

Teen Fertility in Transition: Recent and Historic Trends in the United States

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Key Words

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Abstract

After considerable declines in teen birth and pregnancy rates between 1991 and 2005, teen birth rates rose unexpectedly in 2006 and 2007. To understand these recent trends, we examined historical changes in fertility, trends in sexual behaviors, social forces, and public policies that may influence teen fertility. Although social forces such as poverty are critical in shaping adolescent reproductive choices, these do not explain rapid change in teen pregnancy risk since 1991. These recent changes, including increases in teen births since 2005, follow closely changes in teen contraceptive use. Likewise, contraceptive use is critical in explaining differences between U.S. and European fertility patterns. Public policies related to HIV prevention and sexuality education may have played a critical role in influencing teen pregnancy risk.

Birth rate: the number of live births per 1000 women

Teen birth rate: the number of live births per 1000 women ages 15–19

Fertility: the birth rate of a population

Proximate factor: behaviors and conditions that are directly related to fertility such as current sexual activity and condom and contraceptive use

STI: sexually transmitted infection

INTRODUCTION

Most teen pregnancies are unplanned and unintended (16). Teen childbearing is associated with adverse health and social outcomes for teen mothers and their children, although these outcomes often reflect preexisting social deficits (20). Compared with women who delay childbearing until their 20s, teen mothers are more likely to drop out of school and have low educational attainment; to face unemployment, poverty, and welfare dependency; to experience more rapid repeat pregnancy; to become single mothers; and to experience divorce, if they marry (2, 28). Infants of teen mothers are more likely to be premature and experience infant mortality. The children of teenage mothers do less well on indicators of health and social well-being than do children of older mothers. Teen childbearing in the United States costs taxpayers \$9.1 billion in 2004 (28). A report from the U.S. House of Representatives found that the steep decline in teen birth rates during the 1990s has substantially reduced the number of children living in poverty and living in families headed by single mothers (56). In *Healthy People 2010*, the nation has set specific goals for decreasing teen pregnancy, decreasing sexual activity, and increasing condom and contraceptive use among youth (57).

Teen childbearing is also the result of specific sexual behaviors among youth and social conditions such as poverty and educational opportunities. Trends in teen fertility (i.e., birth rates) are related to changes in these behaviors and social conditions. Teen fertility has varied considerably over time and across demographic groups within the United States and among developed nations. Declines in teen fertility in the United States mirror declines occurring in other developed nations during the latter half of the twentieth century (54).

This review addresses both longer-term and recent declines in teen fertility and attempts to understand trends on two levels: the behavioral and the social. Given unexpected increases in teen birth rates in both 2006 and 2007, we also explore factors related to that increase. We

compare the U.S. experience with teen fertility in other countries. We conclude with suggestions to improve prevention of unplanned and unwanted pregnancy among teens.

A CONCEPTUAL FRAMEWORK FOR UNDERSTANDING RISK FACTORS FOR TEEN FERTILITY

Before attempting to understand trends in teen fertility, it is helpful to have a conceptual framework to understand the factors that influence teen fertility. Changes in these risk factors may explain changes in fertility itself.

A straightforward and sensible demographic model to understand the causes of teen fertility builds on work by Davis & Blake (13) and Bongaarts (8). According to this conceptualization, both distal and proximate variables contribute to fertility. Distal variables include biopsychosocial factors such as age at puberty, poverty, and race/ethnicity. These distal factors influence fertility through a sequence of proximate factors such as sexual intercourse (age at initiation and frequency), use or nonuse of contraception, and gestational outcomes (abortion and miscarriage). Thus, biopsychosocial factors influence teen fertility by influencing proximate variables such as the age at initiation of intercourse (**Figure 1**).

One of the first attempts to bring together scientific knowledge on teen fertility was the National Research Council's *Risking the Future* in 1987 (26). *Risking the Future* reviewed the existing scientific literature to suggest key risk (and protective) factors that are associated with (but not necessarily causal of) teen pregnancy. (We would note that risk factors may be causal or may be markers for other conditions.) A similar approach has been used to understand teen risks for HIV infection and other sexually transmitted infections (STIs) (48), although risk factors for HIV/STI and teen pregnancy show both overlap and distinctive features. Two recent papers by Kirby and colleagues and Mmari & Blum have comprehensively reviewed the recent research on risk and protective factors for

teen fertility and STIs, focusing on research from the United States (29) and developing countries (7).

Remarkably, distal risk and protective factors for teen childbearing are quite similar across nations and cultures. Key distal risk factors associated with teen fertility include socioeconomic status, parental educational attainment, family structure and functioning, community and peer influences, access to education and success in school, pubertal timing, resiliency and connectedness to family and community, engagement in risk-taking behaviors, and having experienced sexual coercion and abuse (7, 29). For example, young women growing up in poor families are more likely to become teen mothers because poverty is associated with earlier initiation of intercourse, lower use of contraception, and lower recourse to abortion. Risk and protective factors operate at the social and community level (e.g., supportive families) and at the level of the individual adolescent (e.g., educational achievement). In the developing world, access to education for girls and young women greatly lowers teen fertility; in developed countries, young women who do well in school are much less likely to become teen mothers.

The influence of specific factors is not always consistent or obvious in their influence. Church attendance is highly related to later age at sexual initiation (29) but may be associated with lower levels of contraceptive use; religious attendance appears to be more important than the specific affiliation (e.g., Protestant, Jewish, Catholic). Biological factors such as the age at puberty also influence teen fertility, although most teens are not fully capable of becoming pregnant in the first years after menarche, so-called post-menarchal subfecundability (3). Other important influences on teen fertility in the United States include recent immigration from regions with higher fertility rates and disparities in social conditions by race and ethnicity.

Social factors appear to be critical influences in historical declines in teen and adult fertility. For example, during demographic transitions, rising standards of living and education are

associated with lower mortality and lower fertility among teens and adults (31). Pertinent to this review, these distal and proximate factors are the potential drivers of changes in teen fertility, which are further explored below.

Nested within this rich research literature on the social antecedents of teen fertility is a contentious debate on the social and public health meaning of teen childbearing. The debate addresses both causes and consequences of teen pregnancy, suggesting that young age and poverty are frequently confounded (4, 20, 21, 40). Some suggest that teen mothers are simply mothers afflicted by poverty or young women making logical choices in resource-constrained environments. Others suggest that teen fertility is an important contributor to poverty and the perpetuation of intergenerational cycles of poverty. We do not attempt to resolve this debate. Rather we seek to understand the reasons why teen birth rates have changed so dramatically over time and why rates are so different among groups. A more refined understanding of changing teen fertility may inform this debate and lead to more effective policy and programmatic approaches.

HISTORICAL TRENDS IN ADULT AND TEEN FERTILITY

Both teen and adult fertility in the United States declined during both the nineteenth and the twentieth centuries. These fertility trends were part of a global demographic transition as child mortality declined, persons moved from farms to cities, the age at marriage rose, and couples chose to have fewer children (8, 11). Smaller families and longer birth intervals have contributed to better health for infants, children, and women and have improved social and economic roles for women (43).

During the first half of the twentieth century, the total fertility rate (TFR, i.e., family size) in the United States declined from 3.3 children in 1921, reached a nadir around 1937 at 2.1 children during the Great Depression, and rose in the 1940s and 1950s after World War II (**Figure 1**). Postwar fertility peaked

Total fertility rate (TFR): the average number of children a woman would have in her lifetime if the current age-specific fertility rates remained constant

Pregnancy rate:

computed by adding rates of live births, fetal losses, and abortions. Fetal losses are generally estimated from national surveys of women

in 1957 at 3.7 children and 122.7 births per 1000 women ages 15–44 (53). Family size then dropped sharply to 2.0 children by 1972 and to a low of 1.7 by 1976. From this historical low, the TFR in the United States rose slowly reaching a replacement level at about 2.1 in 2006 (35). Women in other developed nations also experienced declining fertility rates during the early twentieth century and increases after WWII, before declining. Today, most European countries are below replacement levels.

Historical trends in teen fertility have mirrored these overall fertility rates, as noted by Teitler (55, **Figure 2**). However, since the mid-1990s, these trend lines have diverged; teen rates decreased rapidly while overall fertility increased slightly. This recent divergence has not been adequately explored or explained.

After peaking in the 1950s, teen birth rates in the United States declined throughout the 1960s, 1970s, and early 1980s. Teen birth rates in Western Europe peaked later (~1970) and then dropped more rapidly (55). Teen fertility in Portugal and Greece and Eastern Europe (not shown) peaked even later. Teen fertility in certain English-speaking countries including the United States, Canada, Britain, New Zealand, and Ireland spiked in the 1980s or 1990s. U.S. teen birth rates rose 24% from 1986 to 1991 (from 50 births per 1000 to 62 births) (60). This increase has not been fully explained but may be the result of increasing sexual activity and changes in teen contraceptive use, such as a shift from the pill to condoms (based on conversations between D. Kirby and J. Santelli). Among non-Anglophone countries in Western Europe, teen birth rates declined more steadily, reaching very low rates of teen fertility recently (>10 births per 1000 women ages 15–19 years). See **Figure 3**.

After 1991, teen birth rates in the United States declined dramatically through 2005. Today teen birth rates are less than half of their 1957 peak. These declines were greater among younger teens (–45% for teens aged 15–17 years and –50% for ages 10–14 years) compared with older teens (–26% for teens aged 18 to 19 years) and greater among African American

teens (–48%) compared with white (–40%) and Hispanic (–22%) teens. In 2006, teen birth rates among 15–19-year-olds unexpectedly began to rise, increasing 5% between 2005 and 2007 (24). These increases were shared across demographic subgroups. The primary exception was teens under age 15, a group whose fertility continued to drop.

These trends in teen fertility have been associated with a series of dramatic historical events that have influenced teen sexual behavior and have great importance for teen fertility (**Figure 4**). These include the FDA's approval of the birth control pill and intra-uterine device (IUD) in 1960, the sexual revolution in the mid-1960s, creation of the federal family planning program (Title X) in the late 1960s, the Supreme Court's legalization of abortion in 1973, the pandemic of HIV/AIDS, new federal support for sexuality education, and the development of new contraceptive technologies (e.g., Depo-Provera, emergency contraception) since 1990; all these events have had profound effects on adolescents' lives and sexual and reproductive health.

To understand fully trends in teen pregnancy and birth rates, one must consider changes in rates of teen births, abortions, and miscarriages. National data on teen pregnancy first became available in the United States in the mid-1970s, as states created new systems for reporting after abortion became legal. Pregnancy rates among teens (**Figure 5**) rose from 1976 to 1980, dropped slightly from 1980 to 1987, increased from 1987 to 1990, and fell after 1990 (58). From 1990 to 2004, the U.S. teen pregnancy rate fell 38% from 117 pregnancies to 72 pregnancies (per 1000 women ages 15–19 years of age).

As is readily apparent in **Figure 5**, teen birth and abortion rates may diverge. The rise in teen birth rates in the late 1980s was in part a shift from abortion to live birth, as a declining percentage of pregnant teens chose abortion. Abortion rates for teens were relatively stable in the 1980s and declined after 1988 (25). The teen abortion rate for 2004 was 19.8/1000, representing a 53% decline from 1989 to 2004

(59). Recent teen abortion rates are the lowest recorded in national data.

TRENDS IN TEEN SEXUAL AND CONTRACEPTIVE BEHAVIORS

Over the past 50 years, enormous changes have occurred in adolescent sexual behaviors, contraceptive availability and use, family formation, and childbearing. Over this time, women in the U.S. and other developed countries have initiated sexual intercourse earlier and married later. Thus, sexual initiation is almost always nonmarital today; likewise, teen childbearing has become predominantly nonmarital (15, 27, 62). Earlier initiation of sexual intercourse followed closely the introduction of modern contraception in 1960. Later age at marriage is a widespread phenomenon in developed countries because women have experienced greater educational and occupational opportunities. A variety of public health surveillance systems were developed in the United States in the 1970s to monitor behaviors and experiences related to fertility, particularly the National Survey of Family Growth (NSFG). More recently, these systems have addressed other reproductive health issues affecting adolescents, particularly STIs, including HIV infection.

Beginning in the 1960s, a major transformation in timing of initiation of teen sexual behavior occurred in the United States. Data from the 1982 NSFG suggest that the increase in sexual activity among teens began in the mid-1960s, among the birth cohort of women who turned 17 between 1964 and 1966 (27). The proportion of teen women who had ever had sexual intercourse increased substantially from 1971 to 1988 (19, 27, 62) (**Figure 6**). For example, the proportion of women ages 15–19 reporting premarital sex rose from 30% in 1971 to 43% in 1976 and 50% in 1979 (62). Although data for young men are not available from the 1970s, data from the 1980s suggest that rates of sexual activity also increased for young men (30). This historical trend stopped or reversed around 1990 for young men and young women (1, 9). From 1991 to 2001, sexual experience

(i.e., ever having had sexual intercourse) among young women in high school decreased from 50.9% to 45.9% (5); from 2001 to 2007, rates of sexual experience have not changed. Recent sexual activity (i.e., intercourse in the past 3 months) among young women in high school declined from 38.2% to 35.6% between 1991 and 2007 (5). Our recent reanalysis of these data suggests that declines in sexual experience and recent sex among high-school women were confined to African Americans (46).

Other developed nations have shown similar patterns toward earlier initiation of sexual intercourse among adolescents since the 1950s and continuing through the 1980s (54). Coincident with earlier initiation, Teitler (2002) also found that within- and between-country variation and differences by gender in median age of sexual initiation have decreased (a decline in the median age at sexual initiation means that more teens were having sex and that teens were beginning sex at earlier ages). Thus the timing of sexual initiation among youth in developed countries has converged across nations, genders, and socioeconomic strata, suggesting a convergence in cultural acceptance of adolescent sexuality in many countries. The decline in European teen fertility since 1970 is not attributable to delay in initiation of sexual intercourse because fertility declined in the face of increases in sexual activity. A mid-1990s analysis of five developed countries showed that adolescents in the United States initiated sexual activity at an age similar to that of adolescents in Sweden, France, Canada, and Great Britain (52). To our knowledge, European nations have not experienced declines in teen sexual involvement recently.

Contraceptive use among teens has also changed remarkably over relatively short time periods, particularly as new contraceptive methods such as the pill and Depo-Provera became widely available (18, 39). In the 1950s, prior to FDA approval of the birth control pill, barrier methods such as condoms and diaphragms were common; the pill gained rapid acceptance in the 1960s. The birth control pill was the most common contraceptive method

among teens in the 1970s, followed by condoms and withdrawal (62). Condom use among adolescents increased dramatically in the 1980s, and pill use declined (37). Increases in condom use resulted in an increased use of contraception at first intercourse (38). From 1988 to 1995, condom use continued to increase, as pill use decreased and new long-acting hormonal methods were introduced (1). Data on high-school students since 1991 indicate that condom use increased as nonuse and use of withdrawal declined (46, 49). After 2003, contraceptive use has stopped improving and overall contraceptive use appears to have deteriorated (46, **Figure 7**).

Whereas European teens are not less likely to initiate sex during the high-school years compared with U.S. teens, they are much more likely to use contraception and to use more effective contraceptive methods (23, 47). For example, 61% of 15-year-old females in the Netherlands in 2006/2007 report using the birth control pill at last sex, compared with just 11% of 15-year-olds in the United States (12, 14). Rates of condom use among teens in the United States are similar to rates in Europe (12, 14).

DECLINES IN TEEN PREGNANCY AND BIRTH RATES AFTER 1990

Investigators have made a number of attempts to explain trends in the rates of teen pregnancy and births based on behavior change. The earliest studies used the 1988 and 1995 rounds of the NSFG (6, 17, 34) but were hampered by relatively small changes in pregnancy rates and the fact that these rates rose and fell during this period. Our research group has examined the period since 1991 and calculated the contribution of sexual intercourse (measured as sexual experience or current sexual activity) and contraceptive use (based on method-specific use and the relative efficacy of specific methods) to declines in teen pregnancy (46, 49, 50). These studies used demographic decomposition methods and nationally representative data sets such as the NSFG or the Youth Risk Behavior Survey

(YRBS) of high-school students. The NSFG is a household survey using face-to-face interviewing of families among women of reproductive age, including teens ages 15–19. The YRBS is a paper-and-pencil survey of public and private high-school students in grades 9–12. The size of these data sets allowed us to compare across younger and older teens and racial and ethnic groups. Our method of calculating pregnancy risk appears to be valid; estimates of pregnancy risk correlate well with actual pregnancy rates, and changes in pregnancy risk are similar to changes in pregnancy rates (46, 49, 50).

1991–2001

Our first study examined YRBS data from 1991 to 2001. We found approximately equal contributions of decreased sexual activity and increased contraceptive use to reduced pregnancy rates among high-school students.

1995–2002

Next, we (50) used data from 15–19-year-old females participating in the 1995 and 2002 NSFG to estimate change in pregnancy risk. This study used data on recent sexual activity and contraceptive use at last intercourse to estimate pregnancy risk. Sexual intercourse among teens declined 10% between 1995 and 2002; all this change occurred among 15–17-year-olds. Improved contraceptive use explained most of the change in pregnancy risk because condom use increased and nonuse of contraception declined. We estimated that the decline in sexual activity accounted for 14% of the change in pregnancy risk, and improvements in contraceptive use accounted for the other 86%. Among younger teens (15–17-year-olds), the decline in sexual activity explained 23% of the change in pregnancy risk.

1991–2007

Our third study (46) examined both behavioral trends associated with the decline in teen pregnancy from 1991 to 2003 and the increase

in teen birth rates in 2006 and 2007 using our pregnancy risk index (PRI) method and data from the YRBS. From 1991 to 2003, we found increases in condom use (46% to 63%) and declines in use of withdrawal or no method (33% to 19%). We found that pregnancy risk based on teen behaviors declined from 1991 to 2003 and that contraceptive use was responsible for most of the decline (70%) in the pregnancy risk during this period. From 2003 to 2007, sexual activity remained unchanged, and contraceptive use showed a borderline decline. Although pregnancy risk was higher among minority teens, these differences declined over time. Although recent sexual activity declined from 1991 to 2001, this decline appears to be confined to African American youth.

Influence of Distal Factors

Whereas sexual behaviors are well tracked in public health surveillance systems, social determinants of teen pregnancy are more difficult to track and to link definitively to changes in sexual behaviors or fertility. For example, trend data on peer influences, social norms, or personal resiliency in the United States are generally lacking. Moreover, where trend data are available for poverty or church attendance among teens, linking these data to teen behavioral data or teen fertility may be difficult or impossible. Thus, definitive statements about the influence of distal factors on changing teen fertility are lacking. Several excellent reviews have suggested plausible social explanations for changing teen fertility (30, 33, 36). Possible sources of distal influences include changes in population composition such as an increase in the number of Hispanic teens residing in the United States, economic change, changes in family dynamics or structure, changes in social mores, and new influences such as the pandemic of HIV/AIDS or media influences such as access to the Internet. Ku et al. (30) tracked changes in sexual activity among young men from 1979 to 1995 and found both more conservative attitudes and increased exposure to AIDS education. Manlove et al. (33) found positive and negative changes in

family environment and changing racial/ethnic composition in the teen population, which coincided with changing teen fertility.

It is perhaps easier to rule out the influences of specific social factors, particularly if there is no correlation between change in a specific factor and change in teen behaviors or fertility. For example, poverty is a potent risk factor for teen childbearing, and improvement in economic conditions is a suggested cause for the decline in teen fertility in the 1990s (22). Although trends in poverty and teen fertility were correlated in the 1990s, this association did not persist when economic conditions deteriorated after 2000. Likewise, improved economic conditions in the late 1980s were not associated with decreased teen fertility.

Certainly, any social factor influencing teen fertility should operate via proximate factors. Thus, it is reasonable to ask which social factors or public policies are compatible with the changes we see in teen behaviors. The most prominent behavior change in the late 1980s, 1990s, and early 2000s has been the increase in the use of condoms. This experience is coupled with some decrease in sexual experience. An obvious explanation for these behavior changes is the pandemic of HIV and HIV prevention education directed to teens and young adults. Shifts in sexuality education may also provide an explanation for deterioration of contraceptive use after 2003 and the rise in birth rates after 2005. The emphasis of U.S. national policy after 1998 has shifted from HIV education to a focus on teen abstinence from sexual behavior. Thus, NSFG data from 1995 and 2002 document declines in receipt of contraceptive education among teens (32). The federal funding rules for abstinence programs require a focus on failure rates of condoms and contraception; this approach may be undermining teen contraceptive use (45).

State policies toward teen pregnancy prevention vary widely; states such as California provide publicly supported reproductive health services and comprehensive sexuality education (44, 61), whereas states such as Texas have embraced abstinence education and moved to

Table 1 Teen birth rate (per 1000), change in birth rate, and percent estimated to become teen mothers

	Teen birth rate, ages 15–19, 2006	Change in teen birth rate, 1991–2006	% of females estimated to become teen mothers ^a , 2006
United States	42	–32%	18%
Mississippi	68	–20%	30%
New Mexico	64	–19%	29%
Texas	63	–20%	28%
Arkansas	62	–22%	28%
Arizona	62	–22%	28%
Oklahoma	60	–17%	26%
Nevada	56	–25%	27%
Kentucky	55	–21%	25%
Tennessee	55	–27%	25%
Alabama	54	–27%	24%
Georgia	54	–29%	24%
Louisiana	54	–29%	23%
South Carolina	53	–27%	23%
North Carolina	50	–29%	22%
District of Columbia	48	–56%	N/A
Wyoming	47	–13%	21%
Missouri	46	–29%	20%
West Virginia	45	–23%	20%
Florida	45	–33%	20%
Colorado	44	–25%	19%
Indiana	44	–28%	19%
Alaska	44	–33%	21%
Kansas	42	–24%	18%
Delaware	42	–31%	18%
Hawaii	41	–32%	19%
Montana	40	–15%	18%
South Dakota	40	–16%	17%
Ohio	40	–34%	17%
Illinois	40	–39%	17%
California	40	–46%	18%
Idaho	39	–27%	18%
Oregon	36	–35%	16%
Virginia	35	–34%	15%
Utah	34	–29%	14%
Maryland	34	–38%	15%
Michigan	34	–43%	15%
Nebraska	33	–21%	14%
Iowa	33	–23%	14%
Washington	33	–38%	15%
Wisconsin	31	–29%	13%
Pennsylvania	31	–34%	13%

(Continued)

Table 1 (Continued)

	Teen birth rate, ages 15–19, 2006	Change in teen birth rate, 1991–2006	% of females estimated to become teen mothers ^a , 2006
Minnesota	28	–25%	12%
Rhode Island	28	–38%	11%
North Dakota	27	–25%	11%
Maine	26	–41%	12%
New York	26	–44%	11%
New Jersey	25	–40%	11%
Connecticut	24	–41%	10%
Massachusetts	21	–43%	9%
Vermont	21	–47%	9%
New Hampshire	19	–44%	8%

^aPercent of females ages 15–19 estimated to become teen mothers before age 20. Data from Child Trends & National Campaign to Prevent Teen and Unplanned Pregnancy (41, 42).

implement parental consent requirements for reproductive health care for minor adolescents (10). As a result, teens living in different states have very different experiences with sex education and access to contraception; these differences may have consequences for states' teen pregnancy outcomes. States also vary considerably in rates of teen births and in their success in reducing teen births (**Table 1**) (41, 42). Teen birth rates in 2006 varied more than three-fold from 68/1000 in Mississippi to 19/1000 in New Hampshire. Likewise, declines in teen birth rates from 1991 to 2006 ranged from a decline of 17% in Oklahoma to a decline of 47% in Vermont. The percentage of women who began childbearing as teens ranged from 30% in Mississippi to 8% in New Hampshire. Possible explanations for these state differences include public policies related to access to contraception and sex education and differences in racial/ethnic composition. More research is needed to understand the influence of social factors and social policies on these state differences.

CONCLUSIONS AND POLICY RECOMMENDATIONS

The rise in U.S. teen birth rates in 2006 and again in 2007 are concerning, especially after a

steady decline in rates between 1991 and 2005. The decline was accompanied by substantial increases in contraceptive use at last sex and a small decline in sexual activity, although most of the change in sexual activity appears to be confined to African American teens. The reversal in 2006 and 2007 also appears to be related to changing use of contraception. Moreover, teen birth and pregnancy rates in the United States remain much higher than rates in other developed countries. The key difference between U.S. and European teens appears to be lower rates of contraceptive use, including sharply lower rates of pill use among U.S. teens (12, 23, 47, 54). In the late 2000s, the United States appears to have been floundering in its prevention efforts, particularly efforts to improve contraceptive use.

Addressing teen pregnancy rates in the United States will require efforts at both the state and the national levels, including promotion of contraceptive use through sex education and health services. The United States could learn much about reducing teen fertility by examining the success of Western European countries. European nations have been successful at reducing teen fertility, primarily by encouraging contraceptive use. For example, Dutch parents, compared with U.S. parents, are more likely to normalize teen sexual

activity and contraception use (51). The United States cannot expect to reduce teen fertility to European levels without fundamental changes in adult social norms regarding access to health information and to reproductive health services.

During the early years of the HIV/AIDS pandemic, the United States experienced a collective dialogue about the need for consistent and correct use of condoms among sexually

active teens. The United States would benefit from another collective national dialogue about prevention of unplanned pregnancy and STIs. The United States might redirect its energy from divisive political debates around sexuality education and abortion toward reinvigorated efforts to prevent unplanned pregnancy among teens by promoting the importance of consistent and effective contraception and protection against STIs.

SUMMARY POINTS

1. Teen birth and pregnancy rates have declined historically and recently between 1991 and 2005; these rates rose unexpectedly in 2006 and 2007.
2. Teen fertility is influenced by distal factors such as poverty and public policies and proximate determinants such as contraceptive use.
3. Teen fertility has been, and remains, much higher in the United States than in other developed nations, owing to lower use of contraception in the United States.
4. Improved condom and contraceptive use explains most of the declines in teen pregnancy both historically and between 1991 and 2005; likewise, declines in contraceptive use appear to explain rising teen fertility in 2006 and 2007.

FUTURE ISSUES

1. We must gain a better understanding of the factors driving differences among the 50 states in levels of teen pregnancy.
2. We should more closely examine racial and ethnic differences in sexual behaviors and teen birth rates.
3. We also need to gain a better understanding of the role of public policies in influencing trends and differences.

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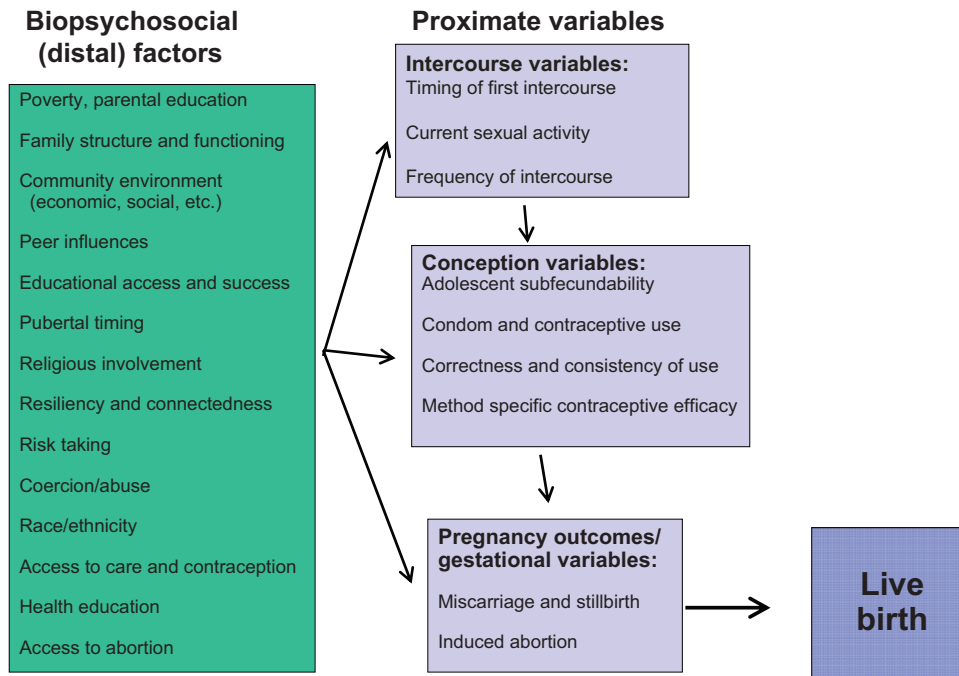


Figure 1

Risk and protective factors for teen fertility.

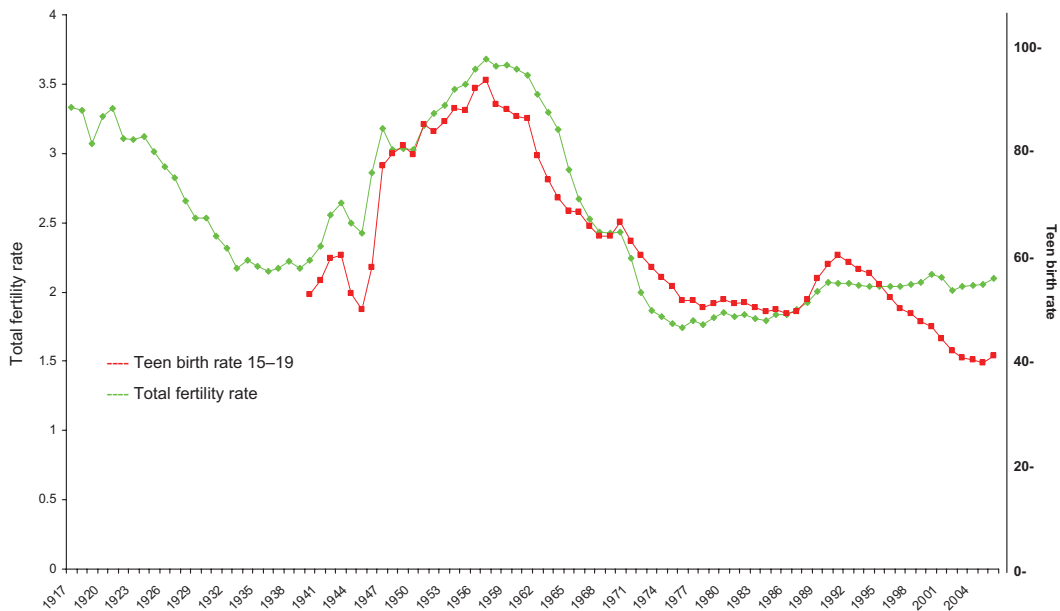


Figure 2
Total fertility rates (1917–2006) and teen birth rates (1940–2006), United States.

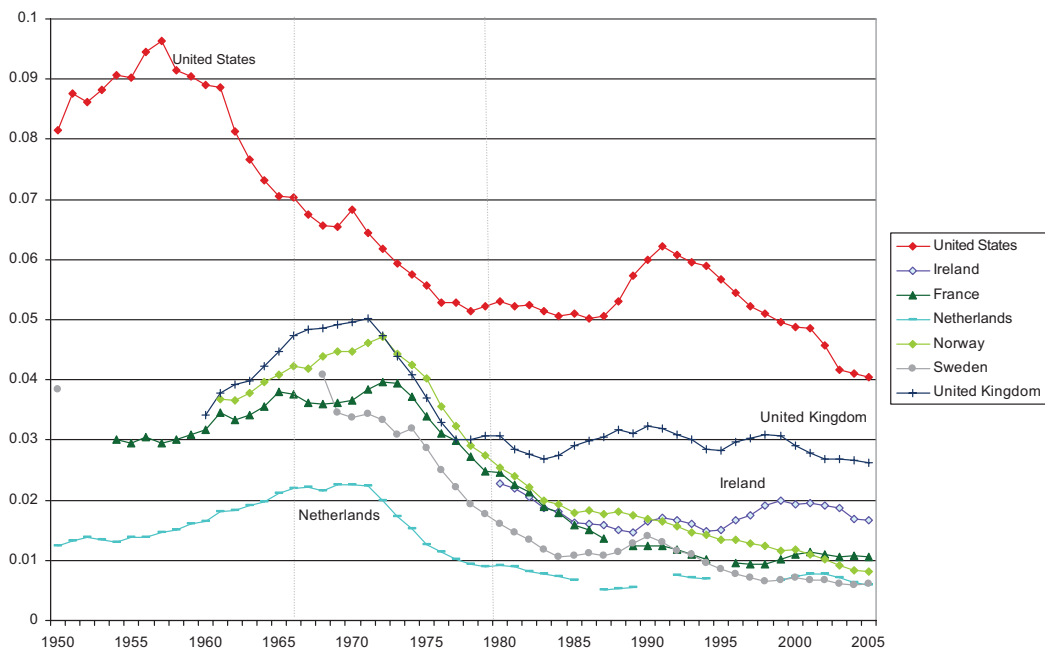


Figure 3
Teen birth rates, developed nations, 1950–2005.

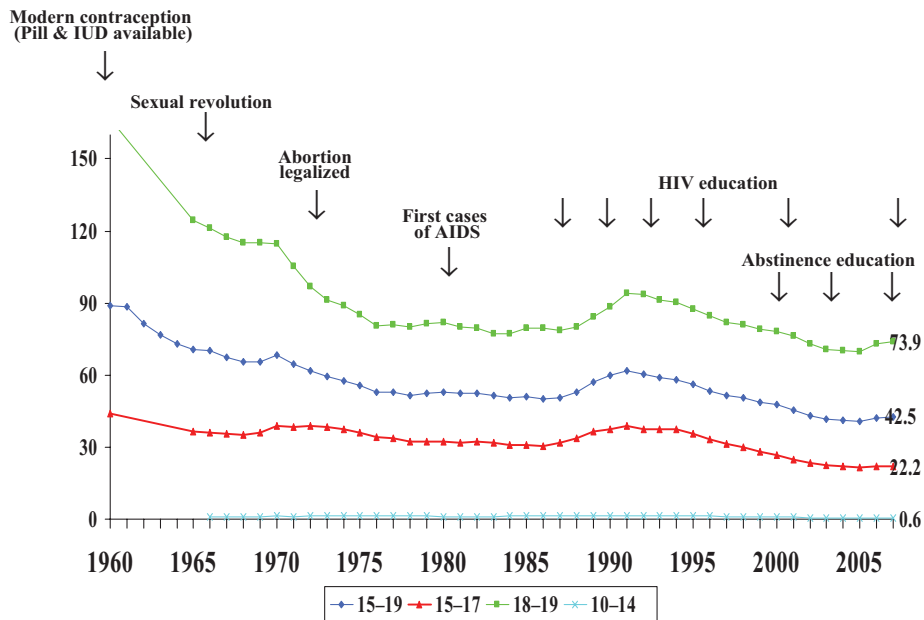


Figure 4

Trends in U.S. teen fertility, 1960–2007.

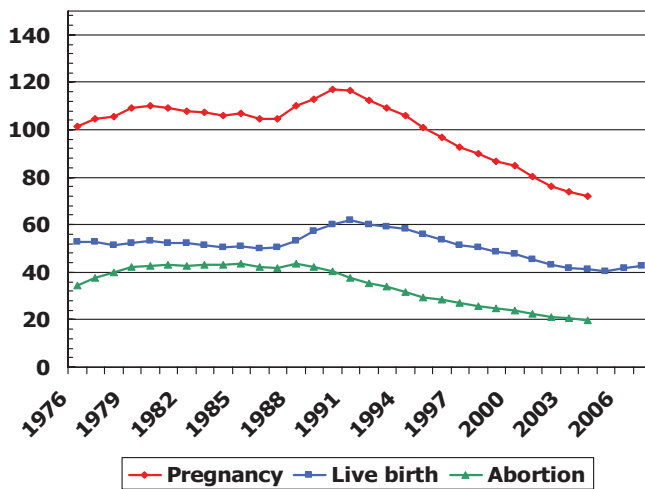


Figure 5

Pregnancy, live birth, and abortion rates, 15–19-year-olds, 1976–2007, United States.

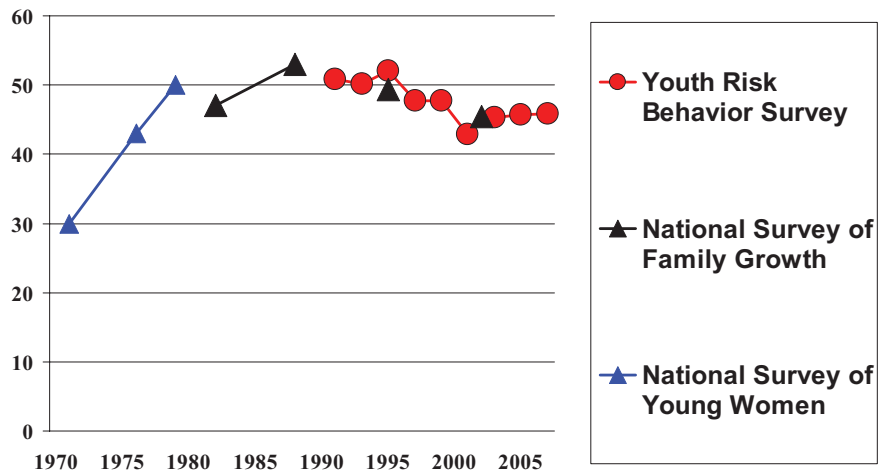


Figure 6

Ever had sexual intercourse, never married adolescent females, aged 15–19 years (NSYW, NSFG) and high-school females [Youth Risk Behavior Survey (YRBS)], 1971–2007, United States.

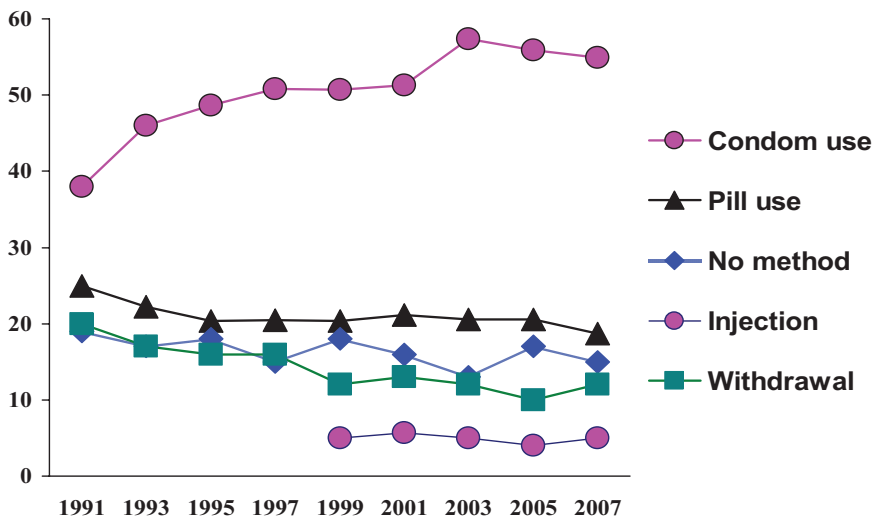


Figure 7

Condom and contraceptive use at last sex, women in grades 9–12, national Youth Risk Behavior Survey (YRBS), 1991–2007, United States.



Contents

Symposium: Public Health Significance of Genomics and Eco-Genetics

Overview of the Symposium on Public Health Significance of Genomics and Eco-Genetics <i>Gilbert S. Omenn</i>	1
Genome-Wide Association Studies and Beyond <i>John S. Witte</i>	9
Methods for Investigating Gene-Environment Interactions in Candidate Pathway and Genome-Wide Association Studies <i>Duncan Thomas</i>	21
Ecogenomics of Respiratory Diseases of Public Health Significance <i>Stavros Garantziotis and David A. Schwartz</i>	37
Nutrigenetics/Nutrigenomics <i>Artemis P. Simopoulos</i>	53
Family History in Public Health Practice: A Genomic Tool for Disease Prevention and Health Promotion <i>Rodolfo Valdez, Paula W. Yoon, Nadeem Qureshi, Ridgely Fisk Green, and Muin J. Khoury</i>	69
The Behavioral Response to Personalized Genetic Information: Will Genetic Risk Profiles Motivate Individuals and Families to Choose More Healthful Behaviors? <i>Colleen M. McBride, Laura M. Koebly, Saskia C. Sanderson, and Kimberly A. Kaphingst</i>	89

Epidemiology and Biostatistics

Overview of the Symposium on Public Health Significance of Genomics and Eco-Genetics <i>Gilbert S. Omenn</i>	1
Genome-Wide Association Studies and Beyond <i>John S. Witte</i>	9

Methods for Investigating Gene-Environment Interactions in Candidate Pathway and Genome-Wide Association Studies <i>Duncan Thomas</i>	21
Ecogenomics of Respiratory Diseases of Public Health Significance <i>Stavros Garantziotis and David A. Schwartz</i>	37
Nutrigenetics/Nutrigenomics <i>Artemis P. Simopoulos</i>	53
Family History in Public Health Practice: A Genomic Tool for Disease Prevention and Health Promotion <i>Rodolfo Valdez, Paula W. Yoon, Nadeem Qureshi, Ridgely Fisk Green, and Muin J. Khoury</i>	69
Prevention Trials: Their Place in How We Understand the Value of Prevention Strategies <i>Graham A. Colditz and Philip R. Taylor</i>	105
Two Decades of Declining Cancer Mortality: Progress with Disparity <i>Tim Byers</i>	121
Teen Fertility in Transition: Recent and Historic Trends in the United States <i>John S. Santelli and Andrea J. Melnikas</i>	371
The Methamphetamine Problem in the United States <i>Rachel Gonzales, Larissa Mooney, and Richard A. Rawson</i>	385
Environmental and Occupational Health	
Advances in Understanding Benzene Health Effects and Susceptibility <i>Martyn T. Smith</i>	133
Approaches to Uncertainty in Exposure Assessment in Environmental Epidemiology <i>Donna Spiegelman</i>	149
Mold Exposure and Health Effects Following Hurricanes Katrina and Rita <i>Deborah N. Barbeau, L. Faye Grimsley, LuAnn E. White, Jane M. El-Dabr, and Maureen Lichtveld</i>	165
Plastics and Health Risks <i>Rolf U. Halden</i>	179
Public Health Practice	
A Review of Unintentional Injuries in Adolescents <i>David A. Sleet, Michael F. Ballesteros, and Nagesh N. Borse</i>	195

Evaluability Assessment to Improve Public Health Policies, Programs, and Practices <i>Laura C. Leviton, Laura Kettel Khan, Debra Rog, Nicola Dawkins, and David Cotton</i>	213
Integrating Clinical, Community, and Policy Perspectives on Human Papillomavirus Vaccination <i>María E. Fernández, Jennifer D. Allen, Ritesh Mistry, and Jessica A. Kahn</i>	235
Outcome-Based Workforce Development and Education in Public Health <i>Denise Koo and Kathleen Miner</i>	253
Progress Toward the Healthy People 2010 Goals and Objectives <i>Edward J. Sondik, David T. Huang, Richard J. Klein, and David Satcher</i>	271
Recent Advances in Public Health Systems Research in the United States <i>Timothy W. Van Wave, F. Douglas Scutchfield, and Peggy A. Honoré</i>	283
Family History in Public Health Practice: A Genomic Tool for Disease Prevention and Health Promotion <i>Rodolfo Valdez, Paula W. Yoon, Nadeem Qureshi, Ridgely Fisk Green, and Muin J. Khoury</i>	69
Health in All Policies—The Finnish Initiative: Background, Principles, and Current Issues <i>Pekka Puska and Timo Ståhl</i>	315
Social Environment and Behavior	
Confronting a Neglected Epidemic: Tobacco Cessation for Persons with Mental Illnesses and Substance Abuse Problems <i>Steven A. Schroeder and Chad D. Morris</i>	297
Health in All Policies—The Finnish Initiative: Background, Principles, and Current Issues <i>Pekka Puska and Timo Ståhl</i>	315
How Experience Gets Under the Skin to Create Gradients in Developmental Health <i>Clyde Hertzman and Tom Boyce</i>	329
Targeted Marketing and Public Health <i>Sonya A. Grier and Shiriki Kumanyika</i>	349
Teen Fertility in Transition: Recent and Historic Trends in the United States <i>John S. Santelli and Andrea J. Melnikas</i>	371

The Behavioral Response to Personalized Genetic Information: Will Genetic Risk Profiles Motivate Individuals and Families to Choose More Healthful Behaviors? <i>Colleen M. McBride, Laura M. Koehly, Saskia C. Sanderson, and Kimberly A. Kaphingst</i>	89
The Methamphetamine Problem in the United States <i>Rachel Gonzales, Larissa Mooney, and Richard A. Rawson</i>	385
The Role of Behavioral Science Theory in Development and Implementation of Public Health Interventions <i>Karen Glanz and Donald B. Bishop</i>	399
Health Services	
Post-Approval Drug Safety Surveillance <i>Robert D. Gibbons, Anup K. Amatya, C. Hendricks Brown, Kwan Hur, Sue M. Marcus, Dulal K. Bhaumik, and J. John Mann</i>	419
Simulation Modeling of Health Care Policy <i>Sherry Glied and Nicholas Tilipman</i>	439
The Health and Health Care of Lesbian, Gay, and Bisexual Adolescents <i>Tumaini R. Coker, S. Bryn Austin, and Mark A. Schuster</i>	457
What Have We Learned About Interventions to Reduce Medical Errors? <i>Helen I. Woodward, Oliver T. Mytton, Claire Lemer, Iain E. Yardley, Benjamin M. Ellis, Paul D. Rutter, Felix E.C. Greaves, Douglas J. Noble, Edward Kelley, and Albert W. Wu</i>	479
Integrating Clinical, Community, and Policy Perspectives on Human Papillomavirus Vaccination <i>María E. Fernández, Jennifer D. Allen, Ritesh Mistry, and Jessica A. Kahn</i>	235
Indexes	
Cumulative Index of Contributing Authors, Volumes 22–31	499
Cumulative Index of Chapter Titles, Volumes 22–31	504

Errata

An online log of corrections to *Annual Review of Public Health* articles may be found at <http://publhealth.annualreviews.org/>