

Unintended Pregnancy in the United States

by Stanley K. Henshaw

Context: *Current debates on how to reduce the high U.S. abortion rate often fail to take into account the role of unintended pregnancy, an important determinant of abortion.*

Methods: *Data from the 1982, 1988 and 1995 cycles of the National Survey of Family Growth, supplemented by data from other sources, are used to estimate 1994 rates and percentages of unintended birth and pregnancy and the proportion of women who have experienced an unintended birth, an abortion or both. In addition, estimates are made of the proportion of women who will have had an abortion by age 45.*

Results: *Excluding miscarriages, 49% of the pregnancies concluding in 1994 were unintended; 54% of these ended in abortion. Forty-eight percent of women aged 15–44 in 1994 had had at least one unplanned pregnancy sometime in their lives; 28% had had one or more unplanned births, 30% had had one or more abortions and 11% had had both. At 1994 rates, women can expect to have 1.42 unintended pregnancies by the time they are 45, and at 1992 rates, 43% of women will have had an abortion. Between 1987 and 1994, the unintended pregnancy rate declined by 16%, from 54 to 45 per 1,000 women of reproductive age. The proportion of unplanned pregnancies that ended in abortion increased among women aged 20 and older, but decreased among teenagers, who are now more likely than older women to continue their unplanned pregnancies. The unintended pregnancy rate was highest among women who were aged 18–24, unmarried, low-income, black or Hispanic.*

Conclusion: *Rates of unintended pregnancy have declined, probably as a result of higher contraceptive prevalence and use of more effective methods. Efforts to achieve further decreases should focus on reducing risky behavior, promoting the use of effective contraceptive methods and improving the effectiveness with which all methods are used.*

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The relatively high rate of unintended pregnancy in the United States¹ has received increasing attention as the immediate cause of both abortion and unplanned birth. For example, the Institute of Medicine recently published a report that summarized the consequences of unintended pregnancies that are carried to term and urged the adoption of a new national goal that all pregnancies be planned.² Improved fertility control would allow women and couples to have children when they feel best prepared socially and financially to assume the responsibilities of parenting.

The most accurate national estimates of unplanned birth have been based on the National Surveys of Family Growth (NSFG), a series of nationally representative surveys that collect detailed reproductive and contraceptive histories and related information from women of reproductive age. A study based on the 1988 NSFG estimated that 57% of pregnancies in 1987 (excluding miscarriages) were unintended; that is, they ended in induced abortion, the woman had wanted no children at that time or she had wanted no

more children ever.³ A study of births to ever-married women found that the proportion of births that were unplanned decreased from 38% in 1969–1973 to 32% in 1978–1982, then increased again to 35% in 1984–1988.⁴ Another study comparing the 1982 and 1988 NSFG survey results found that there had been no change in the unintended pregnancy rate between 1982 and 1987, but that the unintended birth rate had increased from 25 per 1,000 women aged 15–44 to 27 per 1,000, while the abortion rate fell by a similar amount.⁵ An earlier study based on the 1982 NSFG concluded that 46% of women aged 15–44 at the time of the survey had experienced one or more unintended pregnancies and that at 1982 rates, 46% would have at least one abortion by age 45.⁶

The publication of data from the 1995 NSFG⁷ provides information on the intendedness of births during the five years preceding the 1995 survey interviews, and can be used as the basis of an updated report on unintended pregnancy. In this article, we assess the prevalence of unintended pregnancy during this period, the

changes from 1987 to 1994 and the effect of changes in unintended pregnancy rates on rates of abortion and unplanned birth.

Data and Methodology

Data from the 1995 NSFG and from other sources are used to present estimates, for 1994, of the percentage of births and pregnancies that were unintended, the intended and unintended pregnancy rates, and the proportion of women who have ever had an unintended birth, an abortion or both. In addition, we have calculated the proportion of women who, at 1992 rates, will have had an abortion by age 45. For this analysis, unintended pregnancies were estimated as the sum of abortions and of births resulting from pregnancies reported as having been unintended.

Births

The most recent national data on the planning status of births come from the NSFG, a periodic fertility survey. In addition to the 1995 survey, we also use data from NSFGs conducted in 1982 and 1988.

The 1995 NSFG interviewed a nationally representative probability sample of 10,847 civilian women aged 15–44.⁸ Interviews were conducted between January and October 1995 and included questions on the planning status of each pregnancy experienced by a respondent. Following the NSFG definition, births were categorized as unplanned if the woman had been practicing contraception when she became pregnant, if she had not wanted to become pregnant until a later time or if she had wanted no more children ever. The pregnancy was considered intended if the woman had not been practicing contraception and reported that she had not cared whether she became pregnant. The small number of births for which intention status was undetermined (0.3%) were distributed proportionally.

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This information was used to determine the proportion of unplanned births among NSFG respondents in the five years preceding the interview. We chose the five-year period to ensure that the sample size would be large enough to yield a stable proportion. We estimated the number of unplanned births in the United States by multiplying the resulting proportion with the number of births reported in 1994 by the National Center for Health Statistics (NCHS).⁹

We also estimated unplanned births for 1994 according to the mothers' age, marital status, poverty status, race, ethnicity and contraceptive use during the month of conception. Since the number of births by poverty status is not published by the NCHS, we used the poverty distribution of births, as tabulated from the NSFG. Births to unmarried women are reported by the NCHS, but we used NSFG tabulations to further categorize these women as formerly married or never-married.

For 1981 and 1987, the proportions of unplanned births were taken from published 1982 and 1988 NSFG results¹⁰ and applied to the numbers of births in 1981 and 1987.¹¹ While the NSFG coded the woman as married or unmarried for each birth, it did not include a category for formerly married women. For this reason, we were unable to calculate marital status for 1981.

Finally, using the 1995 NSFG data, we estimated the proportion of U.S. women in 1994 who had ever had an unplanned birth. In the interests of simplicity and comparability with other published data, the results for all analyses are presented according to the age and marital status of the woman at the time of the birth or abortion, rather than her age and marital status at the time of conception. Similarly, the year shown is the year of pregnancy outcome, not the year of conception.

Abortions

In calculating the number of unintended* pregnancies, it was assumed that all pregnancies ending in abortion were unwanted, although a small proportion of abortions may have occurred among initially wanted pregnancies. This may have happened for any number of reasons, including health problems experienced by the woman or the fetus or changes in the woman's circumstances, sometimes resulting from the loss of her partner or lack of support.¹²

To calculate the number of unintended pregnancies in 1994, we needed an estimate of the total number of abortions that occurred during the year and data on the characteristics of women who had abortions. The total number of abortions per-

formed nationally is compiled through periodic surveys of abortion providers conducted by The Alan Guttmacher Institute.¹³ However, this provided abortion estimates only through 1992, the most recent year covered by the surveys. For 1993 and 1994, we projected totals from trends in the number of abortions in published and unpublished reports from state health statistics agencies. We used information only from states with consistent data collection procedures in the two adjacent years (42 states and the District of Columbia to project 1993 totals from the 1992 data, and 43 states and the District of Columbia to project 1994 totals from the 1993 data).

The age, marital status, race and ethnicity of women who had had abortions were based on percentage distributions compiled from state health department reports by the Centers for Disease Control and Prevention (CDC),¹⁴ with adjustments for year-to-year changes in the reporting states.[†] For 1994, we separated unmarried women who had had abortions into sub-categories of never-married and formerly married women and derived the distribution of abortions by women's poverty status according to data from a 1994–1995 national survey of 9,985 abortion patients.¹⁵ For 1987, we took the distribution of abortions by marital status from a similar survey of 9,480 abortion patients in that year.¹⁶

Because abortions are underreported in population surveys,¹⁷ we decided not to use NSFG data on the number of women in each age-group who had ever had an abortion, a procedure that would have resulted in a serious underestimate. Instead, we made estimates from national abortion statistics, a complicated task since a woman aged 35 in 1994 could have had an abortion in any year since 1973, placing her in a number of possible age-groups. In addition, we wished to avoid counting more than once the many women who have had more than one abortion.

The first step in estimating the number of women in each age-group who have had an abortion was to estimate the number of abortions that occurred in each year according to single year of age. We started with the number of abortions by five-year age-groups (with single-year groupings for teenagers) for each year during 1973–1994, derived from CDC reports with adjustments as described above. To distribute the five-year groups to single years of age, we used microdata tapes compiled by the NCHS for 1980, 1983, 1985, 1986 and 1988–1992.[‡] Each tape contains data on more than 280,000 abortions in 12 or more

states. We used tabulations of these abortions by single year of age to break down national five-year age-groups into single-year categories. For years lacking an NCHS tape, we interpolated or projected figures.

We also used the tape tabulations to calculate for each year during 1973–1994 the proportion of first-time abortions within each single-year age-group. First, we multiplied the number of abortions by the proportions we had derived from the tapes in order to arrive at an initial estimate for each year of first abortions for each single year of age. We then adjusted the numbers of first abortions in each single-year age category so that the sum for each year was equal to the total number of first abortions previously estimated for that year from CDC data. To estimate the cumulative number of first abortions that took place during 1973–1994 for each age cohort, we added together the number of first abortions that each age-group would have experienced for each year during this period. We then divided this total by the number of women in that age-group in the population in 1994 to arrive at the proportion of U.S. women in each age-group who had ever had an abortion.

Our estimates of the number of first abortions are subject to several possible sources of error: The states included in the NCHS tapes may not have been completely representative of all women having abortions; some women may not have reported their prior abortions to the abortion provider; some of the women who had first abortions died before 1994 and should not have been counted; and some immigrants may have had abortions before coming to the United States.[§] Nevertheless, the results provide an approximate picture of the past abortion experience of U.S. women since the 1973 *Roe v. Wade* decision.

Unintended Pregnancy

We estimated the proportion of women who have ever had an unintended preg-

*"Unintended" and "unplanned" are used interchangeably in this article.

†For a detailed description of the methods for estimating the number of abortions according to women's characteristics, see Henshaw SK and Van Vort J, *Abortion Factbook, 1992 Edition: Readings, Trends, and State and Local Data to 1988*, New York: The Alan Guttmacher Institute, 1992, p. 164.

‡For a description of the 1988 data file, see Kochanek KD, *Induced terminations of pregnancy: reporting states, 1988, Monthly Vital Statistics Report, 1991, Vol. 39, No. 12, Supplement*. The NCHS used the same procedures to compile each data file.

§The number of immigrants exceeded the number of deaths, resulting in an increase by 3–4% of the number of women in each age cohort between 1980 and 1990.

Table 1. Estimated number of pregnancies (excluding miscarriages), percentage distribution of pregnancies, by outcome and intention, and selected measures of unintended pregnancy, all by characteristic, 1994

Characteristic	No. of pregnancies	% distribution of pregnancies				% of births that were unintended	% of pregnancies that were unintended	% of unintended pregnancies that ended in abortion	Pregnancy rate*		
		Intended births	Unintended births	Abortions	Total				Total	Intended	Unintended
Total	5,383,800	50.8	23.0	26.6	100.0	30.8	49.2	54.0	90.8	46.1	44.7
Age at outcome											
<15†	25,100	18.3	33.2	48.5	100.0	64.5	81.7	59.4	13.7	2.5	11.2
15–19	781,900	22.0	42.7	35.3	100.0	66.0	78.0	45.3	91.1	20.0	71.1
15–17	306,100	17.3	46.5	36.2	100.0	72.9	82.7	43.8	59.0	10.2	48.8
18–19	475,800	25.0	40.2	34.8	100.0	61.7	75.0	46.4	140.3	35.1	105.2
20–24	1,479,500	41.5	26.2	32.3	100.0	38.7	58.5	55.2	164.1	68.1	96.0
25–29	1,405,200	60.3	17.2	22.5	100.0	22.2	39.7	56.7	147.0	88.7	58.4
30–34	1,111,400	66.9	14.6	18.4	100.0	18.0	33.1	55.7	100.0	66.9	33.1
35–39	482,400	59.2	17.9	23.0	100.0	23.2	40.8	56.3	43.7	25.9	17.8
≥40‡	98,300	49.3	17.9	32.8	100.0	26.7	50.7	64.7	9.9	4.9	5.0
Marital status at outcome											
Currently married§	3,003,900	69.3	19.3	11.3	100.0	21.8	30.7	37.0	95.2	66.0	29.2
Formerly married	356,700	37.5	21.8	40.7	100.0	36.8	62.5	65.1	64.7	24.3	40.4
Never-married	2,023,100	22.3	31.0	46.7	100.0	58.2	77.7	60.1	91.0	20.3	70.8
Poverty status**											
<100%	1,358,000	38.6	31.3	30.1	100.0	44.8	61.4	49.0	143.7	55.4	88.3
100–199%	1,292,500	46.8	27.7	25.4	100.0	37.2	53.2	47.9	115.2	53.9	61.2
≥200%	2,733,200	58.8	15.9	25.4	100.0	21.3	41.2	61.5	70.8	41.6	29.2
Race											
White	3,981,700	57.1	21.2	21.6	100.0	27.1	42.9	50.4	82.7	47.3	35.5
Black	1,130,700	27.7	28.6	43.7	100.0	50.8	72.3	60.4	136.7	37.8	98.9
Other	271,400	50.0	22.0	28.0	100.0	30.5	50.0	56.0	93.9	46.9	46.9
Ethnicity											
Hispanic	900,200	51.4	22.4	26.1	100.0	30.4	48.6	53.8	143.0	73.5	69.4
Non-Hispanic	4,483,600	50.7	22.6	26.7	100.0	30.9	49.3	54.1	84.6	42.9	41.7

*Pregnancy rates for this category are expressed as per 1,000 women aged 15–44, except for rates for age-groups. †Denominator for rates is women aged 14. ‡Numerator for rates is women aged 40 and older; denominator is women aged 40–44. §Includes separated women. **Percentage of federal poverty level at time of interview. In 1994, the federal poverty level was \$17,020 for a family of four. Note: Intention status of births is based on births in the five years before the 1995 interview.

nancy by first adding the number of women who had had an unplanned birth to the number who had had an abortion, and then subtracting those who were counted twice because they had had both an unplanned birth and an abortion. Tabulations of the NSFG indicate that the proportion of women who have had an unintended birth and also reported having had an abortion ranged from 9% among women aged 15–19 to 28% among women aged 30–34. Since comparisons with national data indicate that the actual number of abortions experienced is about 56% higher than the number reported in the NSFG for the period 1976–1994,¹⁸ we used this figure as a correction factor and adjusted the proportion experiencing both unintended birth and abortion upward for each age-group. Since the rate of abortion underreporting was the same for women younger than 35 and those aged 35–44, we used the same correction factor in all age-groups.¹⁹

Miscarriages

Except where otherwise specified, we excluded miscarriages from all calculations of the number of pregnancies and of pregnancy rates. With miscarriages omitted,

the proportion of unintended pregnancies that ended in abortion reflects actual decisions to terminate or continue pregnancies. In addition, it assures that all tables in this article are consistent, since it would be difficult to calculate the proportion of women who have ever had an unintended pregnancy while at the same time taking into account the overlap between women who have had unintended pregnancies that ended in miscarriage, birth and abortion. (However, the number of miscarriages after 6–7 weeks of pregnancy—the point at which miscarriages are likely to be noted by the woman—can be estimated by adding 20% of births to 10% of abortions.²⁰ Miscarriages may also be estimated using NSFG data.²¹)

Results

Rates and Outcomes

Approximately 3.95 million births and 1.43 million abortions occurred in 1994, for a total of 5.38 million pregnancies, not including miscarriages. (Use of the estimation procedure mentioned above produces an estimated 930,000 miscarriages during the year as well.) The largest number of pregnancies occurred among women aged 20–29, among

currently married women, among those with an income 200% or more of the federal poverty level, and among white and non-Hispanic women (Table 1).

During the five years preceding the 1995 NSFG interview, 31% of births were reported as unintended—that is, the woman did not want to have children when she did (21%) or wanted no more births ever (10%). Applying the same proportions to 1994 births, we estimated that 1.22 million births resulted from unintended pregnancies. Adding abortions, there were 2.65 million unintended pregnancies, or 49% of all pregnancies for that year. (If we include an estimated 390,000 miscarriages that would have otherwise ended in abortion or unintended birth, we find that a total of 3.04 million unintended pregnancies occurred during 1994.) Of all pregnancies in 1994 (excluding miscarriages), 23% ended in unintended births and 27% in abortions. Thus, among women who experienced an unintended pregnancy in 1994 (excluding miscarriages), 54% had an abortion and 46% carried the pregnancy to term.

Forty-eight percent of the women who had an unplanned birth had been using a contraceptive method during the month

Table 2. Estimated rates of unintended pregnancies, unintended births and abortions per 1,000 women, age and marital status, and percentage of unintended pregnancies ended by abortion, by characteristic, 1981, 1987 and 1994

Characteristic	Unintended pregnancy			Unintended birth			Abortion			% ended by abortion		
	1981	1987	1994	1981	1987	1994	1981	1987	1994	1981	1987	1994
Total	54.2	53.5	44.7	25.0	26.6	20.9	29.2	26.9	24.1	53.9	50.3	54.0
Age at outcome												
15–19	78.1	79.3	71.1	35.2	37.1	38.9	42.9	42.2	32.2	54.9	53.2	45.3
20–24	93.6	102.7	96.0	42.3	50.2	43.0	51.4	52.5	53.0	54.8	51.1	55.2
25–29	60.6	66.1	58.4	29.3	35.4	25.3	31.3	30.8	33.1	51.6	46.5	56.7
30–34	37.0	37.3	33.1	19.3	19.3	14.6	17.7	17.9	18.4	47.8	48.2	55.7
35–39	15.0	18.8	17.8	5.5	9.0	7.8	9.5	9.8	10.0	63.5	52.2	56.3
≥40*	4.3	5.3	5.0	0.9	2.4	1.8	3.4	2.9	3.2	78.2	54.3	64.7
Marital status at outcome												
Currently married†	u	41.5	29.2	u	29.8	18.4	u	11.7	10.8	u	28.2	37.0
Formerly married	u	54.6	40.4	u	19.0	14.1	u	35.7	26.3	u	65.3	65.1
Never married	u	71.5	70.8	u	23.2	28.2	u	48.2	42.5	u	67.5	60.1

*Numerator for rates is women aged 40 and older; denominator is women aged 40–44. †Includes separated women. Notes: All measures exclude miscarriages. The intention status of births is based on births in the five years before the interviews in 1988 and 1995 and in the four years before the 1982 interview. u=unavailable.

they became pregnant,* as had 58% of those who had abortions (not shown). For all unintended pregnancies combined, slightly more than half (53%) of the women had been using a method. Of the contraceptive users, 58% ended their pregnancies by abortion, compared with 49% of nonusers who had accidental pregnancies. (When the estimated number of unintended pregnancies that ended in miscarriage is included, the percentage of women who were using a method remains at 53%, but among contraceptive users, we estimate that 51% had abortions, 37% had births and 12% had miscarriages; among nonusers, we estimate that 43% had abortions, 44% had births and 13% had miscarriages.) Thus, contraceptive users appear to have been more motivated to prevent births than were nonusers, although many nonusers did have abortions.

The proportion of all pregnancies that were unintended varied sharply by age, with teenagers younger than 18 having the highest percentage (82–83%). The proportion decreased with rising age, dropping to 33% among women aged 30–34, and then increased again, reaching 51% among women aged 40 and older. Some 44% of teenagers aged 15–17 ended their unintended pregnancies by abortion, the lowest proportion in any age-group. (The relatively high proportion among women younger than 15 is misleading because it excludes the pregnancies of 14-year-olds that ended in births at age 15. It also excludes pregnancies to 14-year-olds that ended in abortion at age 15, but there are relatively few of these.) The proportion was also relatively low for women aged 18–19 (46%), and was highest among women older than 40 (65%).†

The unintended pregnancy rate shows that for every 1,000 women aged 15–44,

about 45 had an accidental pregnancy during 1994 (or nearly 5%). Among women aged 15–17, the rate was similar to that for all women. It peaked at 105 per 1,000 among women aged 18–19, then dropped sharply with age. At these rates, a cohort of 100 women will have experienced 142 unintended pregnancies, or about 1.42 per woman, by the time they are 45 (not shown).

The intended pregnancy rate was about the same as the unintended rate (46 per 1,000), having increased from 40 per 1,000 in 1987 and 43 per 1,000 in 1981 (not shown). The age pattern of intended pregnancy, however, was very different from that of unintended pregnancy: Intended pregnancy was much higher than unintended pregnancy among women aged 25–39 and much lower than unintended pregnancy among teenagers. Each year, 1% of all women aged 15–17 had an intended pregnancy.

Among married women, 31% of pregnancies were unintended, compared with 63% among formerly married women and 78% among never-married women. Only 37% of married women who had unintended pregnancies ended them by abortion, compared with 60–65% of unmarried women. The pregnancy rate among never-married women (91 per 1,000) was about the same as that of married women (95 per 1,000). The outcomes of these pregnancies reflect differences in intention status for these groups, however: Almost half of pregnancies among formerly and never-married women ended in abortion (47% and 41%, respectively), compared with only 11% of those among married women.

Women's poverty status (defined as the ratio of family income to the federal definition of poverty)‡ was strongly associated with the unintended pregnancy rate but only weakly associated with the rate

of intended pregnancy. Among women in poverty, pregnancies were more likely than among higher income women to be unintended and to end in unplanned births, and were slightly more likely to end in abortions. The overall pregnancy rate declined with increasing income, and this trend resulted mainly from the higher rate of unintended pregnancy among poor women. The proportion of poor women's unintended pregnancies that ended in abortion was similar to the proportion among women living at 100–199% of the poverty level, and was less than that among women whose income was 200% or more of the poverty level.

The differences between white and black women generally paralleled those between high- and low-income women: Compared with white women, black women had a higher pregnancy rate. The higher pregnancy rate for black women resulted from an unintended pregnancy rate that was almost three times that of white women. Because black women's unintended pregnancy rate was so high, the proportion of these women's pregnancies that ended in abortion (44%) was much higher than that of white women (22%).

On all measures, women of other races fell between white and black women, usually closer to white women. Hispanic women had a much higher rate of both intended and unintended pregnancy than

*Based on NFSG tabulations of births that were conceived after January 1, 1991, and that took place before the interview. For abortion data, see reference 15.

†These figures are based on the age of the woman when the pregnancy ended, not her age at conception. Adjustment to age at conception would lower the proportions for women younger than 20 and raise them for women older than 30.

‡In 1994, the federal poverty level was \$17,020 for a family of four.

Table 3. Percentage of women who have ever had at least one unplanned birth, abortion or unintended pregnancy, by age-group, 1994

Age	≥1 unplanned births	≥1 abortions*	Both birth and abortion	≥1 unintended pregnancies†
Total	28.4	29.9	10.6	47.7
15-19	6.1	7.0	0.9	12.2
20-24	22.5	26.3	7.4	41.4
25-29	28.5	37.3	10.8	55.1
30-34	33.7	40.2	14.8	59.2
35-39	36.6	38.3	14.9	60.0
40-44	38.1	25.0	12.7	50.4

*Since 1973. †Excludes miscarriages.

did non-Hispanic women, but the percentage of unintended pregnancies and births and the distribution of outcomes were almost identical for Hispanic and non-Hispanic women.

Trends

There have been significant changes over time in the frequency of unintended pregnancy and in the resolution of such pregnancies, especially since 1987. Between 1981 and 1987, the unintended pregnancy rate changed little, but from 1987 to 1994, the rate dropped 16%, from 54 per 1,000 to 45 per 1,000 (Table 2, page 27). As a result, the rates of both unintended births and abortions fell between 1987 and 1994, but the drop was greater for unintended births (6 per 1,000) than for abortions (3 per 1,000). Consequently, the proportion of unintended pregnancies ended by abortion increased from 50% to 54%.

The changes differed markedly by age-group, especially when teenagers were compared with women aged 20 and older. Between 1981 and 1987, the unintended pregnancy rate and birthrate changed little among teenagers but increased among all women aged 20 and older, except among women aged 30-34. Changes in abortion rates were very small during this period. From 1987 to 1994, the rate of unintended pregnancy fell among all age-groups, although the change was small among women aged 35 and older. Among teenagers, the drop in unintended pregnancy affected only the abortion rate, which fell by 24% (from 42 per 1,000 to 32 per 1,000), while the rate of unintended births actually increased slightly (from 37 per 1,000 to 39 per 1,000). Among all other

*Information on the proportion of first abortions by age is unavailable for years since 1992. For calculating the lifetime experience of abortion for Table 3, we assumed that the 1993 and 1994 proportions of first abortion were similar to those for 1992, since small errors would have little effect on the results. The cumulative first abortion rate, however, depends entirely on these proportions, which are only accurate for 1992.

age-groups, the abortion rate increased slightly or stayed the same, while the rate of unintended births fell significantly as a consequence of the reduced rate of unintended pregnancy. In 1994, teenage women were less likely than women in any other age-group to end an unintended pregnancy by abortion, whereas in earlier periods teenagers have been similar to other women in this respect.

Between 1987 and 1994, currently and formerly married women experienced reductions in unintended pregnancy that were reflected in decreases both in the rate of unintended birth and in that of abortion. Among married women, the proportion of unintended pregnancies that ended in abortion increased from 28% to 37%. Never-married women, on the other hand, reported an increase in unintended births that was approximately equal to the decrease in abortions in this group, and the proportion of unintended pregnancies that ended in abortion declined.

All three income groups experienced a decrease in the proportion of pregnancies that were unintended (not shown).²² The proportion of unintended pregnancies that ended in abortion remained about the same among women in the lowest income group, decreased among those in the middle income group and increased sharply among women in the highest income category.

Lifetime Experiences
Over their lifetime, the proportion of women experiencing an unintended pregnancy is substantial, even when the proportion in any one year is small. Of the women aged 15-44 who were surveyed in the 1995 NFSG, 28% indicated that they had had one or more unplanned births, and based on national abortion statistics, 30% of women had had one or more abortions (Table 3). The probability of having experienced an unplanned birth increased with age, largely because of the increased years of exposure to pregnancy risk. By the time they

were 40-44, 38% of the women surveyed had had this experience.

Similarly, the probability of having had an abortion also increased with age, rising from 7% among women aged 15-19 to 40% among women aged 30-34. The proportion was lower among women older than 34 because this research did not attempt to include abortions before 1973, when these women experienced their highest-risk years (ages 15-24). Overall, 11% of all women had had both at least one unplanned birth and at least one abortion. Among women in their 30s, this proportion was 15%.

About 48% of all women aged 15-44 had ever had an unintended pregnancy (either an unplanned birth or an abortion, or both). The percentage increased with age, to a high of 60% among women 35-39. Although the percentage was lower among women aged 40-44, this figure may be understated, again because neither legal nor illegal abortions that occurred before 1973 were counted in this estimate.

Although we know how many women in each age-group had already had an unintended pregnancy, we cannot say exactly how many will have one by age 45, because of the difficulties of estimating the proportion of women having a first abortion who have previously had an unplanned birth and, of those having an unplanned birth, the proportion who have had an abortion. However, we were able to make lifetime abortion estimates at 1992 rates, the most recent year for which data were available (Table 4).*

We estimated the first-abortion rate by applying the 1992 proportion of first abortions for each age-group to the abortion rate for that age-group. The cumulative first-abortion rate indicates the number of women per 1,000, at 1992 rates, who will

Table 4. Abortion rate per 1,000 women and percentage of abortions that were first abortions, and first-abortion and cumulative first-abortion rates, by year, all according to age-group

Age	Abortion rate in 1992	% that were first abortions in 1992	First-abortion rate		Cumulative first-abortion rate*	
			1982	1992	1982	1992
Total	25.9	.530	17.8	13.7	na	na
<15†	7.6	.942	7.8	7.2	7.8	7.2
15-17	23.1	.855	26.0	19.7	85.8	66.4
18-19	53.8	.722	45.4	38.9	176.6	144.1
15-19	35.5	.760	34.1	27.0	176.6	144.1
20-24	56.3	.541	30.3	30.5	328.1	296.5
25-29	33.9	.419	15.7	14.2	406.6	367.5
30-34	19.0	.393	7.1	7.5	442.1	404.8
35-39	10.4	.405	2.8	4.2	456.1	425.9
40-44‡	3.2	.453	0.7	1.4	459.6	433.1

*Number having an abortion by end of specific age-period, per 1,000 women, at current rates. †Denominator for rates is women aged 14. ‡Numerator for rates is women aged 40 and older; denominator is women aged 40-44. Note: na=not applicable. Sources: 1982 DATA—See reference 6.

have had a first abortion by the time they reach the end of the age range. At these rates, 14% of women can expect to have had an abortion before age 20, 37% by age 30 and 43% by age 45.*

The 1992 cumulative lifetime first-abortion rate was slightly lower than the 1982 cumulative rate (46%),²³ and the rate may be still lower today, since abortion rates fell somewhat between 1992 and 1994. The drop between 1982 and 1992 was almost entirely the result of the lower first-abortion rate among teenagers, which fell by seven percentage points; the first-abortion rate among other age-groups changed by no more than two percentage points.

Discussion

Although it is well known that unintended pregnancy is common in the United States, the statistics presented in this article show just how widespread the experience is: Half of all pregnancies are unintended; 28% of women aged 15–44 have had an unplanned birth and 30% have had an abortion; 60% of women in their 30s have had an unplanned birth or an abortion; and, at 1992 rates, 43% of women will have had an abortion by age 45. Some of the women who are most prone to unintended pregnancy, especially unmarried and low-income women, are those who may have the greatest difficulty caring for an unanticipated child.

In spite of the disruption that can be caused by an unplanned birth, only about half of unintended pregnancies are terminated by abortion. A majority of married women (63%) continue their unintended pregnancies, possibly because they find it easier to accommodate an additional child than do unmarried women. However, 35% of formerly married women and 40% of never-married women also continue their unplanned pregnancies.

Between 1987 and 1994, the rate of unintended pregnancy fell from 54 pregnancies per 1,000 women of reproductive age to 45 per 1,000, a decrease of 16%. A likely explanation for the decline in unintended pregnancy is an increase in widespread and effective contraceptive use. The 1995 NSFG data show that condom use has increased significantly, and that the proportion of contraceptive nonusers

*In the future, one can expect that for women having abortions at age 35 or older, a lower proportion will be having a first abortion, since a greater proportion of their reproductive lives will have occurred while legal abortion has been available. If we assume that the proportion of first abortions was .35 for women aged 35–39 and .30 for women aged 40–44, the cumulative abortion rate for women aged 45 will be 428 per 1,000, similar to the rate of 433 per 1,000, shown in Table 4.

among women at risk of unintended pregnancy has gone down.²⁴ Another possible factor is the availability of two new highly effective contraceptives, the implant and the injectable. In part because Medicaid pays for these methods, many of the women who adopted them were at especially high risk of unintended pregnancy—even when they were using other reversible methods. Therefore, use of the new methods may have prevented a disproportionate number of pregnancies.

Overall, the drop in unintended pregnancy between 1987 and 1994 is reflected in decreases in the rates of both unplanned birth and abortion. Further progress is needed, however. In view of the lower rates of unintended pregnancy in other developed countries,²⁵ such progress should be possible.

Among women aged 20 and older, the reduction in unintended pregnancy resulted in lower rates of unplanned birth. Abortion rates in this group changed little or increased slightly. Thus, the percentage of unintended pregnancies ended by abortion increased, indicating that women and couples had become less willing to accept unplanned births. One reason for the change is that a higher proportion of women in each age-group were not currently married. Among unmarried women, 60–65% resolved unintended pregnancies by abortion, compared with 37% among married women. Of women aged 25–29, the proportion who were currently married and living with their husband fell from 59% in 1987 to 53% in 1994.²⁶ Even within the married group, however, more women ended their unintended pregnancies by abortion in 1994 than did so in 1987. One possible reason may be married couples' increased reliance on the woman's earnings.

The pattern among teenagers is remarkably different. Among women aged 15–19 who had an unwanted pregnancy, the proportion who ended these pregnancies by abortion fell from 53% to 45%. The abortion rate declined 24%, while the rate of unplanned birth did not decline at all—and may have increased slightly. In the absence of data, any explanation of the differences between teenagers and other age-groups is speculative. One hypothesis is that teenagers may have been influenced by antiabortion messages. Other possible reasons are decreased access to abortion services, barriers posed by parental involvement statutes, and use of better contraceptive methods (such as the injectable and implant) by those teenagers who are strongly motivated to avoid child-

bearing, leaving unplanned pregnancies more concentrated among those less motivated to avoid childbearing.

Whether they end in abortion or unplanned birth, unintended pregnancies come at a cost both to the individuals involved and to the larger society. Reduction of unplanned pregnancy can only be achieved by decreasing risky behavior, promoting the use of effective contraceptive methods and improving the effectiveness with which all methods are used. More research is needed on the best ways to accomplish these goals, but we know that sensible strategies are to improve the accessibility of contraceptive services, to dispel misconceptions about the health risks of contraception and to make emergency contraception easily available and widely known.

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