11. FAMILY PLANNING

Number	Objective
1	Planned pregnancy
2	Repeat unintended births
3	Contraceptive use, females
4	Contraceptive failure
5	Postcoital hormonal contraception
6	Male involvement in family planning
7	Adolescent pregnancy
8	Sexual intercourse before age 15
9	Adolescent sexual intercourse
10	Pregnancy and STD preventive methods
11	Pregnancy prevention education
12	School requirement for classes on human sexuality, pregnancy prevention, etc.
13	Impaired fecundity

Family Planning

Goal

Every pregnancy in the United States should be intended.

Terminology

(A list of all acronyms used in this publication appears on page 27 of the Introduction.)

Contraception (birth control): the means of pregnancy prevention. Methods include permanent methods (i.e., male and female sterilization) and temporary methods (i.e., barrier, hormonal, and behavioral).

Failure rate under perfect use of a contraceptive: the annual pregnancy rates among persons who use the method correctly on every occasion.

Failure rate under typical use of a contraceptive: the annual pregnancy rate of average users in retrospective surveys or clinical trials.

Family planning: the process of establishing the preferred number and spacing of one's children and selecting the means by which this is best achieved and effectively using that means.

Impaired fecundity: a broader term used to describe problems with pregnancy loss as well as problems conceiving a pregnancy.

Infertility: failure to conceive a pregnancy after 12 months of unprotected intercourse.

- **Primary infertility:** no prior pregnancy has occurred.
- **Secondary infertility:** failure to conceive after a previous pregnancy.

Intended pregnancy: a pregnancy that a woman states was wanted at the time of conception, irrespective of whether or not contraception was being used.

Unintended pregnancy: a general term that includes pregnancies that a woman states were either mistimed or unwanted at the time of conception (and not at the time of birth).

- **Mistimed conceptions:** those that were wanted by the woman at some time, but which occurred sooner than they were wanted.
- **Unwanted conceptions:** those that occurred when the woman did not want any pregnancy then or in the future.

Women at risk of unintended pregnancy: women who (1) have had sexual intercourse in the previous 3 months; (2) are not pregnant, seeking pregnancy, or postpartum (pregnancy ended within 2 previous months); and (3) are not sterile (surgically or nonsurgically).

Overview

In an era when technology enables couples to have considerable control over their fertility, half of all pregnancies in the United States are unintended.[1] Although trends in recent years show a decline in the

incidence of unintended pregnancies in the United States, other industrialized nations report fewer unintended pregnancies,[2] suggesting that progress toward reducing the incidence of unintended pregnancy still further is a realistic, achievable goal. Family planning remains a keystone in attaining a national goal aimed at ensuring that every pregnancy is intended.

The proposed family planning objectives for Healthy People 2010 echo the recommendations contained in the 1995 Institute of Medicine (IOM) report, *Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*, the most comprehensive review of the issue of family planning and unintended pregnancy.[3] The foremost recommendation of the IOM report is that the Nation adopt a social norm in which all pregnancies are intended—that is, clearly and consciously desired at the time of conception. This goal is directed at all Americans, emphasizing personal choice and intent, and speaks to planning for pregnancy, as well as to avoiding unintended pregnancy. A recent study of unintended pregnancy rates in the United States shows a significant decline in the rates of unintended pregnancy, probably as a result of higher contraceptive use and use of more effective methods.[4] Despite this improvement, unintended pregnancy remains a common problem and further progress is needed.

One of the most important determinants of pregnancy and birth rates is contraceptive use. The proportion of all women aged 15 to 44 who are currently practicing contraception (including females who have been sterilized for contraceptive reasons and husbands/partners who have had vasectomies) rose from about 56 percent in 1982 to 60 percent in 1988 and 64 percent in 1995. However, 5.2 percent of all women aged 15 to 44 who had had intercourse in the last 3 months did not use contraceptives.[5]

As yet there are no perfect methods of contraception, nor is any one method likely to be consistently and continuously suitable for each woman, man, or couple. Sterilization is the most common method of contraception in the United States and has no proven long-term risks. It differs from other contraceptive methods in that it is meant to provide permanent contraception (failure rates are 0.2 percent for male and 0.4 percent for female sterilization).[6] Combination oral contraceptives are the most popular method of reversible contraception in the United States used by an estimated 10 million women. Failure rates are as low as 3 percent with typical use and 0.1 percent when used correctly and consistently.[7] Other hormonal contraceptives, such as Depo-Provera and Norplant, provide effective contraception without the need for daily compliance.

Barrier methods have fewer side effects than hormonal contraception, but the average effectiveness is more variable due to inconsistent or incorrect use (failure rates are 3 percent for perfect use and 12 to 16 percent for average use of the male condom; 5 percent under perfect use and 20 percent for typical use of the female condom). Other female barrier methods include the diaphragm (failure rates are 6 percent with perfect use and 18 to 22 percent with typical use) and cervical cap (failure rates for nulliparous women are similar to diaphragm rates but are 20 to 36 percent in multiparous women). Spermicides used alone (foams, creams, and jellies) have an estimated failure rate of 6 percent for perfect use and 21 to 25 percent for typical use.

Barrier methods and spermicides have the advantage of reducing the risk of infection with gonorrhea and chlamydia, but their effects on human immunodeficiency virus (HIV) transmission are uncertain.[8] Intrauterine devices (IUDs) can provide very effective contraception for extended periods of time (0.1 to 0.6 percent failure rate). Coitus interruptus and periodic abstinence may be more acceptable to some people, for example, those with religious objections to artificial contraception, but they can be difficult to perform correctly. The failure rates of withdrawal and periodic abstinence are 18 to 20 percent annually in actual practice.[9]

Contraceptive method choices are far from ideal. Even with all financial and knowledge barriers removed, effective and consistent contraceptive use is difficult. Contraceptive research and development efforts must be expanded to bring new methods to the market, methods that combine high contraceptive efficacy and ease of use with protection against sexually transmitted diseases (STDs) and HIV. Increased attention also must be given to existing options not currently available in this country, such as the Levonorgestrel IUD and various spermicide and microbicide alternatives. Increasing the range of contraceptive choices increases the likelihood that individuals and couples will be able to find a contraceptive method that suits them. Increased choice improves individuals' control over their fertility and reduces the risk of unintended pregnancy.

The use of emergency contraceptive pills (ECP) offers a backup method when regular contraceptives have failed, been used incorrectly, or forgotten. Postcoital administration of estrogen and progestin (ECP) is estimated to reduce the risk of subsequent pregnancy by 75 percent when initiated within 72 hours of unprotected intercourse. Surveys indicate that knowledge and use of postcoital contraception remains low among patients and clinicians alike.[10]

Reducing the incidence of unintended pregnancy is possible and necessary. Unintended pregnancy in the United States is serious and costly and occurring frequently. Socially, the costs can be measured in unintended births, reduced educational attainment and employment opportunity, increased welfare dependency, and increased potential for child abuse and neglect. Economically, there are increased health care costs; an unintended pregnancy, once it occurs, is expensive no matter what its outcome. Medically, unintended pregnancies are serious in terms of the lost opportunity to prepare for an optimal pregnancy and the increased likelihood of infant and maternal morbidity and mortality.[11] The consequences of unintended pregnancy are not confined to those occurring in teenagers or unmarried couples; in fact, unintended pregnancy can carry serious consequences at all ages and life stages, for children, women, men, and families.[12]

With an unwanted pregnancy, the mother is less likely to seek prenatal care in the first trimester and more likely not to obtain prenatal care at all.[13] She is less likely to breastfeed[14] and more likely to expose the fetus to harmful substances such as tobacco or alcohol. The child of such a pregnancy is at greater risk of being at a low birthweight, dying in its first year, being abused, and not receiving sufficient resources for healthy development. A disproportionate share of the women bearing children whose conception was unintended are unmarried or at either end of the reproductive age span, factors that in themselves carry increased medical and social burdens for children and their parents. Pregnancy begun without some degree of planning often prevents individual women and men from participating in preconception risk identification and management.

For teenagers, the problems associated with unintended pregnancy are compounded and the consequences are well documented: reduced educational attainment, fewer employment opportunities, increased likelihood of welfare dependency, and poorer health and developmental outcomes. Teenage mothers are less likely to get or stay married, less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their nonpregnant counterparts. Infants born to teenage mothers, especially mothers under 15, are more likely to suffer from low birthweight, neonatal mortality, and sudden infant death syndrome; and they may be at greater risk of child abuse, neglect, and behavioral and educational problems at later stages.[15] With nearly 1 million adolescent pregnancies occurring each year in the United States,[16] the solution to the problem clearly has not yet been found, nor have the necessary resources been employed to do so.

Unintended pregnancy is expensive. For medical care alone, national expenditures for unintended pregnancy totals billions of dollars annually. It has been estimated that the pregnancy cost for each woman of typical fertility who does not intend to be pregnant, yet is sexually active and uses no contraception, is about $3,200 annually.[17] Estimates of the overall cost to U.S. taxpayers for adolescent pregnancy range between $6.9 billion and $18.6 billion a year, mainly attributed to higher public assistance costs, lower tax revenues, increased child welfare, and higher criminal justice costs.[18] Unintended births, which account for about 40 percent of teenage pregnancies, cost more than $1.3 billion in direct health expenditures each year, while induced and spontaneous abortions among teenagers cost more than $180 million.[19]

Induced abortion is another consequence of unintended pregnancy. There is approximately one abortion for every three live births annually in the United States, a ratio 2 to 4 times higher than that in many other Western democracies. This is in spite of the fact that access to abortion in those countries is often easier than it is here and the numbers of abortions in this country have been declining over the past 15 years.[20] Just as unintended pregnancy occurs across the spectrum of age and socioeconomic status, women of all reproductive ages, married or unmarried, and in all income categories obtain abortions. In 1992, for example, fewer than 25 percent of all abortions were obtained by teenagers.

One obvious point is often overlooked: family planning reduces the need for abortion.[21] Abortion results when women have unintended pregnancies, and adequate access to family planning services reduces the incidence of unintended pregnancies. Each year publicly subsidized family planning services prevent an estimated 1.3 million unintended pregnancies.[22] It is estimated that for every dollar spent on publicly funded contraceptive services, 3 dollars were saved in Medicaid bills for pregnancy-related health care and medical care for newborns.[23]

Even though family planning has certainly demonstrated success, there are a number of issues that need to be dealt with if the goal of ensuring that every U.S. pregnancy is intended is to be attained. It is neither fair nor realistic to expect individuals to avoid unintended pregnancies if they are not assured adequate access to comprehensive family planning services. Gaps in service and coverage still exist and the role of private health insurance in covering family planning and contraceptive services is modest. Health insurance coverage is not universal; even for those who are covered by private insurance, family planning and contraceptive services are frequently not included or may require deductibles or copayments.[24] Although 9 in 10 fee-for-service insurance plans routinely cover sterilizations, half provide no contraceptive coverage at all, and only 15 percent cover five of the most effective medical methods of family planning: Norplant, Depo-Provera, IUDs, oral contraceptives, and the diaphragm. This selection reflects a traditional bias toward coverage of surgical services but not preventive care. Only 22 percent of these plans routinely cover contraceptive counseling. While coverage of sterilization is similar in health maintenance organizations, contraceptive coverage is better. Nearly all HMOs cover contraceptive counseling, 4 in 10 typically cover all five medical methods, and only 7 percent provide no coverage.[25]

Although unintended pregnancies occur among women of all socioeconomic levels, marital status, and age groups, unmarried women, poor women, and African-American women, as well as women at either end of the reproductive age span, are especially likely to become pregnant unintentionally.[26] These women also are the least likely to have the resources necessary to access family planning services and the most likely to be negatively affected by an unintended pregnancy. It is for this reason that publicly subsidized family planning services are so important. Half of all women who are at risk of unintended pregnancy and need publicly subsidized family planning services are not getting them, despite the efforts of various private and public organizations, including Federal programs.[27] Clearly, while these programs have contributed substantially to preventing unintended pregnancy, the need for services continues to outstrip available resources.

Difficulty in obtaining and paying for care is, of course, exacerbated for poor and low-income individuals. Thus, there are several Federal programs supporting family planning services, with most targeting poor or low-income women. The Medicaid program is the largest, but reimbursement for family planning services is typically not available to adolescents, women without children, women who are married, and working poor women whose income may just exceed the eligibility level.

An estimated 6.6 million women receive services from subsidized family planning providers annually, slightly less than one-half of those considered to be in need of subsidized family planning services (those at risk of unintended pregnancy and with a family income less than 250 percent of the poverty level).[28] Nearly 5 million of these women are served by Title X funded family planning programs, the only Federal effort focused exclusively on family planning. Organized family planning programs provide nearly 40 percent of family planning services in the United States. The system is made up of an estimated 3,000 agencies with over 7,000 clinic locations in which subsidized family planning services are provided. Health departments make up nearly half of this universe, while hospitals, community health centers, and other public and nonprofit organizations make up the remainder.

Organized family planning service providers are financed through both private and public sources. Federal funding for reproductive health and family planning services—$554 million in 1994—comes primarily from four programs: Title X of the Public Health Service Act, the Maternal and Child Health Block Grant, the Social Services Block Grant, and Title XIX (Medicaid) of the Social Security Act. State funds—$162 million in 1994—account for almost all of the remaining public sector expenditures for family planning services. Sources of private sector funds include direct patient fees, private contributions, and insurance plans.[29]

A 1995 survey of the Nation's family planning agencies estimated that only three-fourths provided contraceptive services to hard-to-serve populations such as men, substance abusers, disabled persons, incarcerated men and women, homeless persons, and non-English-speaking minorities. Furthermore, we do not know if those agencies that did provide services targeted services to special populations or simply provided care to those who happened to seek it.[30] The need for family planning services among these groups is undeniably great. In the case of substance abuse, the link between illegal drug use and infection with HIV has meant more Federal and State funding for programs designed to reach this population. This may explain why substance abusers are more likely to be targeted by family planning agencies than other hard-to-reach populations. Some of the programs focus specifically on HIV prevention, while others offer comprehensive family planning services and related education and counseling.[31]

Language and cultural differences are significant barriers to serving non-English-speaking minority populations. Providers report that they often have difficulty finding staff with appropriate language skills who also have adequate family planning skills and experience. Furthermore, it is not enough simply to speak the language of the client; the provider must also be able to relate on a cultural level.[32] Many people of some ethnic backgrounds are uncomfortable talking to strangers about intimate topics such as sex and birth control, let alone undergoing a pelvic or breast exam. Some groups tend not to seek preventive services, visit a doctor only when they are sick, and act passive about seeking family planning services. Reaching such populations can therefore be difficult.

Providing outreach, education and clinical services to hard-to-reach populations is expensive. These populations are often poor and do not have Medicaid or health insurance. Frequently they have more health problems than less-disadvantaged family planning clients, and these health problems are not necessarily confined to family planning. One study of San Francisco women estimates that it costs twice

as much to provide services to homeless women as it does to nonhomeless women, because homeless women are at such high risk of gynecological problems that they must undergo a complete exam and diagnostic workup at every visit. Disabled individuals often require extra staff, equipment, and time (especially if they are clients with developmental disabilities, so as to ensure contraceptive compliance and to deal with side effect issues). The extra time, effort, and expense required to reach hard-to-serve groups undoubtedly discourages some family planning agencies from implementing special programs for these populations.[33]

Finally, public education and information about family planning needs to be expanded. Numerous studies and polls indicate a disturbing degree of misinformation about contraceptive methods. The modest health risks of oral contraceptives are frequently exaggerated while the more considerable benefits are underestimated. Knowledge about emergency contraception is not widespread, and the relative effectiveness of various contraceptive methods is often not well understood. Moreover, the risk of unintended pregnancy in the absence of contraceptive use is underestimated and there is a substantial lack of accurate information on STDs and reproductive health in general.[34] One of the main sources of information and education in the Nation, the media, should be encouraged to help in the task of conveying accurate and balanced information on contraception and sexual behavior, highlighting the benefits as well as the risks of contraceptives.

Progress Toward Year 2000 Objectives

Of the 12 family planning objectives, progress has been made in 7 objectives (5.2, 5.3, 5.5, 5.6, 5.8, 5.11, and 5.12). Objective 5.1 (adolescent pregnancy) still remains distant from the target. Data were not available to update three objectives (5.7, 5.9, and 5.10). Updated information on contraceptive failure rates, needed to calculate an update to objective 5.7, will be available soon.

- Progress toward reducing adolescent pregnancy (5.1) from a baseline of 71.1 per 1,000 (in 15- to 17-year-old females) to a level of 50 per 1,000, remains distant. In 1992, there were 72.9 pregnancies per 1,000.

- Overall, the rate of unintended pregnancy (5.2) dropped from 56 percent to 49 percent between 1988 and 1995, with similar declines noted for African-American and Hispanic women—short of the target of 30 percent, but encouraging progress.

- Progress has been made to reduce levels of infertility (5.3). The baseline figure of 7.9 percent of all married couples experiencing infertility had dropped to 7.1 percent, not far from the target level of 6.5 percent.

- Progress toward postponement of adolescent sexual intercourse (5.4) was mixed. Although fewer 15-year-old males and females and fewer 17-year-old males had engaged in sexual intercourse, the proportion of 17-year-old females who had sexual intercourse increased slightly. For adolescents overall, data from the National Survey of Family Growth (NSFG) indicate that the proportion of females aged 15 to 19 who have ever had sexual intercourse dropped from 55 percent in 1990 to 50 percent in 1995.

- The proportions of both adolescent males and females who engaged in sexual intercourse during the last 3 months have declined (5.5). All sexually active females aged 15 to 17 years reported an increase in abstinence from the baseline of 23.6 percent to 27 percent in 1995. The abstinence of in-school males aged 15 to 17 rose from 30 percent in 1990 to 34 percent in 1995.

- Contraceptive use by sexually active adolescents is increasing (5.6). The proportion of sexually active unmarried females aged 15 to 19 who used contraception at first intercourse rose from the 1988 baseline of 63 percent to 77 percent in 1995. Females of the same age group using contraceptives at recent intercourse rose from 78 percent in 1988 to 84 percent by 1995. Dual use of oral contraceptives and condoms at recent intercourse by females rose from the very low level of 2 percent in 1988 to 8 percent in 1995.

- Data from various sources indicate progress in the proportion of young people who have received some type of information about human sexuality and pregnancy prevention. (5.8)

- Limited data are available for updating objective 5.11. Data available for family planning clinics indicate that between 1990 and 1994, HIV client pretest counseling and testing rose from 66 percent to 81.8 percent and from 60 percent to 73.5 percent, respectively.

- Contraceptive use in females aged 15 to 44 years (objective 5.12) rose by about 4 percent from 88.2 percent in 1982 to 92.5 percent in 1995, approaching the 2000 target of 95 percent.

Draft 2010 Objectives

Planned Pregnancy

The former Healthy People 2000 objective 5.2 focused on reducing unintended pregnancy. In order to communicate a broader national goal that all pregnancies should be intended, this objective is now being recast in a positive statement as a measure of planned pregnancies (i.e., intended at conception—wanted at the time, or sooner, irrespective of whether or not contraception was being used).

1. **(Former 5.2) Increase to at least 70 percent the proportion of all pregnancies among women aged 15-44 that are planned (i.e., intended).** (Baseline: 49 percent of pregnancies were unintended, either unwanted or earlier than desired in 1995)

Select Populations	1995
African American, non-Hispanic	72%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	49%
White, non-Hispanic	43%
Mother aged <15	82%
Mother aged 15-19	78%
Mother aged 20-24	59%
Mother aged 25-29	40%
Mother aged 30-34	33%
Mother aged 35-39	41%
Mother aged >40	51%
<100% of Federal poverty level	61%
100-199% of Federal poverty level	53%
≥200% of Federal poverty level	41%
Mother with disability	Not available
Mother without disability	Not available
Mother currently married	31%
Mother formerly married	63%
Mother never married	78%

Technical Note: Unintended pregnancies include births that were not wanted at the time of conception, births that were not wanted at all, and abortions. Estimates of pregnancies that were unintended are derived from four sources: (1) births registered in the United States in 1994; (2) the proportion of recent births that were unintended according to the 1995 NSFG; (3) abortion estimates based on State reports compiled by CDC; and (4) a 1994 national survey of all known abortion providers, conducted by the Alan Guttmacher Institute, projected to obtain national estimates for 1993 and 1994, based on trends observed in States that had consistent data collection procedures between 1992 and 1994. In calculating these estimates, the proportion of births unintended from the NSFG are applied to all registered births and summed with abortion, divided by all births and abortions combined.

Potential sources of error in these data sources are discussed in detail in the following three sources: (1) Henshaw SK, "Unintended Pregnancy in the United States." *Family Planning Perspectives* 30 (Jan/Feb 1998); (2) CDC, "Abortion Surveillance—United States, 1993 and 1994, Special Focus:

Surveillance for Reproductive Health." *Morbidity and Mortality Weekly Report* 46 (SS-4)(August 8, 1997); (3) Henshaw SK and Kost K, "Abortions Patients in 1994-1995: Characteristics and Contraceptive Use." *Family Planning Perspectives* 28 (July/Aug 1996).

Known pregnancies that ended in fetal loss (e.g., miscarriage, stillbirth, or ectopic pregnancy) are excluded in the derivation of the estimates presented. However, it was found that incorporating information on the planning status of pregnancies resulting in fetal loss, as reported in the 1995 NSFG, had very little impact on the proportions shown.

Target Setting Method: Between 1988 and 1995, the proportion of all pregnancies that were unintended dropped by 7 percent, from 56 percent to 49 percent. The proposed target would carry over the Healthy People 2000 goal of 30 percent, which still represents an ambitious target for the year 2010. Achieving the 30 percent target (that reflects the current proportion of unintended pregnancies among females aged 30 to 34 and married women generally) would require a 19 point reduction (more than double the 1987-94 reduction) between the baseline and 2010.

The alternative would be a more realistic target of 40 to 42 percent. This would assume a continued reduction between 7 and 9 points (paralleling the 1988 to 1995 level of reduction). Such a target also would reflect the current rates of unintended pregnancy among non-Hispanic white females, 15 to 44; females in the 35 to 39 age group; and women with incomes above 200 percent of the poverty level.

Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

A recent study of unintended pregnancy rates in the United States shows a significant decline in the rates of unintended pregnancy, probably as a result of higher contraceptive prevalence and use of more effective methods. Between 1987 and 1994, the proportion of pregnancies that were unintended declined from 57 to 49 percent.[35] By comparison the rate of unintended pregnancy is much lower in some other countries. In 1994-95, it was 39 percent in Canada, and it was 6 percent in the Netherlands.[36] Overall, women in the United States spend three-fourths of their reproductive years trying to avoid unintended pregnancy.[37] In 1994, nearly one-half (48 percent) of American women aged 15 to 44 had at least one unintended pregnancy in their lifetime, more than one-fourth (28 percent) had one or more unplanned births, nearly one-third (30 percent) had one or more abortions, and 1 in 10 (11 percent) had both an unintended birth and an abortion.[38] Unintended pregnancy is often mistakenly perceived as predominantly an adolescent problem. However, unintended pregnancy is a problem among all age groups. In 1994, the proportion of pregnancies unintended was 82 percent for females under age 15, 83 percent for females aged 15 to 17, and 75 percent for females aged 18 to 19. The percent drops for females aged 30 to 34 and then begins increasing again, up to 51 percent for women over 40. Among married women, 31 percent of pregnancies are unintended, compared to 63 percent among formerly married women and 78 percent among never-married women.[39]

Repeat Unintended Births

2. (Developmental) Reduce to __ percent the proportion of repeat unintended births (unintended births occurring within 2 years of a previous unintended birth) among births in the last 5 years.

Potential Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

To the extent that very closely spaced pregnancies are not planned (and clinicians have a strong impression that that is often the case), unintended pregnancy may increase the risk of low birthweight.[40] In the

developing world, closely spaced births are associated with increased risk of infant mortality and, less definitively, with increased risk of low birthweight. For adolescents, bearing a child is associated with poor outcomes for young women and their children. Giving birth to a second child while still a teen further increases these risks. The prevention of second and higher order births to very young women is of great interest to public health. Research has shown that such births are associated with physical and mental health problems for the mother and the child.[41] For teen mothers on welfare, a subsequent birth during adolescence reduces the likelihood of getting off welfare. Yet, recent analyses indicate that in the 2 years following the first birth, teen mothers have a second birth at about the same rate as other mothers. In 1995, nearly one in every five births to teen mothers was a birth of second order or higher.[42]

Contraceptive Use, Females 15-44

3. (Former 5.12) Increase to at least 95 percent the proportion of all females aged 15 to 44 at risk of unintended pregnancy who use effective contraception. (Baseline: in 1995, 84 percent of all females aged 15 to 44 at risk of unintended pregnancy used effective contraception)

Select Populations	**1995**
African American, non-Hispanic	81.7%
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	81.5%
White	84.5%
Female aged 15-19	77.3%
Female aged 20-24	87.8%
Female aged 25-29	87.7%
Female aged 30-34	86.5%
Female aged 35-39	80.8%
Female aged 40-44	75.1%
0-149% of Federal poverty level	81.6%
150-299% of Federal poverty level	82.4%
300+% of Federal poverty level	86.0%
Disability status	Not available
Marital status	Not available

Technical Note: Women "at risk of unintended pregnancy" is defined as women who had intercourse in the previous 3 months who are not pregnant, not seeking pregnancy, and not postpartum nor surgically or nonsurgically sterile.

Target Setting Method: The Healthy People 2000 goal of 95 percent has been retained, but the focus of the objective has been modified to shift the measure from any contraceptive use to "use of effective contraception." (In this definition, withdrawal with its high failure rates is not considered an effective method.) There has been substantial progress toward the Healthy People 2000 goal; the percentage of women at risk using some form of contraception rose from 88.2 in 1988 to 92.5 in 1995. With the modified objective shifting emphasis to use of effective methods, the Healthy People 2010 adjusted baseline becomes 84 percent. Increasing the use of effective contraception to 95 percent by 2010 will be a challenging national goal and would dramatically reduce occurrences of unintended pregnancy.

Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

Contraceptive Failure, Females 15-44

4. (Former 5.7) Decrease to no more than 7 percent the proportion of women aged 15-44 experiencing pregnancy despite use of a reversible contraceptive method. (Baseline: in 1988, approximately 14 percent of women using reversible contraceptive methods experienced an unintended pregnancy)

Select Populations	1988
African American, non-Hispanic	17.6
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic females	16.4
White, non-Hispanic	12.7
Age group	Not available
Socioeconomic status	Not available
Disability status	Not available
Marital status	Not available

Target Setting Method: Retain year 2000 target.

Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

The public health benefits of improved contraceptive practices are potentially enormous. Whether fertile men and women who are sexually active and do not want to get pregnant experience an unintended pregnancy is a function of their choice of contraceptive methods and how effectively they are able to use them. Poor or nonexistent contraceptive use is one of the main causes of unintended pregnancy, with unintended pregnancy occurring principally among two groups: (1) women using reversible contraception (i.e., methods other than sterilization) because of contraceptive failure or improper use, and (2) women using no contraception. In the United States, a small proportion of women who are at risk of unintended pregnancy use no methods; they account for over half of all unintended pregnancies. Decreasing the proportion of sexually active individuals using no method and increasing the effectiveness with which people use contraceptive methods would do much to lower the unintended pregnancy rate.[43] It has been estimated that just reducing the proportion of women not using contraception by half could prevent as many as one-third of all unintended pregnancies and 500,000 abortions per year.[44]

The trend in contraceptive use in this country is increasing: figures for all women aged 15 to 44 in 1982, 1988, and 1995 were 55.7 percent, 60.3 percent, and 64.2 percent, respectively.[45] Between 1988 and 1995, most of the increase in contraceptive use was due to the increased prevalence of condom use, from 15 percent to 20 percent. This trend is especially prevalent among women who are under 25, African-American, Hispanic, or unmarried. The increase in reliance on condoms was accompanied by a decrease in the use of oral contraceptives (from 31 percent to 27 percent) and the diaphragm (from 6 percent to 2 percent).[46] This trend may suggest that concerns about HIV and other STDs are changing patterns of method use among women.

Contraceptive Alternatives

5. (Developmental) Increase to __ percent the proportion of family planning clinics that provide, either directly or through referral, postcoital hormonal contraception.

Potential Data Source: Alan Guttmacher Institute.

The *U.S. Guide to Clinical Preventive Services* identifies postcoital administration of emergency contraceptive pills (ECP) after unprotected intercourse as an effective means of reducing subsequent pregnancy. ECP is estimated to reduce the risk of subsequent pregnancy by 75 percent. Yet, this method, which has the public health potential of significantly reducing unintended pregnancy, is not well known and not yet widely available to the public. Several developments in recent years, however, have formalized recognition within the medical community of ECP as an effective means of birth control. In 1996, the American College of Obstetrics and Gynecology issued practice patterns for emergency oral contraception. That document also identifies challenges to the more frequent use of this therapy as including physician awareness of the method, public awareness of the method's availability, and access by patients to a physician who will prescribe the method.[47] More recently, in February 1997, the Food and Drug Administration issued a public notice in the *Federal Register* announcing that certain regimens of combined oral contraceptives are safe and effective for ECP when initiated within 72 hours after unprotected intercourse and invited drug companies to submit packaging and labeling for oral contraceptive products specifically for emergency use.[48] Surveys indicate that knowledge and use of postcoital contraception remains low among patients and clinicians alike.[49] According to data from the NSFG, in 1995, less than 1 percent of women in the United States reported ever having used "morning after" pills.

Male Involvement

6. (Developmental) Increase male involvement in pregnancy prevention and family planning as measured by the increase with which health providers provide outreach, education, or services to men.

Potential Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

The next cycle of the NSFG will be expanded to include men. This provides an avenue for institutionalizing data collection about male fertility that will be reflected in the Healthy People 2010 objectives. Over the course of Healthy People 2010, male measures for family planning objectives will shift from the National Survey of Adolescent Males (NSAM) to be subsumed into the NSFG. The NSFG will be able to collect information about sexual activity, contraceptive use, and pregnancies to which they contribute and the outcomes of these pregnancies, as well as male perceptions of their and their partners' views on the intendedness of pregnancies and births. NSFG will cover a broader range of male age groups than had been covered under the NSAM (males aged 15 to 19 only).

There is a lack of systematic information about how males could and should participate in pregnancy prevention programs. For many years reproductive policy in the United States concentrated almost entirely on women. NSAM, begun in 1988 by the Urban Institute, and repeated again in 1995, collected the first national trend data on the reproductive behavior of teens that addressed males rather than females. A recent Urban Institute survey of publicly funded family planning clinics found that in only 13 percent of clinics do males make up more than 10 percent of the total clientele. On average just 6 percent of clients are men.[50] Men represent an even smaller share of clients who receive family planning services subsidized by the Title X program (2 percent in 1991) or by Medicaid (2 percent in 1990).[51]

Several related developments in public health and welfare point to a real need to increase male involvement in pregnancy prevention and family planning: (1) the need to promote condom use and address HIV and STD prevention, (2) the move to managed care makes providing services to men increasingly part of a marketing strategy, and (3) increasing emphasis on male responsibility in welfare and

child support enforcement programs makes their involvement key. Concern about the spread of HIV and other STDs and the recognition of condoms as the most effective way of preventing transmission during intercourse has accentuated the need to change the reproductive behavior of males. The need for rapid treatment of the male partners of females testing positive for bacterial STDs also is a critical element in slowing not only STD spread, but also that of HIV, again supporting the urgency to target men.

Adolescent Pregnancy

7. (Former 5.1) Reduce pregnancies among females aged 15-17 to no more than 45 per 1,000 adolescents. (Baseline: in 1994, 76 pregnancies per 1,000 females aged 15-17)

Select Populations	**1994**
African American, non-Hispanic aged 15-17	150
American Indian/Alaska Native aged 15-17	Not available
Asian/Pacific Islander aged 15-17	Not available
Hispanic aged 15-17	114
White, non-Hispanic aged 15-17	49
Socioeconomic status	Not available
Disability status	Not available

Notes: Estimates of pregnancy rates shown in this section are the sum of the three outcomes—live birth, induced abortion, and fetal loss. Data on live births are complete counts of all births occurring in the United States and reported to NCHS, part of CDC. Estimates of induced abortion are based on reports by CDC and the Alan Guttmacher Institute (AGI). AGI's national estimates of abortions, based on surveys it conducts of all known abortion providers, are distributed by age and race according to estimates prepared by CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), which are based on reports from State health departments. Estimates of fetal losses are based on sample survey data from the 1995 NSFG, conducted by the NCHS. Women participating in this survey were asked to report the dates and outcomes of each of their pregnancies, including spontaneous fetal losses from recognized pregnancies. The fetal loss estimates shown here are based on averages for the 5 years before the 1995 survey.

Teenagers under 15 years. It is estimated that teenagers under the age of 15 experience about 30,000 pregnancies each year. This translates to a pregnancy rate of about 3 per 1,000 teens aged 10 to 14 years. There is widespread consensus that all pregnancies in this age group are inappropriate, and that whatever the number is, the target number should be 0. Nearly two-thirds of pregnancies in this age group end in induced abortion or fetal loss. Because of the relatively small numbers of events and small sample sizes (for fetal losses) involved, the resulting rates are not as stable as for older women. Therefore, baseline and target data for pregnancies among adolescents under 15 years are not included in this objective.

Target Setting Method: Better than the best. The current pregnancy rate for non-Hispanic white females, aged 15 to 17, is 49 per 1,000. The Healthy People 2000 goal is 50 per 1,000. The pregnancy rate for females aged 15-17 years declined 6 percent from a high of 80.3 per 1,000 in 1990 to 75.5 for the baseline in 1994. The proposed Healthy People 2010 target of 45 per 1,000, however, represents an extremely ambitious reduction for non-Hispanic African Americans and Hispanics with baselines of 150 and 114 per 1,000, respectively. For these groups, a reduction to the overall national level of 76 per 1,000 would still be an ambitious but probably more realistic goal.

Data Sources: Abortion Provider Survey, Alan Guttmacher Institute; National Vital Statistics System (NVSS), CDC, NCHS, National Survey of Family Growth (NSFG), CDC, NCHS.

Over 12 percent of teens aged 15 to 19 become pregnant each year, resulting in about half a million births to teenage mothers.[52] The teenage pregnancy rate in the United States is much higher than in many other developed countries—twice as high as in England and Wales, France, and Canada; and 9 times as high as in the Netherlands or Japan.[53] The issue of adolescent pregnancy remains one of intense national concern, both within the context of public health and welfare reform and as an issue of realizing the optimum potential of the country's youth, as well as the growth and development of newborns.[54] Of the 781,900 pregnancies (live births and induced abortions) to women aged 15 to 19 in 1994, 78 percent were unintended, with 42.7 percent ending in unintended births and 35.3 percent in abortion.[55] Most adolescent childbearing occurs outside marriage, a trend that has increased markedly during the last two decades. In 1996, 76 percent of births to adolescents (under 20) were out-of-wedlock compared to 41 percent two decades earlier (1976).

Adolescent Sexual Behavior

8. (Former 5.4) Reduce to no more than 12 percent the proportion of individuals aged 15-19 who have engaged in sexual intercourse before the age of 15. (Baseline: in 1995, 19.4 percent of females and 21.4 percent of males aged 15-19 had engaged in sexual intercourse before age 15)

Select Populations	**1995**
Male aged 15-19	
Total	21.4
African American, non-Hispanic	48.9
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	27.5
White, non-Hispanic	14.5
Female aged 15-19	
Total	19.4
African American, non-Hispanic	30.7
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	24.5
White, non-Hispanic	16.8

Target Setting Method: Better than the best; 45 percent improvement.

Data Sources: Females—National Survey of Family Growth (NSFG)**,** CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

9. (Former 5.4) Reduce to no more than 25 percent the proportion of individuals aged 15-17 who have ever had sexual intercourse. (Baseline: in 1995, 38 percent of females and 43 percent of males aged 15-17 ever had sexual intercourse)

Select Populations	1995
Male aged 15-17	
Total	43
African American, non-Hispanic	76
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	50
White, non-Hispanic	35
Female aged 15-17	
Total	38
African American, non-Hispanic	48
American Indian/Alaska Native	Not available
Asian/Pacific Islander	Not available
Hispanic	51
White, non-Hispanic	35

Target Setting Method: Better than the best; 35 percent improvement.

Data Sources: Females—National Survey of Family Growth (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

Sexual experience, and particularly age at first intercourse, represents a critical indicator of the risk of pregnancy and STDs. Youth who begin having sex at younger ages are exposed to these risks over a longer period of time. In addition, research has shown that youth who have early sexual experience are more likely at later ages to have more sexual partners and more frequent intercourse.[57] Adolescents should be encouraged to delay sexual intercourse until they are physically, cognitively, and emotionally ready for mature sexual relationships and their consequences. They should receive education about intimacy; sexual limit setting; resistance to social, media, peer, and partner pressure; the benefits of abstinence from intercourse; and prevention of pregnancy and STDs. Since many adolescents are or will be sexually active, they should receive support and assistance in developing the skills to evaluate their readiness for mature sexual relationships.

Contraceptive Use for Pregnancy Prevention and STD Protection Among Individuals Aged 15-19

10. (Former 5.6) Increase by at least 10 percent the proportion of sexually active, unmarried individuals aged 15-19 who use contraception that both effectively prevents pregnancy *and* provides barrier protection against disease. (Baseline: in 1995, 37 percent of unmarried females and 62 percent of unmarried males aged 15-19 used a condom at last intercourse. Nine percent of unmarried females and 17 percent of unmarried males aged 15-19 used a condom plus a hormonal method at last intercourse.)

Select Populations	1995		2010 Target	
	Condom	Condom+ Hormonal	Condom	Condom+ Hormonal
Male: First Intercourse				
Total	76	7	86	17
African American, non-Hispanic	71	10	81	20
American Indian/Alaska Native	*	*	*	*
Asian/Pacific Islander	*	*	*	*
Hispanic	60	5	70	15
White, non-Hispanic	82	6	92	16
Male: Last Intercourse				
Total	62	17	72	82
African American, non-Hispanic	70	19	80	29
American Indian/Alaska Native	*	*	*	*
Asian/Pacific Islander	*	*	*	*
Hispanic	52	8	62	18
White, non-Hispanic	64	18	74	28
Female: First Intercourse				
Total	68	6	78	16
African American, non-Hispanic	60	8	70	18
American Indian/Alaska Native	*	*	*	*
Asian/Pacific Islander	*	*	*	*
Hispanic	48	2	58	12
White, non-Hispanic	74	6	84	16
Female: Last Intercourse				
Total	37	9	47	19
African American, non-Hispanic	39	8	49	18
American Indian/Alaska Native	*	*	*	*
Asian/Pacific Islander	*	*	*	*
Hispanic	22	1	22	11
White, non-Hispanic	40	10	50	20

* Not available.

Note: This objective uses two surveys for the baseline: (1) NSFG for information on female adolescents, and (2) NSAM for a comparable measure for male adolescents. However, the NSFG will be used for tracking the objective for both males and females, as the NSFG is expected to collect comparable data on males in the future and to thereby replace the NSAM. Last intercourse refers to individuals who have had intercourse in the 3 months prior to interview. The NSFG data on first intercourse refer to females who had their first premarital voluntary intercourse in 1990-1995 at less

than 20 years of age. Data on first intercourse for males refers to males 15-19 in 1995 who had ever had intercourse.

Target Setting Method: 10 percent improvement.

Data Sources: Females—National Survey of Family Growth (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

Sexual intercourse without contraception puts a teen at risk of pregnancy and of contracting STDs, including HIV/AIDS. The vast majority of teens do not want to become pregnant. Condoms and birth control pills are the most common forms of contraception used by sexually active teenagers. Among sexually active teens using contraceptive methods, there have been marked changes in the types of methods selected. Condom use at last intercourse has risen substantially and significantly among both male and female teenagers, suggesting more protection from STD transmission. Condom use at first intercourse has also risen. This indicator is an important measure of how well teens anticipate and plan for protection at the initiation of sexual activity, when they experience intercourse at their youngest age. While condom use has risen among most teenagers, the use of oral contraceptives has dropped dramatically, suggesting greater vulnerability to unintended pregnancy if other hormonal methods or consistent use of condoms is not employed. Among currently sexually active females, the use of oral contraceptives at last intercourse fell from 42 percent to 23 percent. The reductions in the use of oral contraception are evident across African-American, Hispanic, and white teenagers of both sexes. Some of the reduction in oral contraceptive use is counteracted by the adoption of new hormonal methods of contraception such as Norplant and Depo-Provera. In 1995, 7 percent of female teens overall used these methods. They were most widely used among African-American female teens: 16 percent reported using Norplant or Depo-Provera at last intercourse.[58]

This objective aims to increase the proportion of young people who use contraception that effectively prevents pregnancy and provides protection against disease—whether a condom to accomplish both goals or an effective contraceptive method plus a condom. While the condom can accomplish both goals, it is very effective at preventing the transmission of STDs and HIV but less effective than some other contraceptive methods at preventing pregnancy. Hormonal methods, by contrast, are very effective at preventing pregnancy but offer no protection against STDs and HIV. For the purposes of this objective, contraception that effectively protects against pregnancy has been limited to hormonal methods including oral contraceptives, injectables (Depo-Provera) and implants (Norplant). Other possible contraceptive methods were not included for various reasons: sterilization rates among adolescents are very low and generally not considered to be an appropriate method for this age group; use rates for IUDs and diaphragms are very low for this age group; and methods such as withdrawal, foam, suppositories, and rhythm are generally less effective means of pregnancy prevention. Contraception that provides barrier protection against disease and pregnancy is measured by condom use.

Pregnancy Prevention Education

11. (Former 5.8) Increase to at least (90) percent the proportion of individuals aged 18 through 24 who have received formal instruction before turning 18 on reproductive health issues, including (a) birth control methods, (b) safe sex to prevent HIV, (c) STDs, and (d) abstinence. (Baseline: in 1995, 64 percent of females aged 18-24 reported having received formal instruction on reproductive health issues before turning 18. In 1995, 64 percent of males aged 18-19 reported ever having received formal instruction.)

Select Populations	1995
Male	
Total aged 18-24	Not available
Aged 18-19	64%
Aged 20-24	Not available
Female	
Total aged 18-24	64%
Aged 18-19	80%
Aged 20-24	57%

Target Setting Method: Better than the best.

Data Sources: Females—National Survey of Family Growth, (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

12. (Developmental) Increase to __ percent the proportion of public and private elementary, middle/junior, and senior high schools that require instruction on human sexuality, pregnancy prevention, STD prevention, and HIV prevention that provide students with information and skills related to abstinence and contraceptive use. (Elementary School data not available.)

Schools teaching a required course in:	Middle/Junior High Schools	Senior High Schools
HIV prevention	78.6%	90.0%
Human sexuality	78.0%	81.2%
Pregnancy prevention	56.8%	77.1%
STD prevention	77.0%	88.5%
Teachers teaching		
"Contraceptive methods to prevent pregnancy"	32.6%	61.5%
"Reasons for choosing sexual abstinence"	61.3%	71.3%

Potential Data Source: School Health Policies and Programs Study (SHPPS), CDC.

All adolescents need education that teaches them the interpersonal skills they will need to withstand pressure to have sex until they are ready and that includes up-to-date information about methods to prevent pregnancy and STDs. More important, they need to receive this education before they start having sex. Education and knowledge, however, are not enough on their own. Adolescents need strong reinforcement from parents, schools, the media, and other sources about the importance of making conscious, informed, responsible decisions regarding whether or not to have intercourse; about the necessity of consistent, correct condom use to protect themselves and their partners against STDs and HIV; and about the use of effective contraception to prevent unintended pregnancy.

Becoming a sexually healthy adult is a key developmental task of adolescence. Adults can encourage adolescent sexual health by providing accurate information and education about sexuality, fostering responsible decisionmaking skills, offering support and guidance in exploring and affirming personal values, and modeling healthy sexual attitudes and behaviors. Yet, according to a 1997 survey, most parents of 8- to 12-year-olds in families today do not talk enough about such important topics as relationships and becoming sexually active, violence, AIDS, alcohol, and drugs. When it comes to key issues such as handling pressure to have sex, becoming sexually active, and preventing pregnancy, most parents of 8- to 12-year-olds report they have not yet had these conversations with their children.[59]

Reduce the Prevalence of Impaired Fecundity

13. (Former 5.3) Reduce by 10 percent the prevalence of impaired fecundity among married couples. (Baseline: in 1995, 13 percent of married couples with wives aged 15-44 reported instances of impaired fecundity)

Select Populations	1995
African American, non-Hispanic married women	14%
American Indian/Alaska Native married women	Not available
Asian/Pacific Islander married women	Not available
Hispanic married women	13%
White, non-Hispanic married women	13%
Parity 0 married women	25%
Parity 1+ married women	10%

Note: Impaired fecundity is defined as a woman's self-report that it is impossible or difficult for her to get pregnant or carry a baby to term, or for her husband to impregnate her, or the couple has a history of 3 consecutive years of unprotected intercourse without a pregnancy.

Target Setting Method: 10 percent improvement.

Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

In 1988, 1 in 12 married women could be classified as infertile, and another 1 in 12 as having impaired fecundity. By 1995, there had been a small overall decline in infertility; this was more marked in Hispanic couples. Although infertility itself does not represent a serious public health threat, it carries significant personal, societal, and economic consequences that call for data surveillance and action. Infertility due to STDs is a preventable condition. Diagnosis and treatment of infertility are very costly, time-consuming, and invasive, and they can place immense stress on marital and family relations. Furthermore, those costs are likely to rise. The trend to delay childbearing (fecundity becomes increasingly impaired with age), the fact that fewer infants are available for adoption, and the development of new drugs and treatment procedures will mean that more and more couples seek expensive infertility services.

Related Objectives From Other Focus Areas

Access to Quality Health Services

A.3 Routine screening about lifestyle risk factors
A.4 Reporting on service delivery
A.5 Training to address health disparities

Maternal, Infant, and Child Health

9 Preconception counseling
14 Postpartum visits
34 Training in genetic testing
36 Genetic testing

Cancer
3 Breast cancer deaths
4 Cervical cancer deaths
10 Pap tests
13 Breast examination and mammogram

HIV
1 AIDS incidence
2 HIV incidence
3 Condom use
8 Classroom education on HIV and STDs
10 Mortality due to HIV infection

Immunization and Infectious Diseases
5 Hepatitis B, under 25
6 Hepatitis B in adults
8 Hepatitis C

Sexually Transmitted Diseases
1 Chlamydia
2 Gonorrhea
3 Primary and secondary syphilis
4 Herpes simplex virus type 2 infection
5 Human papillomavirus infection
6 Pelvic inflammatory disease
7 Fertility problems
10 Heterosexually transmitted HIV
14 Reimbursement for treatment of partners of STD patients
15 Training in STD-related services
16 Television messages
17 Screening for genital chlamydia
20 Compliance with CDC Guidelines for the Treatment of STDs
21 Provider referral services for sexual partners
22 Reimbursement for counseling on reproductive health issues
23 Provider counseling during initial visits

Resources

Abma, J.; Driscoll, A.; and Moore, K. Young women's degree of control over first intercourse: An exploratory analysis. *Family Planning Perspectives* 1998.

Chandra, A. Infertility. Reproductive health of women. In: *From Data to Action-CDC's Public Health Surveillance for Women, Infants and Children.*

Contraceptive Needs and Services. New York: The Alan Guttmacher Institute, 1995.

Delbanco, S. Improving the use of contraceptives: The challenge continues. *Obstetrics and Gynecology* 88(3) (supplement), September 1996.
Forrest, J.D. Epidemiology of unintended pregnancy and contraceptive use. *American Journal of Obstetrics and Gynecology* 170:1485-1488, 1994.

Guttmacher, S.; et al. Condom availability in New York City public high schools: Relationships to condom use and sexual behavior. *American Journal of Public Health* 87(9):1427-1433, 1997.

Healthy People 2000 National Health Promotion and Disease Prevention Objectives. DHHS publication no. (PHS) 91-50212. Washington, DC: U.S. Department of Health and Human Services, 1991.

Kaiser Family Foundation Surveys on Public Knowledge and Attitudes on Contraception and Unplanned Pregnancy in the United States, Canada and the Netherlands, 1995.

Mosher, W.D. "Contraception. Reproductive Health of Women." In: *From Data to Action CDC's Public Health Surveillance for Women, Infants and Children.*

Ooms, T. Not Just for Girls: Involving Boys and Men in Teen Pregnancy Prevention. Highlights of a Roundtable Meeting, February 11-12, 1997. National Campaign to Prevent Teen Pregnancy and the Family Impact Seminar.

Position Statement of the Sex Information and Education Council of the United States (SIECUS).

Programme of Action of the United Nations International Conference on Population and Development.

Sonenstein, F.L.; Stewart, K.; Lindberg, L.D.; Pernas, M.; and Williams, S. *Involving Males in Preventing Teen Pregnancy*. 1997.

Ventura, S.J., Maring, J.A., Curtin, S.C., Mathews, T.J. Report of Final Natality Statistics, 1996. *Monthly Vital Statistics Report*: Vol. 46, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1998.

Ventura, S.J., Taffel, S.M., Mosher, W.D., Wilson, J.B., Henshaw, S. Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-1992. *Monthly Vital Statistics Report*: Vol. 43, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1995.

References

1. *Healthy People 2000 Review*. Hyattsville, MD: National Center for Health Statistics, 1997.
2. Delbanco, S.; Lundy, J.; Hoff, T.; Parke, M.; and Smith, M.D. Public knowledge and perceptions about unplanned pregnancy in three countries. *Family Planning Perspectives* 29(2), March/April 1997.
3. Brown, S.S. and Eisenberg, L., eds. *Summary—The Best Intentions. Unintended Pregnancy and the Well-Being of Children and Families*. Institute of Medicine. Washington, DC: National Academy Press, 1995.
4. Henshaw, S.K. Unintended pregnancy in the United States. *Family Planning Perspectives*, 30(1):24-29&46, 1998.
5. Piccinino, L.J. and Mosher, W.D. Trends in contraceptive use in the United States: 1982-1995. *Family Planning Perspectives*, 30(1):4-10, 46, 1998.
6. *Guide to Clinical Preventive Services, 2nd Edition*. Report of the U.S. Preventive Services Task Force. Washington, DC: U.S. Department of Health and Human Services, 1996.
7. Ibid.
8. Ibid.
9. Ibid.
10. Ibid.
11. *Report to Congress on Family Planning Fiscal Years 1994-1995.*
12. Brown and Eisenberg, op. cit.

13. Piccinino, L.J. Unintended pregnancy and childbearing. Reproductive health of women. In: *From Data to Action—CDC's Public Health Surveillance for Women, Infants and Children.*
14. Dye, T.D.; Wojtowycz, M.A.; Aubry, R.A.; Quade, J.; and Kilburn, H. Unintended pregnancy and breast-feeding behavior. *American Journal of Public Health* 87:1709-1711, 1997.
15. *Sex and America's Teenagers*. New York: The Alan Guttmacher Institute, 1994.
16. *Report to Congress on Family Planning Fiscal Years 1994-1995.*
17. Lee, L.R. and Stewart, F.H. Editorial: Failing to prevent unintended pregnancy is costly. *American Journal of Public Health* 85(4), April 1995.
18. Maynard, R.A., ed. *Kids Have Kids: A Robin Hood Foundation Special Report on the Costs of Adolescent Childbearing,* 1996.
19. Trussell, J.; Koenig, J.; Stewart, F.; and Darroch, J.E. Medical care cost savings from adolescent contraceptive use. *Family Planning Perspectives* 29(6), November/December 1997.
20. Counseling to prevent unintended pregnancy. In: *Guide to Clinical Preventive Services, 2nd edition*, op. cit.
21. *Report to Congress on Family Planning Fiscal Years 1994-1995.*
22. *Title X and the U.S. Family Planning Effort.* New York: The Alan Guttmacher Institute, 1997.
23. Forrest, J.D. and Samara, R. Impact of publicly funded contraceptive services on unintended pregnancies and implications for Medicaid expenditures. *Family Planning Perspectives* 28:188-195, 1996.
24. Landry, D.A. and Forrest, J.D. Private physicians' provision of contraceptive services. *Family Planning Perspectives* 28 (5), September/October 1996.
25. *Uneven and Unequal: Insurance Coverage and Reproductive Health Services.* New York: The Alan Guttmacher Institute, July 1994.
26. Brown and Eisenberg, op. cit.
27. *Report to Congress on Family Planning Fiscal Years 1994-1995.*
28. Ibid.
29. Ibid.
30. Donovan, P. Taking family planning services to hard-to-reach populations. *Family Planning Perspectives* 28(3), May/June 1996.
31. Ibid.
32. Ibid.
33. Ibid.
34. Mauldon, J. and Delbanco, S. Public perceptions about unplanned pregnancy. *Family Planning Perspectives* 29(1), January/February 1997.
35. Henshaw, op.cit.
36. Delbanco, et al., op. cit.
37. Forrest, op. cit.
38. Henshaw, op. cit.
39. Ibid.
40. Brown and Eisenberg, op. cit.
41. Klerman, L. *Can Intervention Program Prevent Subsequent Births to Teenage Mothers*? Prepared for Program on Preventing Second Births to Teenage Mothers: Demonstration Findings. Sponsored by the American Enterprise Institute for Public Policy Research, March 6, 1998.
42. *Trends in the Well-Being of America's Children and Youth: 1997.* Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Health. 1997.
43. Westoff, C.D. Contraceptive paths toward the reduction of unintended pregnancy and abortion. *Family Planning Perspectives* 20(4):1988.
44. *Guide to Clinical Preventive Services, 2nd Edition*, op. cit.
45. Piccinino and Mosher, op. cit.
46. Ibid.
47. American College of Obstetrics and Gynecology Practice Patterns. *Evidence-Based Guidelines for Clinical Issues in Obstetrics and Gynecology*. Number 3, December 1996.
48. 62 *Federal Register* 8610. Prescription Drug Products; Certain Combined Oral Contraceptives for Use as Postcoital Emergency Contraception, February 25, 1997.
49. *Guide to Clinical Preventive Services, 2nd Edition*, op cit.
50. Schulte, M.M. and Sonenstein, F.L. Men at family planning clinics: The new patients? *Family Planning Perspectives* 27(5), September/October 1995.

51. Sonenstein, F.L.; Stewart, K.; Lindberg, L.D.; Pernas, M.; and Williams, S. *Involving Males in Preventing Teen Pregnancy.* 1997.
52. *Teenage Reproductive Health in the United States.* New York: The Alan Guttmacher Institute, 1994.
53. *Title X and the U.S. Family Planning Effort.* New York: The Alan Guttmacher Institute, 1997.
54. *Report to Congress on Family Planning Fiscal Years 1994-1995.*
55. Henshaw, op. cit.
56. Reference deleted.
57. *Trends in the Well-Being of America's Children and Youth: 1997.* Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 1997.
58. Abma, J. and Sonenstein, F. *Teenage Sexual Behavior and Contraceptive Use: In Update*. Paper presented at the May 1, 1998 American Enterprise Institute Sexuality and American Social Policy Seminar Series.
59. Kaiser Family Foundation and Children Now National Survey: Talking with Kids about Tough Issues. January 19, 1997 News Release.