Early Term and Full Term Births in Oklahoma

Preterm birth (less than 37 weeks gestation) is a leading cause of infant mortality and morbidity in the U.S. Oklahoma ranked 46th in preterm births in 2011, with a rate of 13.9%. In Oklahoma, the infant mortality reduction initiative “Preparing for a Lifetime, It’s Everyone’s Responsibility” has been working to reduce the rate of infants born prior to 39 weeks gestation. Reducing the number of infants delivered via non-medically indicated induction or scheduled cesarean section prior to 39 weeks is the goal of the initiative's project “Every Week Counts (EWC),” initiated in January 2011. Approximately 95% of infants were born in hospitals participating in EWC.

This Brief will review the prevalence and compare selected outcomes of early term (37-38 weeks) and full term (39-40 weeks) infants from 2009-2011.

For 2009-2011, 32.6% of the total births were born between 37-38 weeks (early term) and 52.2% of the births were between 39-40 weeks (full term). There was a 9% increase in the rate of full term births between 2009 and 2011 (Figure 1).

**Figure 1. Percent of Births by Weeks Gestation, Oklahoma 2009-2011**

<table>
<thead>
<tr>
<th>Weeks Gestation</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;37 WEEKS</td>
<td>10.7</td>
<td>9.4</td>
<td>8.5</td>
</tr>
<tr>
<td>37-38 WEEKS</td>
<td>32.8</td>
<td>34.4</td>
<td>30.5</td>
</tr>
<tr>
<td>39-40 WEEKS</td>
<td>52.2</td>
<td>52.3</td>
<td>56.7</td>
</tr>
<tr>
<td>&gt;40 WEEKS</td>
<td>4.3</td>
<td>3.9</td>
<td>4.3</td>
</tr>
</tbody>
</table>

In terms of outcomes, early term infants were more likely to:

- Low birthweight (5.2% vs. 1.1%)
- Admitted to the NICU (9.2% vs. 6.0%)
- Have private insurance pay for delivery (43.6% vs. 37.2%)

Full term infants were more likely to:

- Have been breastfed (78.6% vs. 73.7%)
- Have government-funded deliveries (57.9% vs. 53.2%)

**Oklahoma Facts**

- 32.6% of the total births in 2009-2011 were born between 37-38 weeks (early term)
- 52.2% of 2009-2011 births were between 39-40 weeks (full term).
- There was a 9% increase in the rate of full term births between 2009 and 2011.
There were no statistically significant differences in maternal demographics between mothers who had an early term and mothers who had a full term birth (data not shown).

Mothers with a previous preterm birth were significantly more likely to have a subsequent early term infant (58.0%) compared to mothers without a previous preterm birth (42.0%).

No statistically significant differences were found in the number of nights the mother or infant stayed in the hospital, in cesarean section rates, or in prenatal care initiation (data not shown).

Early term infants were more likely to be low birthweight (less than 2,500 grams) than full term infants (5.2% vs. 1.1%). Infants who were born early term were more likely to have stayed in the neonatal intensive care unit (NICU) compared to full term infants (9.2% vs. 6.0%).

Full term infants were more likely than early term infants:

- To have been breastfed (78.6% vs. 73.7%)

- To have government-funded (including Medicaid, IHS, or military) delivery care (57.9% vs. 53.2%, See Figure 2).

References:


“...I chose NOT to have an induction, but I did feel somewhat pressured by my doctor to get one.”
- PRAMS Mom

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PRAMS is a population-based surveillance system about maternal behaviors and experiences before, during, and after pregnancy. Approximately 250 mothers are selected to participate in Oklahoma each month. Mothers are sent as many as three mail questionnaires seeking their participation with follow-up phone interviews for non-respondents. Information included in the birth registry is used to develop analysis weights that adjust for probability of selection and non-response. Prevalence rates were calculated and the potential risk factors were identified using the Cochran-Mantel-Haenszel Chi-Square ($\chi^2$) Test. The sample size for 2009-2011 was 8,834 with a response rate of 68%.

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Figure 2. Percent of Births by Weeks Gestation and Delivery Payer, Oklahoma PRAMS 2009-2011

![Figure 2](http://www.health.ok.gov)