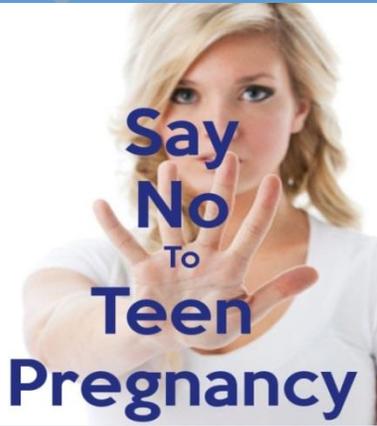


RAPID REPEAT BIRTHS AMONG OKLAHOMA TEENS



Introduction

Teen birth rates have continuously declined over the past two decades in both the US and Oklahoma. However, Oklahoma continues to have one of the largest percent of subsequent teen births in the nation. Each year nearly 1 in 5 teen births in the US are repeat births. Pregnancies and repeat pregnancies can take a huge toll on the physical and psychological health of teen mothers. Moreover, studies have found that children of teen parents are at a greater risk than children of older parents for a host of social, economic and health-related problems.

Data used in this report were from the Oklahoma birth certificates and the Pregnancy Risk Assessment Monitoring System (PRAMS). Mothers of ages 10-19 years old with one or more previous live births were identified from the birth certificates. The time to their subsequent birth was enumerated using the date of last live birth available in the birth certificate. Maternal experiences and behaviors before, during, and after pregnancy were assessed from the PRAMS survey.

Highlights

Over 1 in 3 teen mothers had a rapid repeat birth (birth within 18 months).

Rapid repeat births among teen mothers were more prevalent among:

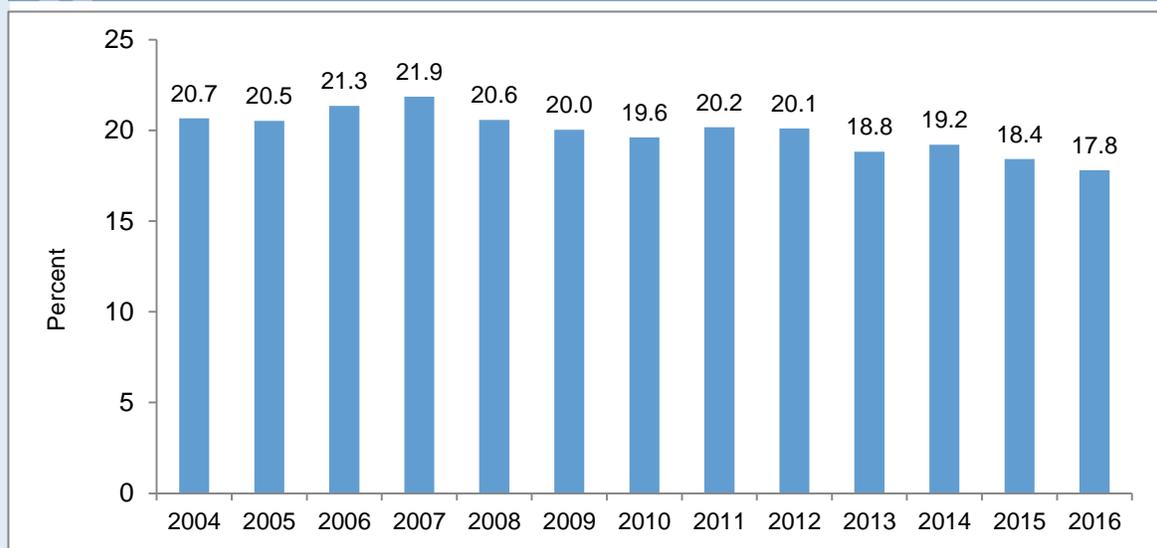
- 15-17 year old mothers.
- Non-Hispanic American Indian mothers
- Mothers living in rural areas

Around 37% of teen mothers reported using a birth control at the time they got pregnant.

Teen Mothers with Birth Spacing less than 18 months and 24 months

Despite declines in repeat teen births in Oklahoma (Figure 1), nearly 1 in 5 of all teen births in a year is a repeat birth. During 2010 – 2016, over 38% of teen mothers had a repeat birth within 18 months and 56% had a repeat birth within 24 months. Figure 2 indicates a small decline in the percent of teen mothers having repeat births within 18 and 24 months (Figure 2).

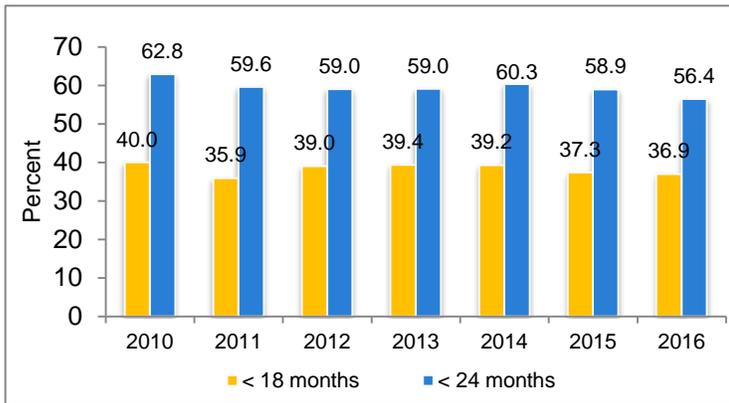
Figure 1: Trends in percent repeat births among teen mothers: Oklahoma Births 2004 – 2016



Rapid Repeat Births among Teen Mothers

Short birth spacing is associated with a number of adverse outcomes for both mother and baby¹. For this report, rapid repeat birth spacing is defined as time from the preceding live birth to a subsequent live birth of less than 18 months. The American College of Obstetricians and Gynecologists (ACOG) recommends the optimal interval between delivery and subsequent pregnancy as 18 months to 5 years²

Figure 2: Short birth intervals among teen mothers: Oklahoma Births 2010 - 2016



Characteristics of Teen Mothers with Rapid Repeat Births in 2010 - 2016

Rapid repeat births (< 18 months) were most prevalent among 15 - 17 year old mothers. Nearly half of all these mothers had a repeat birth within 18 months. Rapid repeat birth counts among teen mothers less than 15 years old were suppressed due to small numbers. Non-Hispanic American Indian mothers had the highest percent of repeat births within 18 months. Hispanic teen mothers had the lowest percent of rapid repeat births. The differences observed were statistically significant.

Teen mothers with less than high school education had a significantly ($p < 0.05$) higher percent of rapid repeat births compared to mothers with more education. Teen moms living in rural areas also had a slightly higher percent ($p < 0.05$) of rapid repeat births compared to those living in urban areas of Oklahoma. However, there was no significant ($p > 0.05$) difference in the percent of rapid repeat births among teen moms by their pre-pregnancy body mass index or by their Medicaid status (Figure 3).

Over half of all teen moms in Lincoln County had a repeat birth within 18 months. Table 1 shows the top 5 counties

with rapid repeat births among teen mothers. Only counties with overall 35 or more births for years 2010 – 2016 were considered for this table.

Figure 3: Selected characteristics of teen mothers with rapid repeat births: Oklahoma Births 2010 - 2016

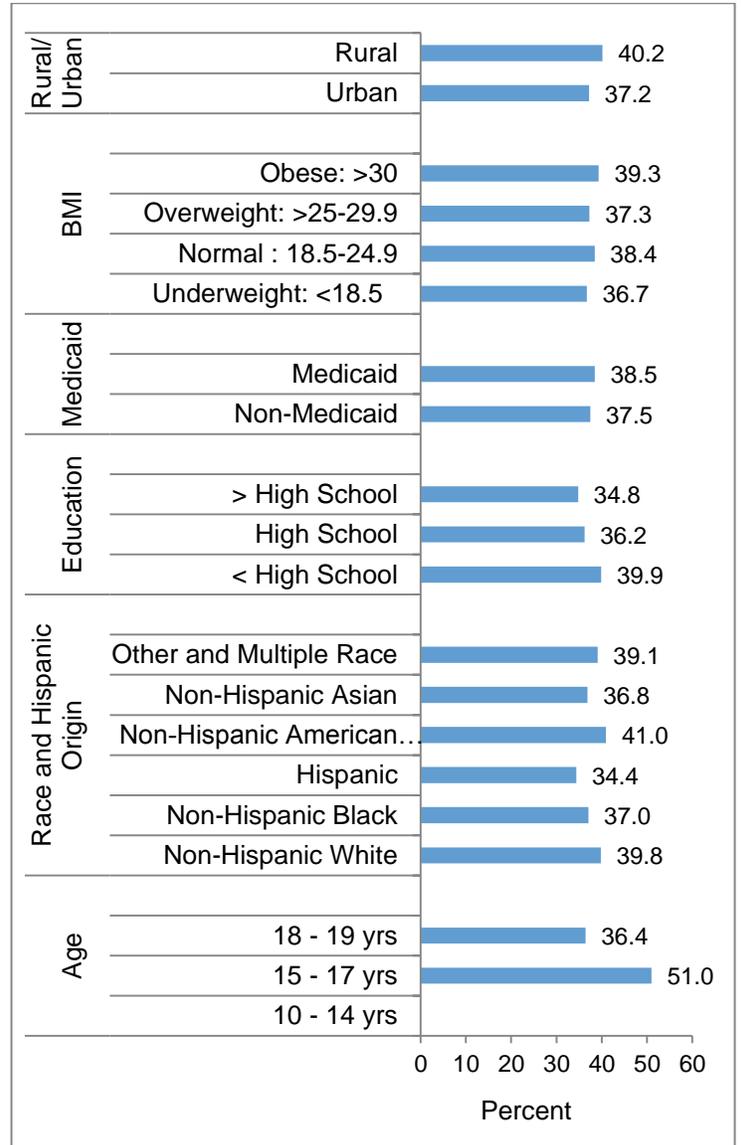


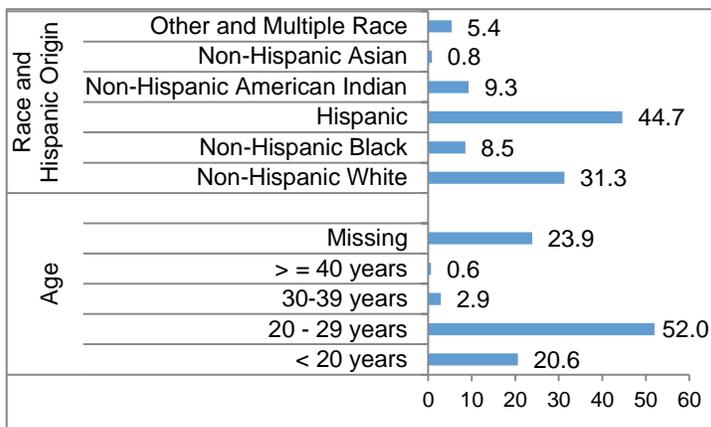
Table 1: Counties with the highest teen rapid repeat births: Oklahoma Births 2010 -2016

County of residence	Percent of repeat births within 18 months
Lincoln	51.2
Choctaw	47.6
Washington	45.3
Canadian	45.2
Carter	44.5

Fathers Associated with Teen Mothers with Rapid Repeat Births

Over half of fathers associated with rapid repeat births were in the age group 20 – 29 years and 45% of the fathers were of Hispanic origin (Figure 4). Nearly 39% of rapid repeat births happened when the parental age difference was less than 3 years (data not shown). Paternal information was missing from a significant number of birth records (23.9%); hence this data need to be interpreted with caution.

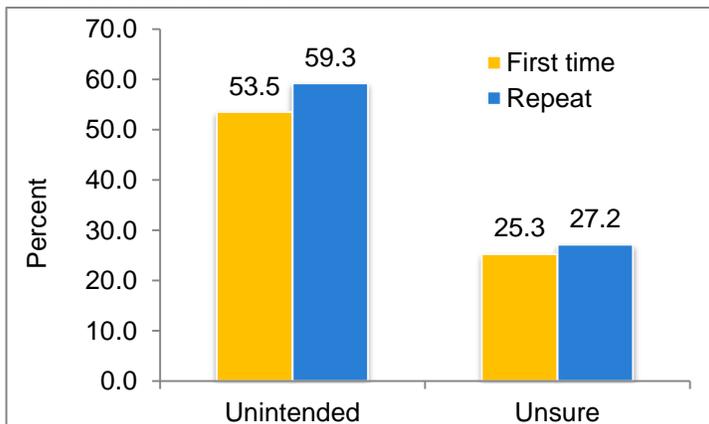
Figure 4: Selected characteristics of fathers associated with teen mothers with rapid repeat births: Oklahoma Births 2010 – 2016



Pregnancy Intention of Teen Mothers

In PRAMS over 59% of repeat teen mothers had unintended pregnancies compared to 53% among first time teen mothers. Percent of teen mothers with unsure pregnancy intention was slightly higher among those with repeat births (27.2% vs. 25.3%).

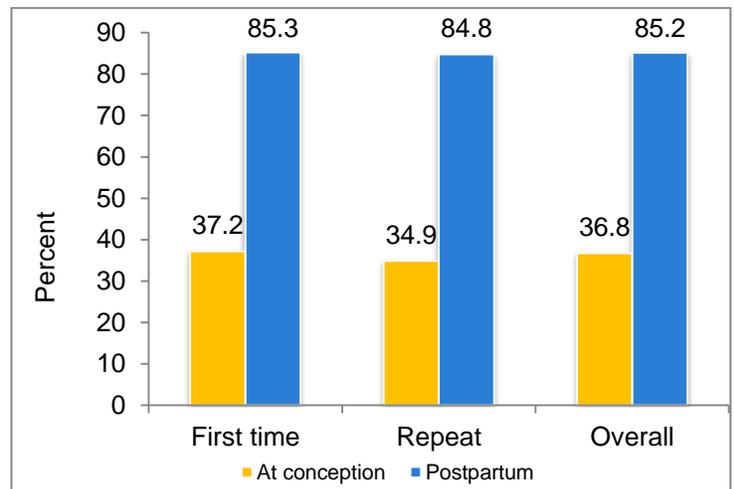
Figure 6: Pregnancy intention of first time and repeat teen mothers: Oklahoma PRAMS 2012 - 2015



Birth Control Use among Teen Mothers

Access to and use of effective birth control is linked to lower rates of unintended pregnancies in teens. Studies have shown that long-acting reversible contraceptives (LARCs) are more effective in delaying a second birth than other methods for teen child bearers and older women³. The percent of teens using a contraceptive at the time of pregnancy is very low. Overall in Oklahoma, roughly 37% of teens less than 20 years old used a contraceptive at the time they got pregnant, however over 85% reported to be using birth control postpartum. These rates were slightly lower among teen mothers with repeat births (Figure 7). This trend in birth control use among teen mothers did not differ much when the pregnancy was unintended.

Figure 7: Birth control use among first time and repeat teen mothers: Oklahoma PRAMS 2012 - 2015



In PRAMS, teens not using birth control at conception reported their reasons for nonuse; 32% did not really mind if they got pregnant, 31% felt they could not get pregnant at the time of conception, and 31% stated their partner did not want to use contraception (Figure 8).

Condoms were the most common postpartum birth control method used by teen mothers (46%), followed by pills (27%) and shots (20%). IUD and implants were used by 17% of teen mothers. Least effective methods such as withdrawal and abstinence were used as birth control by 17% and 14% of teen mothers, respectively (Figure 9).

Figure 8: Reasons for birth control nonuse at conception among teen mothers: Oklahoma PRAMS 2012 - 2015

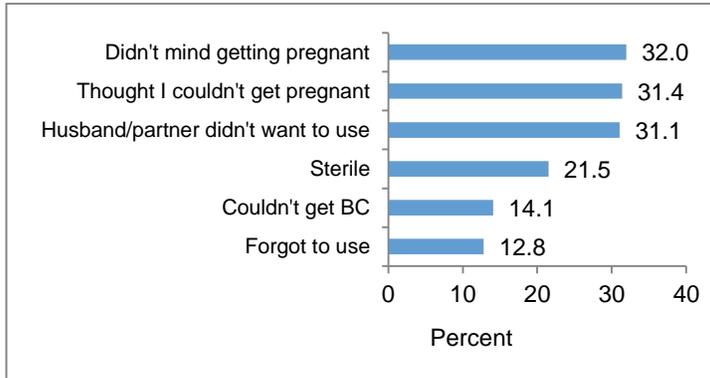
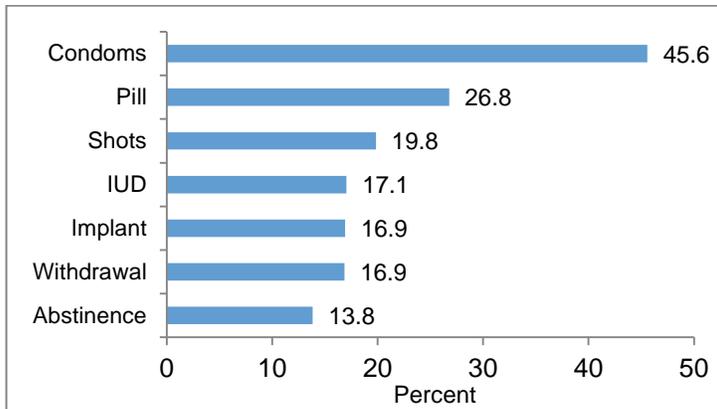


Figure 9: Common types of postpartum birth control methods used by teens: Oklahoma PRAMS 2012 - 2015



Conclusions:

Overall, subsequent teen births appeared to be declining from a high of 21.9% in 2007 to 17.8% in 2016. Studies have shown a relationship between declines in teen pregnancy and improved contraceptive use³. The increased availability and use of LARCs has likely played a role in this decline in Oklahoma. Recent changes to SoonerCare policy to allow postpartum LARC insertion in the delivery hospitals, will also aid in decreasing rates of subsequent pregnancy among young mothers.

Beginning in July 2017, Oklahoma became the recipient of the Pregnancy Assistance Fund. One of the primary goals for the grant in Oklahoma was to assist pregnant and parenting youth in reducing subsequent pregnancies before achieving their personal educational and employment goals.

Supporting young parents to meet goals, educating youth on the benefits of LARCs and increasing LARC availability will all be effective in reducing rapid repeat

births among teens and reducing the number of teens giving birth overall.

Limitations:

Rapid repeat births were enumerated from the dates of last live birth available on the birth certificate. Detailed information related to prior pregnancies or live births are not available on the birth certificate. PRAMS data are subject to limitations related to recall bias and self-reporting.

Data Sources:

1. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2000 to 2016.
2. Oklahoma State Department of Health (OSDH), Maternal and Child Health Assessment, Pregnancy Risk Assessment Monitoring System (PRAMS) 2012 to 2015.

Acknowledgements:

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2. The American Congress of Obstetricians and Gynecologists. Committee Opinion, Number 666. June 2016. Accessed 1/2018 from: <https://www.acog.org/-/media/Committee-pinions/Committee-on-Obstetric-Practice/co736.Pdf?dmc=1&ts=20180424T1459212856>.
3. Manlove, J.; Karpilow, Q.; Welti, K.; Thomas, A. Linking Changes in Contraceptive Use to Declines in Teen Pregnancy Rates. *Societies* 2016, 6, 1.

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