

# Unintended Pregnancy

---

**Definition:** Pregnancies that are identified by the mother as either unwanted or mistimed (occurring earlier than wanted) at the time of conception are considered unintended pregnancies. For this report, a subset of these pregnancies are identified retrospectively using the Pregnancy Risk Assessment Monitoring System (PRAMS) survey, which is administered to mothers 2–6 months after giving birth.

---

## Summary

**Unintentional pregnancies are those that were not planned at the time of conception. This is an ambiguous concept that is difficult to measure. Findings may be influenced by who is asked and when, as well as by the outcome of the pregnancy. An estimated 51% of all pregnancies and 38% of all live births in Washington State in 2005 were unintended at the time of conception. Rates of unintended pregnancy have remained relatively unchanged since 1994. While young women, poor women, and some women of color have the highest rates, unintended pregnancies occur in all segments of society.**

**When pregnancies are begun without planning or intent, there are fewer opportunities to prepare for an optimal outcome. Unintended pregnancies are associated with adverse maternal behaviors such as delayed entry into prenatal care, poor maternal nutrition, and cigarette smoking. Maternal and familial stress and domestic violence are also associated with unintended pregnancy. About half of unintended pregnancies end in abortion. Access to quality family planning information and services is an important factor in planning for healthy pregnancies and preventing unintended pregnancies. Preconception care throughout a woman's reproductive life could contribute to healthier pregnancies that are adequately spaced with mothers in optimal health prior to pregnancy.**

## Background

Unintended pregnancy is an ambiguous concept that is imperfectly measured. It refers to pregnancies that were not planned at the time of conception and includes pregnancies identified

as either unwanted or mistimed (occurring earlier than wanted) at the time of conception. Pregnancy intention can vary depending on when the information is requested. For example, a woman may respond differently depending on whether she has just learned of the pregnancy or just delivered a live born infant. The concept of intending or planning pregnancies may also be influenced by socioeconomic and cultural values about sexuality, relationships, and access to and use of birth control.<sup>1</sup> It is important to note that an unintended pregnancy may not reflect the desirability of that pregnancy.<sup>2</sup> Measuring unintended pregnancy is further complicated by who is asked and whether all pregnancies (including live births, miscarriages, abortions, and other pregnancy outcomes such as ectopic pregnancies) are included.

Two unintended pregnancy measures are reported in this chapter: the percent of births from unintended pregnancies, and the unintended pregnancy rate. The percent of births from unintended pregnancies refers to live births from pregnancies reported as unintended by mothers responding two to six months after delivery to the [Pregnancy Risk Assessment Monitoring System](#) (PRAMS) survey. Women who avoid pregnancy are excluded from this measure, as are women whose pregnancies ended in miscarriages, abortions, or other pregnancy outcomes.

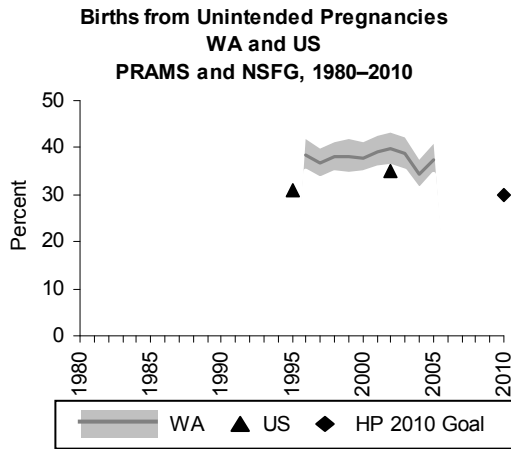
The unintended pregnancy rate refers to estimates derived from a formula combining PRAMS data about births from unintended pregnancies (noted above) and reported abortions. (See Technical Notes.) These estimates allow us to analyze overall rate, trends, and age distribution. But the variability of unintended pregnancies by race, Hispanic origin, geography, income, or other factors cannot be assessed because such data are either unavailable or largely incomplete for abortions.

National data on pregnancy intention come from the National Survey of Family Growth (NSFG). This survey asks a random sample of all women ages 15-

44 about pregnancies within the previous five years, whether they were intended, and the outcome of the pregnancy (live birth, miscarriage, or abortion). Data presented in this report are for pregnancies resulting in live births or miscarriages.<sup>3</sup>

### Time Trends

The unintended pregnancy rate in Washington has remained stable since monitoring began in 1994. In that year, an estimated 55% ( $\pm 4\%$ ) of all pregnancies were unintended, and 39% ( $\pm 4\%$ ) of all births were from unintended pregnancies. In 2005, an estimated 51% ( $\pm 4\%$ ) of all pregnancies were unintended, and 38% ( $\pm 4\%$ ) of all births were from unintended pregnancies. National trend data on the percent of unintended pregnancies are not available. But data from the 2002 NSFG show that 35% of women ages 15–44 reported having a birth or miscarriage from an unintended pregnancy in the five years prior to the survey. In the 1995 NSFG, 31% of women reported a birth from an unintended pregnancy.<sup>3</sup>



### Year 2010 Goals

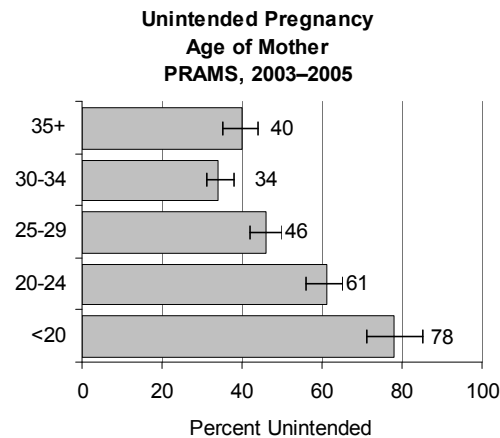
The national *Healthy People 2010* goal is to increase the proportion of pregnancies that are intended to at least 70% (30% unintended). Washington is not on track to meet this goal.

### Geographic Variation

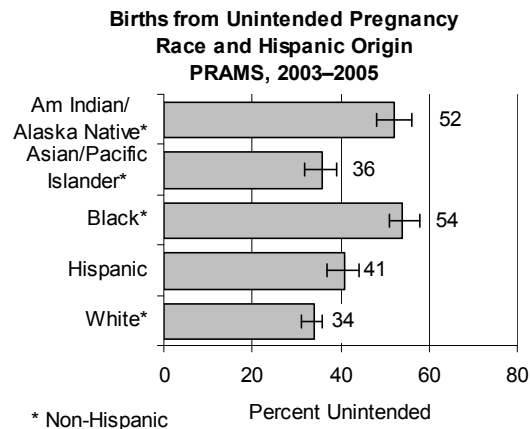
Because of the [small number](#) of PRAMS respondents for most counties, county comparisons are not available.

### Age

Data from PRAMS and abortion records show unintended pregnancies occur among women of all age groups. From 2003–2005, Washington women younger than 20 had the highest unintended pregnancy rate, 78% ( $\pm 7\%$ ). The unintended pregnancy rate decreased with increasing age until ages 30–34. While teens have a higher rate of unintended pregnancy, over seventy percent of the number of unintended pregnancies are to women ages 20–34 years. This is because more women in this age range become pregnant.



### Race and Hispanic Origin



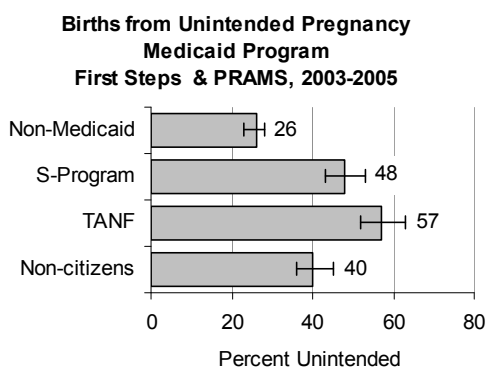
Rates of births from unintended pregnancies varied by race and Hispanic origin in Washington in 2003–2005. Black women and American Indian and Alaska Native women reported the highest rates of births from unintended pregnancies (54%  $\pm 4\%$  and 52%  $\pm 4\%$ , respectively). These rates were higher than rates reported by women of Hispanic origin (41%  $\pm 4\%$ ), Asian and Pacific Islander women (36%  $\pm 4\%$ ), and white women (34%  $\pm 3\%$ ).

## Income

Higher birth rates from unintended pregnancies have been reported among women with lower income.<sup>4</sup> Receipt of Medicaid-paid health services is one measure of low income. In Washington from 2003–2005, mothers receiving Medicaid-paid prenatal or delivery services had significantly higher rates of births from unintended pregnancy (50% ±3%) than mothers not receiving Medicaid (26% ±3%).

But trend data show that the proportion of births from unintended pregnancies declined from 57% (±5%) in 2002 to 48% (±5%) in 2005 among mothers receiving Medicaid. No decrease was observed among mothers not receiving Medicaid.

When women receiving Medicaid-paid services were grouped by Medicaid program, the association with income was not as clear. Non-citizen mothers generally had the lowest incomes of all women receiving Medicaid, but they had a lower rate of births from unintended pregnancies than mothers receiving Medicaid and cash assistance (Temporary Assistance to Needy Families or TANF program) and mothers who received Medicaid but no cash assistance (S-Program). Non-citizen mothers in Washington are predominantly Hispanics from Mexico, and their proportion of births from unintended pregnancies may reflect cultural factors other than income.



## Other Measures of Impact and Burden

**Abortion.** Nationally, about half of all unintended pregnancies end in abortion.<sup>5</sup> Thus abortion is one of the primary consequences of unintended pregnancy, and reducing unintended pregnancy should decrease the incidence of abortion. Since peaking in 1989–1990, the

abortion rate has declined both nationally and in Washington by nearly a third. Reasons for this decline are not entirely clear because a number of changes occurred during the same period. Contributing factors might include changes in access to contraception, in the number of effective contraceptive methods, in contraceptive practices including abstinence, and in access to abortion services.<sup>6</sup>

In 2005, there were 24,162 abortions reported for women living in Washington. Most of these abortions (88%) were obtained by 12 weeks' gestation when there is less risk of complications. According to the federal Institute of Medicine, long-term medical or psychological consequences from abortion are few.<sup>7</sup> But abortion poses difficult questions for women and continues to be a controversial procedure.

The following measures of impact and burden apply only to births from unintended pregnancy. We have no way to assess smoking, multivitamin use, stress, or abuse among women with unintended pregnancies that ended in abortion.

**Effects of unintended pregnancy.** Unintended pregnancy limits the opportunity for the mother or couple to participate in preconception risk assessment and intervention that could mitigate many serious medical conditions. Strict metabolic control of maternal diabetes and phenylketonuria reduces the risk of congenital malformation of the fetus.<sup>8,9</sup> Neural tube defects can be reduced through dietary folic acid supplementation before and during the early months of pregnancy.<sup>10</sup>

Unintended pregnancy is associated with delayed entry into prenatal care. From 2003–2005, 29% (±3%) of Washington mothers reporting unintended pregnancies began prenatal care after the first trimester compared to 15% (±2%) of mothers reporting intended pregnancies. Mothers with unintended pregnancies compared to mothers with intended pregnancies were also more likely to have smoked in the three months prior to pregnancy (30% vs. 14%) and were less likely to have taken a multivitamin before pregnancy (29% vs. 56%).

**Maternal and family Stress.** PRAMS data show that mothers with unintended pregnancies in Washington were statistically significantly more likely to report stressors in the year prior to delivery. From 2003–2005, mothers with unintended pregnancies compared to mothers with intended pregnancies were significantly more likely to have separated or divorced (16% vs. 5%), moved (47% vs. 36%), lost jobs (15% vs. 6%), been homeless (8% vs. 4%), argued with partners more than usual (33% vs. 16%),

had bills they couldn't pay (32% vs. 16%), gone to jail or had a partner who went to jail (7% vs. 2%), or had someone close to them with a bad drinking or drug problem (19% vs. 10%). In addition, these mothers were more likely to report their husbands or partners didn't want them to be pregnant (17% vs. 4%).

**Abuse.** Washington mothers who had been physically abused by their husbands or partners more frequently reported that their pregnancy was unintended (60%  $\pm$ 12%) than mothers who were not abused (36%  $\pm$ 2%).

**Economic costs.** The average cost for Medicaid-financed prenatal care and delivery in Washington was \$7,796 in 2005. Using this figure, the estimated federal and state government cost for Washington births from unintended pregnancies paid by Medicaid in 2005 was \$145 million.<sup>11</sup> This estimate does not include costs associated with unintended pregnancy that occur after delivery, such as children's health coverage and economic support.

## Risk and Protective Factors

A 1995 Institute of Medicine report cites several reasons for high rates of unintended pregnancy in the United States compared with other countries.<sup>7</sup> These include gaps in reproductive knowledge and information; lack of high-quality instruction on sexuality and contraception; the wide range of personal feelings and cultural values; and attitudes regarding sexuality. Other factors include the expense of and complicated access to birth control; administrative barriers that cause delays in service; the sexual saturation of the media; and public policies and institutional practices such as insurance coverage for births or abortions but not contraception.<sup>7</sup>

**Contraceptive use.** National data indicate about 14% of sexually active women at risk for unintended pregnancy are not using contraception but are not seeking to become pregnant.<sup>12</sup> About half of unintended pregnancies occur among these women; the other half occurs among women using reversible contraception (i.e., any contraception except tubal ligation or vasectomy).<sup>13</sup> According to national estimates, during 2003–2005, 46% ( $\pm$ 4%) of Washington mothers reporting unintended pregnancies were not using contraception when they got pregnant. Many of these mothers reported they didn't mind if they

got pregnant (33%  $\pm$ 5%) or they didn't think they could get pregnant at that time (31%  $\pm$ 5%).

Correct and consistent use of effective contraceptives can provide women control over when they become pregnant. A woman who is sexually active throughout her reproductive years and wants two children will need contraceptive protection for about 30 years.<sup>14</sup> According to [Behavioral Risk Factor Surveillance System](#) (BRFSS) data, in Washington in 2003, 90% ( $\pm$ 2%) of adults ages 18–49 who were sexually active in the past year and were not pregnant or trying to get pregnant reported using birth control at last intercourse. Pregnancies can occur among contraceptive users because some methods are of limited effectiveness even when used correctly. Other methods can fail because it is difficult to comply with directions for their use. A series of new contraceptive methods have been developed and marketed over the past decade. While these newer methods might not have improved safety or efficacy for perfect use over existing methods, they may be easier to use consistently and correctly due to different delivery systems, compliance regimens, and side-effect profiles, thereby improving typical use efficacy.<sup>15</sup>

**Contraceptive access.** Washington BRFSS data for 2003 show that 73% ( $\pm$ 7%) of women ages 18–25, 54% ( $\pm$ 6%) of women 26–32, and 32% ( $\pm$ 6%) of women 33–39 reported visiting a health care provider for birth control services in the past year. Health insurance plans in Washington providing comprehensive coverage of prescription medications or devices must cover prescription contraceptives.<sup>16</sup> In addition, a variety of family planning services for low-income women are available across the state. However, a Guttmacher Institute report estimated that fewer than half of Washington women in need of such publicly funded services were served in 2004.<sup>17</sup> Non-profit family planning clinics that serve low-income individuals are struggling because federal and state funds have not covered the cost of providing services to women needing contraception.

## Intervention Strategies

The 1995 Institute of Medicine report recommends a new social norm where all pregnancies are consciously and clearly desired at conception.<sup>7</sup> Achieving this goal requires long-term efforts to educate the public on the benefits of family planning and of spacing pregnancies.<sup>18</sup>

**Improving access to family planning.** The Institute of Medicine report and *Healthy People 2010* both call for more reproductive health education and

better access to clinical reproductive health services. Family planning services supported through federal Title X family planning funding, Medicaid, and state funding provide women control over their reproduction, which prevents unintended pregnancies.<sup>19</sup> Medicaid family planning expansions have also been shown to lower birth rates.<sup>20</sup> The Washington State departments of Health and Social and Health Services work together to provide subsidized family planning throughout the state.

**Improving access to emergency contraception.** The American Medical Association, the American College of Obstetricians and Gynecologists (ACOG), and the American Academy of Pediatrics, among other national organizations, support increased access and use of emergency contraception (EC) as a way to prevent unintended pregnancies.<sup>21,22,23</sup>

Nationally, the U.S. Food and Drug Administration (FDA) in August 2006 approved EC for over-the-counter availability for those 18 years and older. Since 1999, EC has been available directly from Washington pharmacists who enter into a collaborative agreement with a medical provider such as a physician. Availability did not change dramatically with FDA approval. Despite over-the-counter status, EC is still kept behind the pharmacy counter. Proof of age is required to obtain EC because the FDA rule states women younger than 18 years can obtain EC only with a prescription.

Washington State also requires that EC be offered and provided (if requested) to victims of sexual assault at all hospital emergency rooms.

**Male involvement.** Programs targeting men's role in decisions about contraceptive use show promise, but further evaluation is needed on their effectiveness in preventing unintended pregnancy. These programs, referred to as male involvement projects, are typically led by men and include education on male responsibility in contraception, sexually transmitted disease prevention, and abstinence.<sup>24</sup>

**Youth development.** While some youth development programs appear to show promise in reducing adolescent pregnancy rates, further evaluation is needed to determine the impact on unintended pregnancy among this age group.<sup>25</sup>

**Improving general health care for women.** The U.S. Centers for Disease Control and Prevention (CDC) and experts elsewhere have recently recommended a change in the provision of health care for women that better integrates health care across a woman's lifespan, including preconception and interconception health care.<sup>26</sup> While there are no data to substantiate that providing comprehensive health care to women will prevent unintended pregnancy or improve spacing between pregnancies, recent recommendations include better integration of family planning services for women. The CDC, ACOG, and other national organizations have developed preconception health care guidelines and recommendations.<sup>27,28</sup>

Strategies to increase preventive health care to every woman at every visit are needed. These strategies should address provider time constraints, insurance coverage, and professional guidelines for content of care. In addition, women should be encouraged to create a reproductive life plan and discuss it with their providers at every visit.

**See Related Chapters:** [Adolescent Pregnancy and Childbearing](#), [Access to Prenatal and Preconception Care](#), and [Sexual Behavior](#).

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

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

Pregnancy Risk Assessment Monitoring System (PRAMS), Washington State Department of Health, Office of Maternal and Child Health Assessment, 1996–2005.

Washington State Abortion Data: Washington State Department of Health, Vital Registration System Annual Statistical Files, Abortions 1980–2004, released December 2006.

Washington State Behavioral Risk Factor Surveillance System (BRFSS) data: 1987–2005. 2003–2005 data weighted to reflect county over-sample, November 2006.

Washington State Department of Social and Health Services, Research and Data Analysis Division, First Steps Database, 2003–2005.

#### **For More Information**

Washington State Department of Health Office of Maternal and Child Health, (360) 236-3502; Maternal and Child Health Assessment, (360) 236-3533; Office of Infectious Disease and Reproductive Health, (360) 236-3444; Family Planning and Reproductive Health, (360) 236-3471

#### **Technical Notes**

Percentages of births from pregnancies that were unintended at the time of conception are derived from PRAMS data. To

estimate the total number of pregnancies that were unintended, the percent of live births identified by PRAMS respondents as unintended are combined with the number of abortions from vital statistics for that year. This definition excludes ectopic and molar pregnancies as well as miscarriages and fetal deaths. This estimate also assumes that all reported abortions are due to unintended pregnancies, though a small percentage might be medically indicated.

## Endnotes

<sup>1</sup> Santelli, J., Rochat, R., Hatfield-Timajchy, K., Colley Gilbert, B., Curtis, K., Cabral, R. et al. (2003). The measurement and meaning of unintended pregnancy. *Perspectives on Sexual and Reproductive Health*, 35, 94-101.

<sup>2</sup> Kendall, C., Afable-Munsuz, A., Speizer, I., Avery, A., Schmidt, N., & Santelli, J. (2005). Understanding pregnancy in a population of inner-city women in New Orleans—results of qualitative research. *Social Science and Medicine*, 60, 297-311.

<sup>3</sup> Chandra, A., Martinez, G. M., Mosher, W. D., Abma, J. C., & Jones, J. (2005). Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. *Vital Health Statistics*, 23(25). Hyattsville, MD: National Center for Health Statistics.

<sup>4</sup> Finer, L. B., & Henshaw, S. K. (2006). Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. *Perspectives on Sexual and Reproductive Health*, 38, 90-96.

<sup>5</sup> Henshaw, S. K. (1998). Unintended pregnancy in the United States. *Family Planning Perspectives*, 30, 24-29, 46.

<sup>6</sup> Straus, L. T., Gamble, S. B., Parker, W. Y., Cook, D. A., Zane, S. B., & Hamdan, S. (2006). Abortion surveillance—United States, 2003. *Morbidity and Mortality Weekly Report*, 55(SS11), 1-32.

<sup>7</sup> Institute of Medicine. (1995). *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*. Washington, DC: National Academy Press.

<sup>8</sup> Maternal Phenylketonuria. (2000, January). ACOG Committee Opinion, Number 230. Washington, DC.

<sup>9</sup> Pregestational Diabetes Mellitus. (2005, March). ACOG Practice Bulletin, Number 60. Washington, DC.

<sup>10</sup> Neural Tube Defects. (2003, July). ACOG Practice Bulletin Number 44. Washington, DC.

<sup>11</sup> Cawthon, L. (2006, October 26). *Medicaid paid maternal and infant services for Washington births to Medicaid mothers, 1993-2004*. First Steps Database. Olympia, WA: Department of Social and Health Services, Research and Data Analysis.

<sup>12</sup> Gaydos, L. M. D., Hogue, C. J. R., & Kramer, M. R. (2006). Riskier than we thought: Revised estimates of noncontracepting women risking unintended pregnancy. *Public Health Reports*, 121, 155-159.

<sup>13</sup> Trussell, J., & Vaughan, B. (1999). Contraceptive failure, method-related discontinuation and resumption of use: Results from the 1995 National Survey of Family Growth. *Family Planning Perspectives*, 31, 64-72, 93.

<sup>14</sup> Alan Guttmacher Institute. (2000). *Fulfilling the Promise: Public Funding and U.S. Family Planning Clinics*. New York: Alan Guttmacher Institute.

<sup>15</sup> Herndon, E. J., & Ziemann, M. (2004). New Contraceptive Options. *American Family Physician*, 69, 853-860.

<sup>16</sup> Washington Administrative Code 284-43-822. Unfair practice relating to health coverage. Effective 10/6/01.

<sup>17</sup> Calculated based on women in need of contraceptive services and supplies, 2004, Alan Guttmacher Institute, 2006. Accessed 3/2/2007 at <http://www.guttmacher.org/pubs/win/win2004.pdf> and Department of Health and Human Services, Region X, Title X Database. Ahlers and Associates, 2004 data.

<sup>18</sup> Green-Raleigh, K., Lawrence, J. M., Chen, H., Devine, O., & Prue, C. (2005). Pregnancy planning status and health behaviors among nonpregnant women in a California managed health care organization. *Perspectives on Sexual and Reproductive Health*, 37, 179-183.

<sup>19</sup> Alan Guttmacher Institute. (1999). *U.S. Policy Can Reduce Cost Barriers to Contraception*. Issue Brief 7/1999. Accessed at [http://www.guttmacher.org/pubs/ib\\_0799.html](http://www.guttmacher.org/pubs/ib_0799.html).

<sup>20</sup> Lindrooth, R. C., & McCullough, J. S. (2007). The effect of Medicaid family planning expansions on unplanned births. *Women's Health Issues*, 17, 66-74.

<sup>21</sup> ACOG News Release, May 4, 2004. Accessed on March 2, 2007 at [http://www.acog.org/from\\_home/publications/press\\_releases/nr05-04-04-3.cfm](http://www.acog.org/from_home/publications/press_releases/nr05-04-04-3.cfm).

<sup>22</sup> American Medical Association, Council on Medical Services. Access to Emergency Contraception, CMS Report 1, I-00, December 2000 Interim Meeting.

<sup>23</sup> American Academy of Pediatrics. (2005). Policy Statement on Emergency Contraception, *Pediatrics*, 116, 1038-1047.

<sup>24</sup> Center for Health Training. (2000). *Blueprint for male involvement*. Seattle, WA. Available at [http://www.centerforhealthtraining.org/materials.html#m\\_blueprint](http://www.centerforhealthtraining.org/materials.html#m_blueprint).

<sup>25</sup> Kirby, D. (2002). Effective Approaches to Reducing Adolescent Unprotected Sex, Pregnancy, and Childbearing. *Journal of Sex Research*, 39, 51-57.

<sup>26</sup> Atrash, H. K., Johnson, K., Adams, M., Cordero, J. F., & Howse, J. (2006, September). Preconception care for improving perinatal outcomes: The time to act. *Maternal and Child Health Journal*, 10(5 Suppl.), 3-11.

<sup>27</sup> The Importance of Preconception Care in the Continuum of Women's Health Care. (2005, September). ACOG Committee Opinion Number 313. Washington, DC.

<sup>28</sup> U.S. Centers for Disease Control and Prevention. (2006). Recommendations to Improve Preconception Health and Health Care—United States: a report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *Morbidity and Mortality Weekly Report*, 55(RR-6), 1-23.