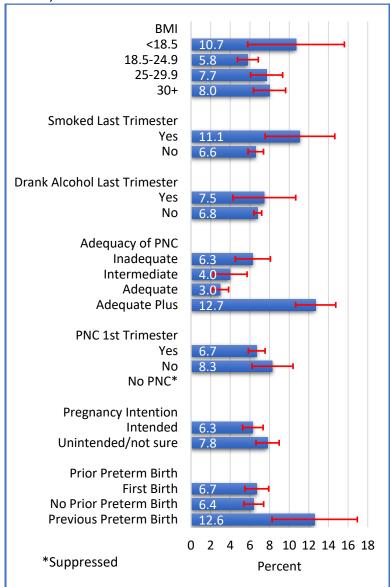
According to NM PRAMS, 7.0% of births to NM resident mothers who gave birth to singletons in NM were preterm during 2012-2015. Mothers with the highest percentage of preterm births were aged 35 years or older, were Native American, received Medicaid, Indian Health Service or State Coverage Insurance, lived in rural counties, were not married, and lived at ≤100% of the federal poverty level.

Figure 3. Prevalence of Preterm Birth by Maternal Health Conditions, NM PRAMS, 2012-2015



Mothers who had pre-pregnancy hypertension or who had pre-pregnancy depression were more likely to have a preterm birth than mothers without these health conditions.

Figure 4. Prevalence of Preterm Birth by Maternal Risk Factors, NM PRAMS 2012-2015



Mothers with a **Body Mass Index** of <18.5 had the highest percentage of preterm birth compared to mothers who were of normal weight, overweight or obese.

Mothers who smoked during the last trimester of pregnancy were more likely to have a preterm birth than mothers who did not smoke.

Women who received **inadequate prenatal care** were more likely to have a preterm birth than mothers who had adequate prenatal care.

Women who received adequate plus prenatal care were more likely to have a preterm birth. This result could be due to cases where an identified high-risk pregnancy led to more than adequate prenatal care.

Mothers who had a **previous preterm birth** were more likely to
have a preterm birth than mothers
without a history of preterm birth.

NM PRAMS – Preterm Birth Issue 2018-01

Mothers experiencing the following **stressful life events** during the 12 months before their baby was born had a higher percentage of preterm birth than mothers not experiencing the stressful event:

- Separated or divorced from husband or partner (9.4%, 95% CI [6.3-12.5] VS 6.8%, 95% CI [6.0-7.5]).
- Homeless or had to sleep outside, in a car or in a shelter (9.4%, 95% CI [3.0-15.8] VS 6.9%, 95% CI] 6.2-7.7]).
- Husband or partner did not want mother to be pregnant (8.6%, 95% CI [4.9-12.4] VS 6.9%, 95% CI [6.1-7.6]).

Mothers who were **physically abused during pregnancy** (11.3%, 95% CI [6.0-16.6]) had a higher percentage of preterm birth than mothers who were not physically abused during pregnancy (6.8%, 95% CI [6.1-7.6]).

Recommendations for Reducing Preterm Births:

Only about 50% of women who experience preterm birth have an identifiable risk factor². However, pregnant women can take important steps to help reduce their risk of preterm birth. Premature birth prevention and risk reduction strategies include encouraging pregnant women to:

- Quit smoking
- Receive early and regular prenatal care throughout their pregnancy
- Seek medical attention for any warning signs or symptoms of preterm labor
- Talk with their doctor or other healthcare provider about the use of progesterone treatment if they
 had a previous preterm birth³

Limitations:

Some NM resident women with a high-risk pregnancy gave birth in hospitals with a higher level of care in states bordering NM and therefore were excluded from the survey. This may explain why the preterm birth rate from NM PRAMS survey is over a percentage point less than the preterm birth rate from the CDC natality data. A limitation of the PRAMS survey is that all responses were self-reported and were subject to recall bias and social desirability bias.

References:

- 1. United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2007-2016, on CDC WONDER Online Database, February 2018. Accessed at http://wonder.cdc.gov/natality-current.html on Jun 18, 2018 11:49:47 AM
- 2. Moore ML. Preterm labor and birth: what have we learned in the past two decades? *J Obstet Gynecol Neonatal Nurs* 2003;32(5):638–49.
- 3. https://www.marchofdimes.org/complications/progesterone-treatment-to-help-prevent-premature-birth.aspx

