

# Adolescent Pregnancy and Childbearing

## Summary

Adolescent pregnancy is influenced by individual, family, and community characteristics. Teen births can negatively affect the health and social and economic well-being of many youth and society as a whole. Despite declining rates of adolescent pregnancy, the United States continues to have higher rates of teen pregnancy than other industrialized nations.<sup>1,2</sup>

In 2005 in Washington State, the adolescent pregnancy rate among 15–17 year-old females was 28 per 1,000. This is the lowest rate since tracking began in 1980 and is well below the *Healthy People 2010* goal of no more than 43 pregnancies per 1,000. No single approach to prevent adolescent pregnancies is appropriate for all adolescents in all circumstances. Comprehensive health education programs that include both education about contraceptives and abstinence are the most effective in preventing adolescent pregnancies.<sup>3</sup>

## Time Trends

**Adolescent pregnancies.** The pregnancy rate among 15–17 year-olds in Washington decreased during the early 1980s to a low of 53 per 1,000 in 1984. Subsequently, it increased to 59 per 1,000 in 1989. Since then, the rate declined steadily to 28 per 1,000 in 2005, which is the lowest rate since tracking began in 1980. The national teen pregnancy rate has been decreasing since the early 1990s, but in every year from 1980 to 2005, the pregnancy rate among 15–17 year-olds in Washington was lower than the national average.<sup>4</sup>

**Adolescent births.** Washington's birth rate for 15–17 year-olds began rising steadily in 1987 and peaked in 1992 at 33 per 1,000. After 1992, the rate decreased. In 2005, the birth rate for

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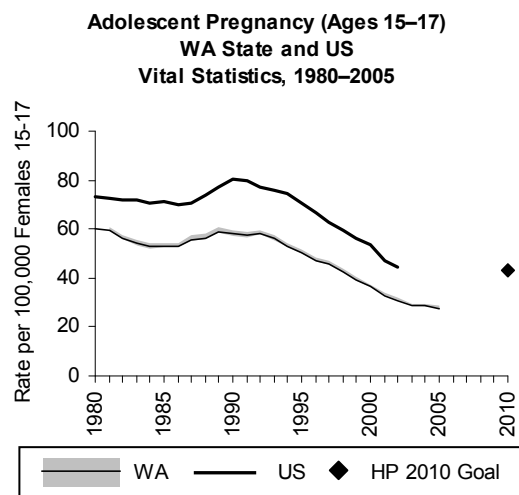
**Definition:** In this section, “adolescents” or “teens” are 15–17 year-olds unless otherwise indicated. Analysis was restricted to 15–17 year-olds because they are school age. Pregnancy among teens younger than 15 is a rare event, and teens older than 17 are at lower risk for poor birth outcomes. Adolescent pregnancies are estimated by adding together 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 their number.

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15–17 year-olds was 15 per 1,000, the lowest rate since tracking began in 1980.

**Adolescent abortion.** Washington's abortion rate for 15–17 year-olds decreased from 35 per 1,000 in 1980 to about 30 per 1,000 by the mid-1980s. Beginning in 1989, the rate decreased steadily from 30 per 1,000 in 1989 to 13 per 1,000 in 2005.

National studies suggest that adolescent pregnancy rates are falling because fewer teenagers are having sex, and those who do engage in sexual activity are more effective users of contraception.<sup>4,5,6</sup>



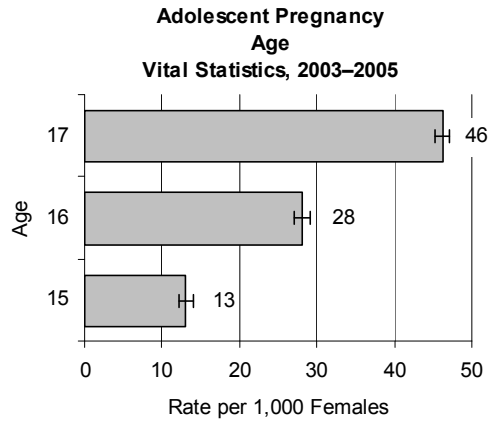
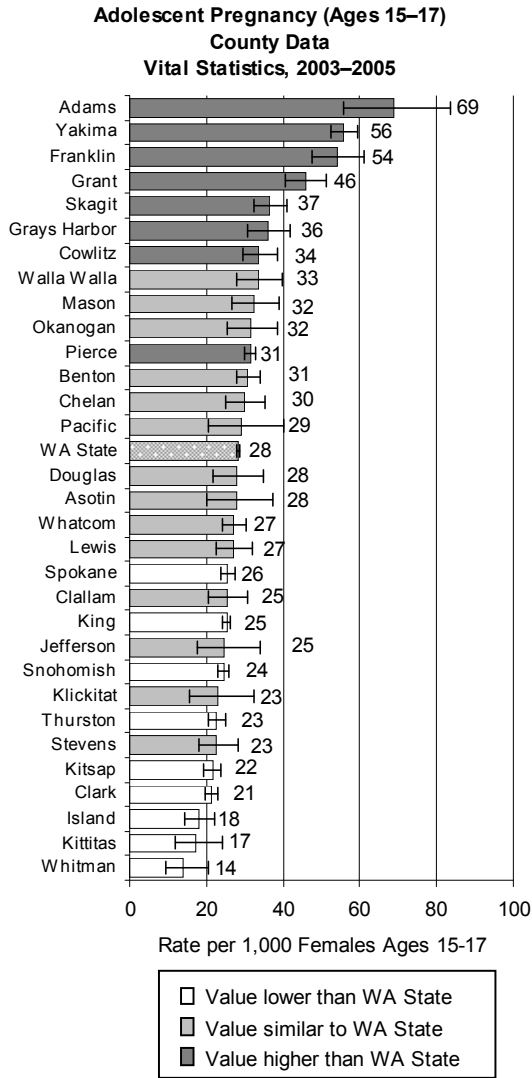
## Year 2010 Goals

The *Healthy People 2010* goal for adolescent pregnancies is a rate of no more than 43 per 1,000 females ages 15–17. Washington achieved this target in 1998.

## Geographic Variation

During 2003–2005, teen pregnancy rates were significantly higher in Adams, Yakima, Franklin, Grant, Skagit, Grays Harbor, Cowlitz, and Pierce counties than in the state. County variations may be

influenced by demographic differences such as race and poverty, and small numbers. The following chart does not include eight counties in which there were fewer than 20 teen pregnancies during 2003–2005.

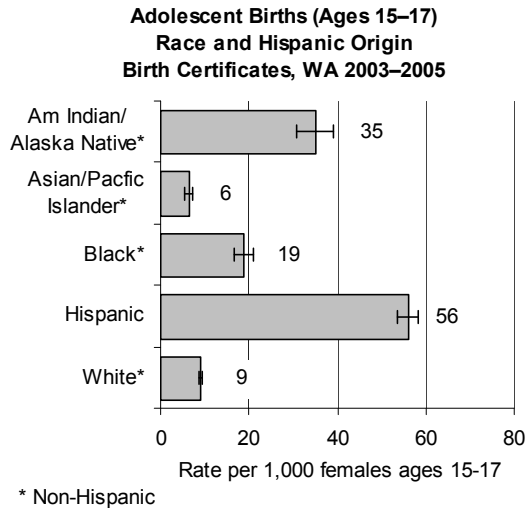


### Race and Hispanic Origin

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 2003–2005 combined, live births to women 15–17 years old were significantly higher among Hispanics, American Indians and Alaska Natives, and blacks than among whites and Asians and Pacific Islanders. This pattern is also seen nationally. Washington teen birth rates for blacks, whites, and Asians and Pacific Islanders 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.<sup>6</sup> Birth rates for teens of all races and Hispanic origin have declined significantly since 1992, although the decline for Washington teens of Hispanic origin and American Indian and Alaska Native teens has been slower than for other groups. Differences in poverty rates, access to health care, and low maternal education may account for some of these racial and ethnic differences. Pregnancy rates may also be influenced by cultural values about sexuality, relationships, birth control, and abortion.

### Age

During 2003–2005, teen pregnancy rates for 15–17 year-olds increased with maternal age. The pregnancy rate was 46 per 1,000 among 17 year-olds, 28 per 1,000 among 16 year-olds, and 13 per 1,000 among 15 year-olds. Age-specific pregnancy rates have declined for all three ages since the early 1990s.



## Income and Education

Income and completed education are effective indicators of socioeconomic status in the adult population. Both measures are strongly related to age, however, and most teens have not yet had the opportunity to complete their education. For that reason, data on income and education are not presented here.

## Other Measures of Impact and Burden

**Educational and economic effects of teen parenting.** Research suggests that early parenthood is a challenge for teens who are trying to complete their high school education. Nationally, teen mothers are significantly less likely to complete high school than women who delay childbearing.<sup>7,8</sup> Overall, teen mothers complete two fewer years of education than non-teen mothers. Even before pregnancy, teenage women who became mothers were more likely to have low educational achievement, poor school performance, and parents with low educational attainment.<sup>7</sup> In this context pregnancy becomes yet another challenge for high school completion.

Teen childbearing can trigger adverse economic consequences for the mother and child. Teen mothers are at high risk for repeat pregnancies and spend more of their adult years as single parents than women who delay childbearing. This pattern results in greater stress upon young mothers to support their families on limited incomes.<sup>9,10</sup> Three-fourths of children born to

teen mothers who did not complete high school live in poverty.<sup>11,12</sup>

**Fathers of children born to adolescent mothers.** Men of any age who father teen pregnancies tend to have lower educational achievement and are more likely to use illegal substances or spend time in jail or prison than other men.<sup>13</sup> A father of a teen pregnancy generally has less ability to care for his child and less interaction with his child. Teen mothers often have partners who are not teens. The 2002 National Survey of Family Growth found that about 13% of sexually active 15-year-old females had first-time partners who were four to five years older, and 11% had partners who were six or more years older.<sup>14</sup> These data raise important legal, economic, and teen health and safety issues.

**Cost of teen births.** Nationally, teen pregnancy costs taxpayers about \$9.1 billion a year. In 2004, teen pregnancy cost Washington taxpayers an estimated \$115 million.<sup>15</sup> Medicaid financed more than 90% of Washington births to mothers younger than 18 years old in 2004.<sup>16</sup> In 2005, the mean cost for prenatal care and delivery for teens ages 15-17 was \$7,848 per woman for all Medicaid-covered deliveries.<sup>17</sup>

**Outcomes for teen births.** Teen childbearing can result in adverse health for both mothers and children. Poor maternal weight gain, pregnancy-induced hypertension, anemia, and sexually transmitted diseases occur more frequently with adolescent pregnancy.<sup>9</sup> Children of teen mothers are more likely to be born preterm, to be low birthweight, and to die during their first year of life than children born to non-teen mothers.<sup>9,18</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>18,19</sup> Among 15–17 year-olds who delivered in Washington during 2003–2005, 41% did not receive prenatal care during their first trimester. Similar to national data, Washington's reported rates of smoking during pregnancy are highest for teens. During 2003–2005, 16% of 15–17 year-olds who became pregnant reported smoking during pregnancy. Smoking during pregnancy is associated with intrauterine growth restriction, low birthweight, and infant mortality.

Children of teen parents also have long-term adverse outcomes. They are more likely than children born to older mothers, to have academic difficulties, to engage in substance abuse, to initiate sexual activity early, and to become teen parents themselves.<sup>9</sup> Children of teen mothers also are more

likely than other children to be victims of abuse and neglect and to have cognitive and behavioral impairments.<sup>14,20</sup> Sons of teen parents are 13% more likely to be imprisoned, and daughters of teen mothers are 22% more likely to become teen mothers themselves.<sup>21</sup> Other factors associated with teen parenthood, such as poverty, may play a role in these associations.

## Risk and Protective Factors

National research studies among 15–19 year-olds are used here to identify common risk factors and protective mechanisms that affect adolescent pregnancy rates. These can be viewed from the individual, family, and community level. Individual, family, and community risk and protective factors are often interrelated. Most studies discussed below address some of these interrelated factors.

**Individual factors.** The likelihood of an adolescent becoming pregnant increases with early sexual activity and other risk factors, including early alcohol and drug use, fewer grades completed for age, and physical or sexual abuse.<sup>9,14,22,23</sup> Low expectations for the future, poor self esteem, depression, and the perception that teenage sexual activity and pregnancy are acceptable also place adolescents at risk for pregnancy.<sup>9,14</sup> Individual protective factors include having high quality family interactions, parental support, connectedness to school and family, commitment to do well in school, and religious beliefs.<sup>24</sup>

There are no statewide Washington data on youth sexual activity. (See Technical Notes.) Nationally in 2005, about 47% of high school students had ever had sexual intercourse (36% of females, 48% of males), and about 6% (4% of females and 9% of males) had sexual intercourse before age 13.<sup>25</sup> Contraceptive use is increasing among adolescents, but nonuse and ineffective use remain high especially among the youngest teens.<sup>26,27</sup>

About 30% of adolescents who give birth have another pregnancy within two years.<sup>13</sup> Repeat teen pregnancies are at higher risk for poor birth outcomes compared to repeat pregnancies in women in their 20s.<sup>9,28</sup> During 2003–2005, 8% of teens who gave birth had a prior live birth, and an additional 7% had a prior pregnancy that did not result in a live birth. Adolescent parents often do not change their contraceptive

behavior, nor do they use contraceptives consistently after the birth of their first child.<sup>29,30</sup> Not returning to school, a positive attitude about adolescent pregnancy, ambivalence about postponing further childbearing beyond adolescence, and a prior poor birth outcome are associated with repeat adolescent pregnancies.<sup>14,30,31,32,33</sup>

**Family factors.** An adolescent's family plays an important role in her risk for adolescent pregnancy. Living with a single parent, frequent family conflict, illness or addiction of a parent, and lack of parental supervision are significant risk factors for adolescent pregnancy.<sup>34,35</sup> Teen childbearing has also been associated with low socioeconomic status, low levels of education in the family, and with adolescent pregnancy of a parent or sibling.<sup>20,24,35</sup>

Open and positive communication and strong family attachments, such as older sibling relationships, are vital protective factors for adolescents.<sup>20,35</sup> Providing youth with clear rules and boundaries, strong parental values, and parental disapproval of teen sex are also important protective mechanisms.<sup>20,36</sup>

**Community factors.** Teens living in communities with low educational levels and with high poverty, crime, unemployment, and high proportion of single parent homes are at risk for adolescent pregnancy.<sup>35</sup>

A feeling of connection to adults in the community, strong school connections, availability of schools providing support and respect to youth, constructive after-school activities, and organizations such as clubs and youth centers are protective factors and appear to prevent adolescent pregnancy.<sup>21,22,24,37,38</sup> Most studies of community factors do not fully account for individual and family factors, however.

## Intervention Strategies

Adolescent pregnancy is influenced by a multitude of factors. Many of these factors also contribute to other adolescent risk behaviors such as substance use and violence. No single approach can be expected to reduce all teen pregnancy. Effective approaches focus on several identified antecedents to adolescent pregnancy. The following approaches have the strongest basis in science.

**Comprehensive health education.** Research shows comprehensive health education programs that include education on both contraception and abstinence are the most effective in preventing adolescent pregnancies. An evaluation of 250 such programs by the National Campaign to Prevent Teen Pregnancy found that such programs changed adolescent sexual behaviors without increasing

sexual activity.<sup>33</sup> A 2006 study found that for 15–17 year-olds, 23% of the decrease in teen pregnancy from 1995–2002 was attributable to fewer teens having sex, and 77% was attributable to improved contraceptive use.<sup>3</sup> The literature to date shows little evidence that abstinence-only education is effective in reducing adolescent pregnancy.<sup>39,40</sup> Despite the effectiveness of comprehensive sex education, much work remains to be done. Based on data from the 2002 National Survey of Family Growth, about 65% of recent births to mothers younger than 18 years were classified as unintended by one or both parents. A lack of individual commitment to specific pregnancy prevention methods (such as abstinence or effective contraceptive methods), ambivalence about childbearing, and confusion about prevention contribute to unintended pregnancy among adolescents.<sup>21,29,31</sup>

**Youth development programs.** Youth development programs can help adolescents increase their motivation to avoid pregnancy, childbearing, and other high-risk behaviors. These programs assume that adolescents must develop basic competencies and skills to become successful adults. These basic skills and competencies include developing a sense of belonging, self-awareness, self-worth, and a sense of mastery, as well as creating opportunities to develop leadership and other skills and to build social and academic competencies and positive relationships within the community.<sup>11,40</sup> Service learning programs (volunteering within an organized and supportive environment) and intensive long-term youth programs that provide multiple services (including health education, academic support, work experience, and organized recreational activities) have been successful in reducing adolescent pregnancy rates during the time youth participated in the programs.<sup>34</sup>

**Support for adolescent mothers.** While prevention of teen pregnancy is a primary goal to improve the health and well-being of teen mothers and children, a secondary goal is to provide the support and assistance services necessary for positive outcomes in the children of teen parents.

Nurse-Family Partnership is an evidence-based nurse 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 that this kind of intervention improves prenatal health, increases intervals between births, reduces child abuse and neglect, and improves school readiness.<sup>13, 41, 42, 43</sup> Nurse-Family Partnership programs operate in nine Washington counties.

First Steps services support Medicaid-eligible 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. First Steps is associated with improved access to prenatal care. For medically high-risk women, including medically high-risk teens, the program is associated with decreased low birth weight.<sup>44</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 checks to buy WIC-approved groceries. WIC participation is associated with increased use of health and dental care services for the child, lower risk of abuse and neglect reports, and lower risk of diagnosis of several nutrition problems such as anemia, failure to thrive, and nutritional deficiency.<sup>45,46</sup> No specific evaluations for children of teen mothers have been conducted.

**See Related Chapters:** [Unintended Pregnancy](#), [Singleton Low Birth Weight](#), [Access to Prenatal and Preconception Care](#), [Infant Mortality](#), [Tobacco Use](#), [Alcohol Abuse and Dependence](#), [Drug Abuse and Dependence](#), [Sexual Behavior](#), and [Nutrition](#)

**Data Sources** (For additional detail, see [Appendix B](#).)

Washington State Abortion Data: Washington State Department of Health, Vital Registration System Annual Statistical Files, Births 1980–2005, released December 2006.

Washington State Birth Certificate Data: Washington State Department of Health, Vital Registration System Annual Statistical Files, Births 1980–2005, released December 2006.

Washington State Fetal Death Certificate Data: Washington State Department of Health, Vital Registration System Annual Statistical Files, Fetal Deaths 1980–2005, released December 2006.

Population data for race and ethnicity: provided by the Center for Health Statistics, Washington State Department of Health.

## For More Information

Washington State Department of Health, Division of Community and Family Health, Office of Maternal and Child Health, Child and Adolescent Health 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: Washington does not currently collect sexual activity data on the Healthy Youth Survey. To collect information on student beliefs or practices regarding sex or religion, the Washington Administrative Code (WAC 392-500-030) requires written parental consent. Currently, parents are notified about the survey and are given the opportunity to refuse their child's participation. The resources required to obtain written parental consent for the approximately 50,000 students sampled for the survey are significant and would entail staff time to notify parents about the consent process, as well as to collect the consent forms and to follow-up with students who do not return forms. Even with the large level of effort to gather written consent, we estimate that inclusion of sex-related questions would result in substantially decreased student participation and response rates, such that the data obtained would not be generalizable to the overall Washington student population.

## Endnotes

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