Postponing parenthood beyond the teen years can improve child wellbeing by increasing the odds of a healthy birth. Compared to older mothers, teen mothers were less likely to receive prenatal care, more likely to smoke during pregnancy, and more likely to have a birth that is preterm and/or low-birthweight. Consequently, teen mothers also experience higher rates of infant mortality, and infants who were born low-birthweight or preterm often experience consequences lasting into adolescence and beyond.

**KEY DATA**

- Teen mothers were nearly twice as likely to forgo prenatal care in the first trimester compared to older mothers (43% compared to 25% respectively).
- Teen mothers were 33% more likely to smoke during pregnancy compared to older mothers (12% compared to 9% respectively). Furthermore, the majority of teen mothers who smoked during their pregnancy did not quit smoking before their child was born.
- Infants born to teen mothers were 17% more likely to be preterm and 25% more likely to be born low-birthweight compared to infants born to older mothers.
- Infant mortality rates, although low across the board, were more than 50% higher among teen mothers compared to older mothers (9.6 deaths per 1,000 births compared to 6.3).
- Differences in these outcomes between teen and older mothers were significant for nearly every racial/ethnic subgroup, and recent studies suggest that the risk of poor infant health outcomes remains significantly higher among teen mothers even after controlling for other factors.

**PRENATAL CARE**

In 1985, the Institute of Medicine (IOM) concluded that “the overwhelming weight of evidence is that prenatal care reduces low birthweight.” Subsequent studies confirm that prenatal care protects against preterm birth, birth defects, and infant mortality. In addition, increasing the number of
women who receive early prenatal care remains a priority in the U.S. Department of Health and Human Services’ Healthy People 2020 goals.\textsuperscript{2}

Unfortunately, teens who gave birth in 2010 were significantly more likely to forgo prenatal care or receive care later in their pregnancy. One-quarter of older mothers received no prenatal care in the first trimester compared to a little less than half (43\%) among teen mothers (see Figure 1). This gap between teen mothers and older mothers was significant for mothers of all races and ethnicities as well as for mothers overall.

The difference in rates of prenatal care between teen and older mothers was evident across a variety of other measures (not shown). For example, although the percent of mothers receiving no prenatal care throughout the pregnancy was relatively low across the board, the percent was significantly higher for teen mothers than for older mothers (3\% and 2\% respectively) and this remained the case within each racial/ethnic group. Similarly, the percent not receiving care until the third trimester was significantly higher among teen mothers (11\%) compared to older mothers (6\%), a pattern that also held true across racial/ethnic groups.

**SMOKING DURING PREGNANCY**

Infants whose mothers smoke during pregnancy are at significantly higher risk of birth defects, including cranial, cardiovascular, and musculoskeletal defects. Smoking during pregnancy also increases the risk of preterm delivery and low birthweight.\textsuperscript{6}

The incidence of smoking during pregnancy was significantly higher among teen mothers compared to older mothers (12\% compared to 9\%). Further analysis by race/ethnicity indicates this difference is primarily driven by results for non-Hispanic white teen mothers, an alarming 27\% of whom reported smoking during pregnancy—more than twice the percent of older non-Hispanic white mothers (13\%). Among Asian or Pacific Islander women, teen mothers were also significantly more likely to smoke than older mothers (5\% and 1\% respectively), though their incidence was low overall. By contrast, non-Hispanic black teen mothers were less likely to smoke than older mothers. Differences by age among Hispanic mothers and among American Indian/Alaskan Native mothers were not significant.

Although some mothers who smoke during pregnancy quit smoking sometime before the baby was born, this was not the case for the majority of mothers who smoked (not shown). For example, less than one-quarter (23\%) of non-Hispanic white teen mothers who smoked during pregnancy reported quitting sometime before they gave birth.

\footnote{a. Statistics on the percent who received prenatal care are limited to those jurisdictions that implemented the revised birth certificate by January 1, 2010. This includes 33 states plus the District of Columbia, and represents 76\% of all births in the United States.}
**Figure 2: Percent of Mothers Who Smoked During Pregnancy, by Age, 2010**

* *differences between teen and older mothers are statistically significant, \( \alpha = .05 \).*

- **Total**: 12% (Teen) vs. 9% (older)
- **Hispanic**: 2% (Teen) vs. 2% (older)
- **Non-Hispanic white**: 27% (Teen) vs. 13% (older)
- **Non-Hispanic black**: 6% (Teen) vs. 9% (older)
- **Non-Hispanic American Indian/Alaskan Native**: 19% (Teen) vs. 19% (older)
- **Non-Hispanic Asian or Pacific Islander**: 5% (Teen) vs. 1% (older)

b. Statistics on the percent who smoked during pregnancy are limited to those jurisdictions that implemented the revised birth certificate by January 1, 2010. This includes 33 states plus the District of Columbia, and represents 76% of all births in the United States.

**Figure 3: Percent of Births that were Preterm, by Age of Mother, 2010**

* *differences between teen and older mothers are statistically significant, \( \alpha = .05 \).*

- **Total**: 14% (Teen) vs. 12% (older)
- **Hispanic**: 13% (Teen) vs. 12% (older)
- **Non-Hispanic white**: 12% (Teen) vs. 11% (older)
- **Non-Hispanic black**: 17% (Teen) vs. 17% (older)
- **Non-Hispanic American Indian/Alaskan Native**: 14% (Teen) vs. 14% (older)
- **Non-Hispanic Asian or Pacific Islander**: 15% (Teen) vs. 10% (older)
PRETERM DELIVERY, LOW BIRTHWEIGHT, AND INFANT MORTALITY

The Institute of Medicine (IOM) cites preterm birth and low-birthweight as major contributing factors to infant mortality, and notes that preterm infants are at increased risk of acute respiratory, gastrointestinal, and neurological conditions, as well as other major medical challenges, often at considerable emotional and economic cost to families. The broader societal costs associated with preterm births totaled $26 billion in 2005. Numerous other studies suggest that the developmental consequences of preterm delivery and low birthweight often persist into adolescence and even adulthood.

Preterm delivery, defined as prior to 37 weeks of gestation, remains a relatively uncommon event. Nonetheless, teen mothers were significantly more likely to experience a preterm birth compared to older mothers (14% compared to 12%). This difference was significant for Hispanic mothers, non-Hispanic white mothers, and Asian or Pacific Islander mothers.

Preterm birth is closely associated with low birthweight (defined as less than 2,500 grams), though these two outcomes do not overlap completely. In general, low birthweight was less common than preterm birth, but the differences in low birthweight by age were more significant. Teen mothers were significantly more likely than older mothers to experience a low-birthweight birth (10% compared to 8%), and this pattern held true for mothers of all racial/ethnic groups except for American Indian/Alaskan Native mothers.

The starkest measure of infant health is infant mortality. Infant mortality is a rare event, even among teen mothers, who experienced a rate of 9.6 infant deaths per 1,000 births in 2008. That is, less than 1% of births result in infant death. Nonetheless, the infant mortality rate for teen mothers is significantly higher than that for older mothers (6.6 infant deaths per 1,000 births). This pattern held true for teen mothers overall as well as teens within nearly every racial/ethnic group. The exception was rates for mothers who were American Indians or Alaskan Natives, which were higher for teens than for older mothers, but the difference was not significant.

Clearly, there are many factors that influence maternal behavior during pregnancy and the outcomes of those pregnancies. Therefore, one cannot assume that the risk of unhealthy births among teen mothers would entirely disappear were they to simply postpone parenthood beyond their teen years. For example, unintended pregnancy, a factor strongly linked to lack of prenatal care and other unhealthy birth outcomes, remains prevalent among young adult mothers as well as teen mothers. Similarly, lack of access to health services and other challenges faced by economically disadvantaged women will not be completely ameliorated simply by postponing childbearing beyond the teen years.

Figure 4: Percent of Births that are Low-Birthweight, by Age of Mother, 2010

* Differences between teen and older mothers are statistically significant, α = .05.
Nonetheless, recent studies found that, even after controlling for various maternal characteristics and circumstances, teen childbearing remains a significant risk factor for adverse infant health outcomes. For example, one recent study found that, compared to mothers age 20 to 24, teen mothers’ risk of adverse infant health outcomes was 20% higher in terms of preterm birth, 14% higher in terms of low birthweight, and 15% higher in terms of infant mortality, net of other factors.10

Regardless of the extent to which healthy births are affected by teen childbearing vs. other sources of disadvantage in their lives, it is important to understand that, on average, teen mothers and their infant children are at higher risk for preterm delivery, low birthweight, and infant mortality, compared to mothers who postpone childbearing beyond the teen years.

**About the Author**

Kelleen Kaye is the Senior Director of Research at The National Campaign.

---

**Figure 5: Infant Mortality Rate, by Age of Mother, 2008**

<table>
<thead>
<tr>
<th>Age of Mother</th>
<th>Rate per 1,000 Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total*</td>
<td>9.6</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>6.3</td>
</tr>
<tr>
<td>Non-Hispanic white*</td>
<td>5.4</td>
</tr>
<tr>
<td>Non-Hispanic black*</td>
<td>5.2</td>
</tr>
<tr>
<td>Non-Hispanic American Indian/Alaskan Native</td>
<td>13.8</td>
</tr>
<tr>
<td>Non-Hispanic Asian or Pacific Islander*</td>
<td>12.4</td>
</tr>
<tr>
<td>Mothers 15-19</td>
<td>10.2</td>
</tr>
<tr>
<td>Mothers 20-44</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>4.4</td>
</tr>
</tbody>
</table>

*differences between teen and older mothers are statistically significant, \( \alpha = .05 \).

**Sources**


This project is funded by the Centers for Disease Control and Prevention and is supported by grant number 1U58DP002916-02. Materials developed as part of this project are solely the responsibility of the authors and do not necessarily represent the official views of CDC. The National Campaign wishes to thank the CDC for its support of this resource.