# Teen Pregnancy and Childbearing

# Summary

Individual, family, community and cultural factors influence rates of teenage pregnancy and childbearing. Teen childbearing can result in poor health for both mothers and children.

In 2011 in Washington State, the teen pregnancy rate among 15–17-year-old females was 19 per 1,000. This is the lowest rate since tracking began in 1980 and is well below the *Healthy People 2020* goal of no more than 36 pregnancies per 1,000. The 2011 Washington State birth rate among 15–17-year-olds was 12 per 1,000 teens, also the lowest rate since 1980 and lower than the U.S. teen birth rate of 15 per 1,000. While Washington's rates are lower than national rates, the United States has the highest teen birth rate of any developed country. Washington's teen birth rate is also high compared with other developed countries.

During 2009–2011, birth rates were highest for Washington's Hispanic and American Indian and Alaska Native teens and lowest for Asian followed by white teens. During the same period, teen birth rates were higher in geographic areas with higher concentrations of poverty and lower levels of college completion.

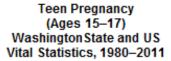
Comprehensive sexual health education programs, increasing access to family planning services, and use of long-acting reversible contraceptives are the most effective strategies to prevent teen pregnancies.<sup>3</sup>

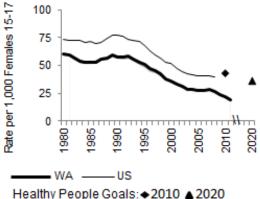
# **Time Trends**

**Teen pregnancies.** In the U.S. and Washington, the teen pregnancy rate has decreased over the past 20 years, after an increase in the late 1980s and early 1990s. Between 1993 and

**Definition:** In this section, "adolescents" or "teens" are 15–17-year-olds unless otherwise indicated. Analysis was restricted to 15–17-year-olds because they are school age and legally still children. Pregnancy among teens younger than 15 is a rare event, and teens older than 17 are at lower risk for poor birth outcomes. Teen pregnancies are estimated by combining reported births, induced abortions, and fetal losses for females ages 15–17. Spontaneous abortions (miscarriages) occurring prior to 20 weeks gestation are not included because there is no way of accurately estimating the number of these events.

2004, the pregnancy rate among 15–17-year-olds in Washington sharply declined to 29 per 1,000. Between 2004 and 2007, there was little change in rates. Between 2007 and 2011, it sharply declined again to 19 per 1,000, which is the lowest since tracking began in 1980. Trends in Washington mirror national trends, but in every year since 1980, the rate in Washington was lower than the national rate.<sup>4</sup>





**Teen births.** The trend for birth rates among 15–17-year-olds in Washington mirrors the trend for pregnancy. Like the pregnancy rate, there was little change between 2004 and 2007, followed by a sharp decrease between 2008 and 2011. In 2011, the birth rate for 15–17-year-olds was 12 per 1,000, the lowest rate since tracking began in 1980.

**Teen abortion**. The trend for Washington's abortion rate for 15–17-year-olds also follows the trend for pregnancy. After a sharp decline until 2004, there was little change in rates for four years. From 2008 to 2011, the rate sharply decreased to a low of 8 per 1,000 in 2011.

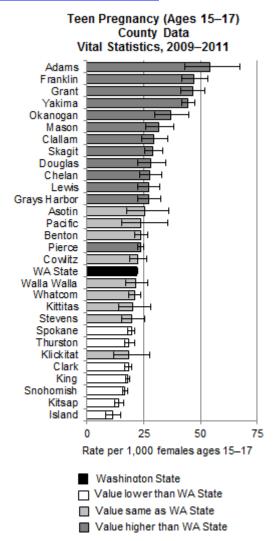
The increased use of birth control at first initiation of sex, the decrease in sexual initiation and activity, and the increased use of dual contraceptive

methods among sexually active teenagers have been credited with falling teen birth, abortion and pregnancy rates. <sup>5,6,7,8,9,10</sup> Social shifts, such as changes in the composition of the population, economics, family structure and social norms may also have influenced the changing rates. <sup>7</sup>

# 2010 and 2020 Goals

The Healthy People 2010 goal for teen pregnancies was a rate of no more than 43 per 1,000 females ages 15–17. Washington achieved this target in 1998. The Healthy People 2020 goal is a rate of no more than 36 per 1,000 females ages 15–17. Statewide, Washington achieved this target in 2002, but as shown in the chart of county data, five counties still exceed this target.

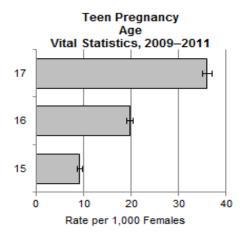
# **Geographic Variation**



During 2009–2011 combined, teen pregnancy rates ranged from 11 per 1,000 15–17-year-olds in Island County to 54 per 1,000 in Adams County. County variations may be influenced by demographic differences such as race and poverty. The following chart does not include 10 counties in which there were fewer than 20 teen pregnancies during 2009–2011, because rates for these counties can fluctuate widely even when combining several years of data.

## Age

During 2009–2011 combined, teen pregnancy rates for 15–17-year-olds increased with maternal age. The pregnancy rate was 9 per 1,000 among 15-year-olds, 20 per 1,000 among 16-year-olds, and 36 per 1,000 among 17-year-olds. Age-specific pregnancy rates have declined for all three ages since the early 1990s.



## **Economic Factors and Education**

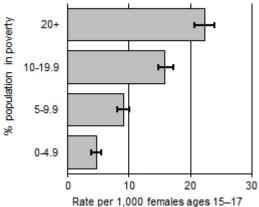
Income and highest completed level of education indicate socioeconomic status in the adult population. However, both measures are strongly related to age. Most teens have not yet had the opportunity to complete their education. For that reason, data on individual income and education are not presented here.

However, neighborhood characteristics such as the education and poverty level of the residents can be measured and are associated with teen pregnancy and birth. <sup>11,12</sup>

The birth rate for Washington teens ages 15–17 is higher in census tracts with higher concentrations of poverty. For example, in 2010, the teen birth rate was 22 per 1,000 teens in census tracts where 20% or more of the population lived in poverty compared

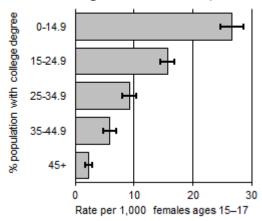
with 5 per 1,000 teens in census tracts where less than 5% of the population lived in poverty.

Teen Birth Rate (Ages 15–17) by Neighborhood Poverty, Washington Birth Certificates, 2010



Similarly, teen birth rates are higher in census tracts where lower percentages of residents age 25 or older have college degrees.

Teen Birth Rate (Ages 15–17) by Neighbhorhood Education, Washington Birth Certificate, 2010

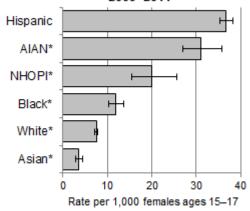


# Race and Hispanic Origin

Pregnancy rates are estimated from birth, abortion and fetal loss records. Abortion data reported to the Washington State Center for Health Statistics frequently lack information about race or Hispanic origin. Therefore, it is possible to calculate birth rates, but not pregnancy rates, by race and Hispanic origin. In Washington for 2009–2011 combined, live births to teens ages 15–17 were lowest among Asians (4 per 1,000) and whites (8 per 1,000). Rates were highest among Hispanics (37 per 1,000) and American Indian and Alaska Natives (31 per

1,000). This pattern is similar to the national pattern. Washington birth rates for black and white teens were lower than the national rates for these groups. Teen birth rates for American Indians and Alaska Natives and teens of Hispanic origin were higher than national rates for those groups. Rates for Asian and Native Hawaiian and other Pacific Islander teens are not available nationally. 13 Washington birth rates for white, black, Asian and Hispanic teens have declined significantly since 2004, the earliest year that data are available for these racial and ethnic groupings. Differences in poverty rates, access to healthcare and low maternal education may account for some of these racial and ethnic differences. Race-specific pregnancy rates may also be influenced by cultural values about sexuality. relationships, birth control, adolescent childbearing and abortion. 14,15,16,17,18,19

Teen Births (Ages 15–17) Race and Hispanic Origin Washington Birth Certificates, 2009–2011



\* Non-Hispanic, single race only AIAN: American Indian/Alaska Native NHOPI: Native Hawaiian/Other Pacific Islander

# Other Measures of Impact and Burden

Educational and economic effects of teen parenting. Early parenthood is a challenge for teens who are trying to complete high school. Nationally, teen mothers are less likely to complete high school than teens who delay childbearing. By age 22, 43% of women who gave birth before age 18 had neither a high school diploma nor GED, compared with 6% of women who did not have a child in their teens. After giving birth, teen mothers are at higher risk for depression, substance abuse, intimate partner violence and poverty, compared with their peers who delay childbearing. They are also more likely to use government benefits.

Even before pregnancy, teens who become mothers are more socially and economically disadvantaged than other teens. Teens who become mothers are more likely to have low educational achievement, poor school performance, parents with low educational attainment, and limited family economic resources. These early disadvantages contribute to the negative economic and educational consequences associated with teen births, many of which diminish or disappear when controlling for background characteristics. 25,26

Teen mothers are at high risk for repeat pregnancies and spend more of their adult years as single parents than women who delay childbearing. During 2009–2011, 7% of teens ages 15–17 in Washington who gave birth had a prior live birth, and an additional 7% had a prior pregnancy that did not result in a live birth. This pattern results in greater stress upon young mothers to support their families on limited incomes. Teens with repeat births are also at higher risk for poor birth outcomes compared to teens having their first birth and women in their 20s having repeat births. 10,28,29

#### Fathers of children born to teen mothers.

Teenage males who have low academic achievement, low family socioeconomic status, are involved in drug use or crime, or have experienced sexual abuse are at increased risk of becoming teen fathers, compared with teens without those characteristics. 30,31,32

Once they become fathers, these teens are at higher risk of poor academic performance, are more likely to drop out of school, and have limited financial resources, compared to their peers who are not fathers. This influences the teen fathers' ability to provide financial resources for their children. 4

Teen mothers often have partners who are not teens. The 2006–2010 National Survey of Family Growth found that about 8% of sexually active 15-year-old females had first-time partners who were four to five years older, and 4% had partners who were six or more years older. The Among Washington women under age 18 who gave birth in 2011, over a third of birth certificates did not have the father's age listed. Of those that did, 20% of births were to fathers five or more years older than the mother. While this age difference is present among all young women, it is highest among those of Hispanic

origin (28%). These data raise important legal, economic, and teen health and safety issues.

Cost of teen births. Nationally in 2008, teen pregnancy cost taxpayers about \$10.9 billion. In that same year, teen pregnancy in Washington cost taxpayers an estimated \$151 million, 60% of which were state and local costs. Medicaid financed 96% of Washington births to mothers younger than 18 years old in 2011. In 2010, the mean cost for prenatal care and delivery for teens ages 15–17 was approximately \$10,700 per woman for all Medicaid-covered deliveries, a rate similar to other age groups. Reference of the prediction of the same province of the sam

**Outcomes for teen births.** Poor maternal weight gain, poor nutrition, pregnancy-induced hypertension, anemia and sexually transmitted diseases occur more frequently with teen pregnancy. <sup>10</sup> Children of teen mothers are more likely to be born preterm, to be low birth weight, and to die during their first year of life than children born to nonteen mothers. <sup>10,39,40</sup>

Multiple factors can influence these poor outcomes, including access to prenatal care, physical and emotional maturity, and pre-pregnancy behaviors such as smoking.<sup>41</sup> Among 15–17-year-olds who delivered in Washington during 2009-2011, 37% did not receive prenatal care during their first trimester and 10% received late or no prenatal care, rates that are approximately double those of women age 20 and older (20% and 5%, respectively). Similar to national data, Washington's reported rates of smoking during pregnancy are highest for teens. During 2009–2011, 12% of 15–17-year-olds who gave birth reported smoking during pregnancy compared with 9% of women age 20 and older. Smoking during pregnancy is associated with intrauterine growth restriction, low birth weight and infant mortality.42

Having teen parents can also have long-term consequences for children. Compared to children born to older mothers, children with teen mothers are more likely to experience abuse and neglect, and to have lower cognitive and language abilities, and more behavior problems. They are more likely to have academic difficulties, engage in substance abuse, initiate sexual activity early, have lower life satisfaction, be imprisoned, and become teen parents themselves. Other factors associated with teen parenthood, such as poverty, play a role in these associations.

## **Risk and Protective Factors**

Individual, family and community level factors influence rates of teen pregnancy. These factors are often interrelated.

Individual factors. The likelihood an adolescent becomes pregnant increases with early sexual activity, early alcohol and drug use, <sup>44</sup> nonuse or inconsistent use of birth control, <sup>45</sup> and physical or sexual abuse. <sup>10,44</sup> Depression and the perception that teenage sexual activity and pregnancy are acceptable also place teens at risk for pregnancy. <sup>10,44</sup> Having friends who are older, sexually active, with sexually permissive or pro-childbearing attitudes and behaviors can increase the risk of teen pregnancy. Being part of a gang and having an older romantic partner also puts teens at higher risk of pregnancy. <sup>44,46,47</sup>

Individual protective factors include connectedness to school and family, higher academic performance, aspirations for the future, and religious beliefs that do not sanction sexual activity outside of marriage.<sup>44</sup>

Based on the 2012 Healthy Youth Survey, about 32% (±5%) of 10th graders in Washington have had sexual intercourse. Among this group, about 18% (±4%) had sexual intercourse before age 13 and 62% (±7%) reported using a condom during last intercourse. Contraceptive use is increasing among teens, but nonuse and ineffective use remain high especially among the youngest teens. <sup>47</sup>

Not using long-acting reversible contraception; experiencing intimate partner violence in the three months after delivery; 48 not being enrolled in school or employed; 49 having a positive attitude about teen pregnancy; 50 having lower cognitive ability; living with their husband or partner; 51 having a first birth that was intended; and having a prior poor birth outcome are all associated with repeat teen pregnancies. 52 Privacy concerns or lack of parental support in obtaining contraceptives—as well as loss of healthcare in the postpartum period—may influence teens' use of contraceptives. 53,54

**Family factors.** A teen's family plays an important role in her risk for teen pregnancy. Living with a single parent, low maternal education, a mother or sibling who had a teen birth herself, and household substance abuse are significant risk factors for teen pregnancy.

Open and positive communication between parents and children and strong family attachments; providing youth with supervision and monitoring; communicating about sex and condoms or contraception; and parental disapproval of teen sex are also important protective mechanisms.<sup>44,56</sup>

**Community factors.** Teens living in communities with substance abuse, violence and hunger are at greater risk for teen pregnancy.<sup>44</sup> When youth feel connected with their school, such as through extracurricular activities, they are less likely to engage in risky sexual behavior.<sup>57</sup>

After controlling for individual characteristics, teens living in communities with high poverty are at greater risk for being teen parents, based on a national study. This risk increases the longer the teen has lived in the neighborhood. The risk increases when the poor neighborhood is adjacent to economically advantaged communities. Increased sexual risk behavior is also associated with neighborhoods that have higher numbers of youth age 16 and older who had not graduated from school, and were not attending school nor working. Se

# **Intervention Strategies**

Because a multitude of factors influence teen pregnancy, no single strategy can prevent all teen pregnancies. Based on scientifically rigorous reviews of evaluation findings, comprehensive sexual education programs have more support than abstinence-only programs. <sup>3,59,60,61,62</sup> The following strategies have demonstrated the strongest evidence of effectiveness.

Sexual health education and comprehensive youth development programs. The U.S. Department of Health and Human Services recognizes 31 curriculum-based sexual health education programs as effective in reducing the risk behaviors that lead to teen pregnancy and sexually transmitted infections (STIs). <sup>63</sup> These programs use a range of approaches, including encouraging teens to wait to have sex, educating on contraception, training on refusal skills, or talking about the health consequences of sexual activity. Many of the programs were developed for specific ages and racial or ethnic groups. These 31 programs are used in federally funded teen pregnancy prevention programs.

Teen pregnancy prevention education components are also included in many youth development curricula. These lessons foster the basic competencies and skills needed to become successful adults. Most focus on building a sense of

belonging, self-awareness and self-worth in participants, as well as developing leadership, relationship building, and communication skills through service-learning components. <sup>64</sup> The youth development programs included on the federally approved list have been shown to be effective in increasing adolescent motivation to avoid pregnancy, childbearing and other highrisk behaviors. <sup>65</sup>

Through a grant from the CDC, The National Campaign to Prevent Teen and Unplanned Pregnancy produced a summary of evidence-based programs that have been shown to positively impact sexual behavior, lower rates of pregnancy and STIs, and increase condom and contraceptive use. This document provides a rich resource for communities to use when choosing and implementing a teen pregnancy prevention program, especially for one that takes place outside of a school setting, such as a clinic.<sup>44</sup>

A national set of standards for sex education, developed by the Future of Sex Education Initiative, is available to help public schools provide high-quality age-appropriate sexual health education for kindergarten through 12th grade. These standards align with the National Health Education Standards. In Washington, all sexual health education that takes place in public schools must be medically accurate, include information about both abstinence and contraceptives, and meet the 2005 Guidelines for Sexual Health Information and Disease Prevention. All funding received by state agencies for sexual health education must be used for evidence-based curriculum. 66

Despite the effectiveness of comprehensive sex education and the variety of available resources, they have yet to be broadly implemented. Based on a multi-state study of women who recently gave birth, 50% of teens were not using any type of birth control when they got pregnant. Desire for pregnancy, confusion, lack of accurate information about contraception, difficulty accessing or paying for contraception, and the need for skills in making healthy choices and avoiding risk behavior all contribute to pregnancy among adolescents. 19,44,64,68,69

Family Planning and Clinic-Based Interventions. Increased access to contraceptives and to family planning services decreases adolescent pregnancy. Teens in Washington may obtain contraception without parental consent. One avenue is school-based

health centers (SBHCs). Young women who had access to a school-based health center that provided reproductive health services were more likely to receive pregnancy or disease prevention care, use a hormonal contraceptive method, and be screened for STIs, compared with young women who did not have access to these centers. Condom-availability programs in health clinics, schools and SBHCs have also been shown to increase condom use among adolescents. Having SBHCs or condom-availability programs on school campuses does not increase teen sexual activity or hasten initiation of sexual activity.

Long-acting reversible contraceptive (LARC) methods, which include intrauterine device (IUD) and hormonal implants, are now the recommended contraceptive method for adolescents due to their high rate of effectiveness in preventing pregnancy.<sup>73</sup>, 74 LARC also significantly decreases the risk of repeat pregnancy in teens when initiated soon after an abortion or during the post-partum period. 75,76 LARC does not rely on user adherence to be effective and provides contraception for 3-10 years. Although less costly than contraceptive pills over time, the upfront cost for LARC may be prohibitive for teens without contraceptive coverage. 77,78 Even with insurance, out-of-pocket expenses may be too high for many teens. 77 The Affordable Care Act, which requires health plans to cover LARC without out-of-pocket costs, may reduce some of these financial barriers. 74 However, teens may be reluctant to use their parents' insurance due to confidentiality concerns.<sup>77,74</sup>

Many young women are unfamiliar with or are lacking accurate medical information about LARC.79 Based on a national study, only 2% of female teens who are sexually active use LARC. 6 Healthcare providers report barriers to providing contraception in general, 80 with additional barriers to providing LARC. Almost 50% of family planning providers report that they have limited training on inserting an implant.81 Provider perception of the safety of IUDs is also slow to change. In two separate studies of family planning providers in 2012, approximately 30-50% believed IUDs were unsafe for women who have not had a child or for teens. 78,79 Even among those who believed IUDs were safe, the majority reported rarely or never placing an IUD for a woman who did not have a child.

Improving healthcare provider knowledge and skills, increasing patient awareness, and decreasing upfront costs of LARC will likely increase the use of these methods.<sup>82</sup> In a study that provided birth control at no cost—combined with comprehensive

evidence-based contraceptive counseling—around 70% of teens ages 17 and younger chose LARC.<sup>83</sup> This study found a significant reduction in teen pregnancy rates over time.<sup>84</sup>

The coverage of contraception by insurers is cost-effective, with LARC providing the most cost savings. Publically funded family planning programs prevent an estimated 400,000 teen pregnancies per year in the U.S.<sup>77</sup>

**Support for Adolescent Parents**. In addition to efforts to delay pregnancy until after adolescence, healthcare and related services are important for maximizing health and wellbeing of teen parents and their children.

Nurse-Family Partnership is an evidence-based home visitation program that provides nursing intervention services for first-time mothers starting early in pregnancy through the infant's second birthday. The focus includes healthy birth outcomes and support in developing positive health behaviors, parenting and life skills. Studies have found this intervention improves perinatal health, increases intervals between births, reduces child abuse and neglect, and improves school readiness. Nurse-Family Partnership programs operate in 10 Washington counties.

The First Steps program supports Medicaideligible women, including teens, in having healthy pregnancies and positive birth outcomes through health education and clinical interventions. Infant case management services that connect infants and their families to needed community services are available from three months postpartum to the infant's first birthday. For medically high-risk women, including medically high-risk teens, the program is associated with decreased low birth weight.<sup>88</sup>

Eligible teens can also participate in the Supplemental Nutrition Program for Women, Infants, and Children (WIC), which provides nutrition education, referrals to health and social services, and stipends to buy WIC-approved groceries. WIC participation leads to increased use of health and dental care services for the child, lower risk of abuse and neglect reports, and lower risk of nutrition problems such as anemia, failure to thrive and nutritional deficiency. <sup>89,90</sup> No evaluations specific to children of teen mothers have been conducted.

See Related Chapters: <u>Unintended Pregnancy</u>, Singleton Low Birth Weight, Access to Prenatal and

<u>Preconception Care</u>, <u>Infant Mortality</u>, <u>Tobacco Use</u>, <u>Alcohol Abuse and Dependence</u>, <u>Drug Abuse and Dependence</u>, <u>Sexual Health</u>, <u>and Nutrition</u>

Data Sources (For additional detail, see Appendix B.)

Washington State Abortion Data: Washington State Department of Health, Center for Health Statistics, Abortion Reporting System-Report of Induced Termination of Pregnancy, 1990–2011, released November 2012.

Washington State Birth Certificate Data: Department of Health, Center for Health Statistics, Vital Statistics System-Washington State Certificate of Live Birth, 1990–2011, released November 2012

Washington State Fetal Death Certificate Data: Department of Health, Center for Health Statistics, Vital Statistics System, Washington State Fetal Death Certificate, 1990–2011, released November 2012

Washington State population counts: 2000 and 2010 U.S. Census and 2001–2009 intercensal and 2011 post-censal estimates, Washington State Office of Financial Management, Forecasting Division (OFM), released January 25, 2013; 1990 U.S. Census and 1991–1999 OFM intercensal estimates, Vista Partnership and Krupski Consulting, released October 2007; 1980 U.S. Census and 1981–1989 OFM intercensal estimates.

#### For More Information

Washington State Department of Health, Division of Prevention and Community Health, Office of Healthy Communities, Surveillance and Evaluation Section at (360) 236-3515.

## **Technical Notes**

The primary sources of data for adolescent pregnancy are birth certificate data, fetal death certificate data, and abortion data from the Washington State Department of Health Center for Health Statistics. Where possible, we provide characteristics of all teen pregnancies. In several instances, though, we have provided data only on live births due to the unavailability of data on all pregnancies.

State data on sexual activity in youth are from the 2012 Washington Healthy Youth Survey.

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### **Endnotes**

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