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# **Use of Contraception in the United States, 1982**

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During the period 1973-82, use of sterilization as a contraceptive method increased and use of the oral contraceptive pill declined among wives in the childbearing ages (15-44 years). By 1982, sterilization had become the leading method of contraception for ever married women. The method most commonly used by never married women in 1982 was the pill. These findings are based on preliminary data from the National

vey of Family Growth, Cycle III.

The National Survey of Family Growth is conducted periodically by the National Center for Health Statistics on topics related to childbearing, family planning, and related aspects of maternal and child health. Most of the statistics in this report are based on Cycle III of this survey, which included interviews with a sample of 7,969 women 15–44 years of age in the noninstitutional population of the conterminous United States in 1982. Survey design and sampling variability are discussed further in the Technical notes.

Data on the contraceptive status of all women of childbearing age, regardless of marital status, are presented for the first time in this report. Statistics for married women update those presented in reports based on previous cycles of the National Survey of Family Growth.<sup>1-3</sup>

# All women

In 1982, about 54 percent of American women 15–44 years of age were using some method of contraception: 18 percent were using contraceptive sterilization and 37 percent, other methods (table 1). Some women were not using contraception because they were not exposed to the risk of unintended pregnancy: 9 percent were sterile for noncontraceptive reasons (8 percent surgically sterile and 2 percent nonsurgically sterile), percent were pregnant or had been pregnant within 2 months is interview (post partum), 4 percent were trying to become

pregnant, 14 percent had never had sexual intercourse, and 6 percent had not had intercourse in the 3 months before the interview. Another 7 percent were exposed to the risk of unintended pregnancy but were not using contraception for other reasons, such as indifference to the possibility of pregnancy, or health or religious concerns. This last group also included some women who had had sexual intercourse within 3 months of the interview but reported that they were not currently having intercourse. Such women are considered exposed to the risk of unintended pregnancy in order to include in the exposed population women with intermittent patterns of sexual intercourse. Of women who were at risk of an unintended pregnancy—those who had had sexual intercourse during the 3 months prior to interview and were not pregnant, post partum, seeking pregnancy, or nonsurgically or noncontraceptively sterile—88 percent were using a method of contraception and 12 percent were not (calculated from table 1).

The most widely used method of contraception in 1982 was sterilization (either male or female), used by 18 percent of women, followed in order of popularity by the pill (16 percent), condom (7 percent), diaphragm (5 percent), and IUD (4 percent). About 2 percent of women used some form of periodic abstinence: rhythm by calendar, temperature methods, or natural family planning. Each of several other methods, such as withdrawal, douche, foam, and suppositories were used by about 1 percent or less of women.

Black women were less likely than white women to be using some method of contraception (51 percent compared with 55 percent, including sterilization), and more likely to be having intercourse in the 3 months before the interview but not using a method (13 percent compared with 6 percent). Female contraceptive sterilization was more common among black than white women (14 percent compared with 12 percent), while male contraceptive sterilization was more commonly relied upon by white women. Use of male or female sterilization as a contraceptive method was higher for white women (18 percent) than for black women (15 percent). A higher proportion of black women (20 percent) than white women

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Table 1. Number of women 15–44 years of age and percent distribution by current contraceptive status and method, according to age and race: United States, 1982

[Preliminary data based on a sample of the household population of the conterminous United States. See Technical notes for estimates of sampling variability and definitions of terms]

|                                 | 15–44 years               |                     |       | 1                         | 5–29 year    | s     | 30–44 years               |        |       |  |  |  |
|---------------------------------|---------------------------|---------------------|-------|---------------------------|--------------|-------|---------------------------|--------|-------|--|--|--|
| Contraceptive status and method | All<br>races <sup>1</sup> | White               | Black | All<br>races <sup>1</sup> | White        | Black | All<br>races <sup>1</sup> | White  | Black |  |  |  |
|                                 |                           | Number in thousands |       |                           |              |       |                           |        |       |  |  |  |
| All women                       | 54,099                    | 45,367              | 6,985 | 30,413                    | 25,239       | 4,223 | 23,686                    | 20,128 | 2,762 |  |  |  |
|                                 |                           |                     |       | Parao                     | nt dictribut | tion  |                           |        |       |  |  |  |
|                                 |                           |                     |       | reice                     |              | lion  |                           |        |       |  |  |  |
| Total                           | 100.0                     | 100.0               | 100.0 | 100.0                     | 100.0        | 100.0 | 100.0                     | 100.0  | 100.0 |  |  |  |
| Sterile                         | 27.3                      | 27.8                | 23.7  | 8.0                       | 7.7          | 9.5   | 52.0                      | 52.9   | 45.4  |  |  |  |
| Surgically sterile              | 25.7                      | 26.2                | 22.3  | 7.1                       | 6.8          | 8.8   | 49.7                      | 50.5   | 42.9  |  |  |  |
| Contraceptively sterile         | 17.9                      | 18.4                | 15.0  | 5.6                       | 5.4          | 7.0   | 33.6                      | 34.6   | 27.1  |  |  |  |
| Female                          | 12.0                      | 11.6                | 14.2  | 3.7                       | 3.1          | 6.6   | 22.6                      | 22.3   | 25.8  |  |  |  |
| Male                            | 5.9                       | 6.7                 | *0.7  | 2.0                       | 2.3          | *0.4  | 11.0                      | 12.4   | *1.3  |  |  |  |
| Noncontraceptively sterile      | 7.9                       | 7.8                 | 7.3   | 1.5                       | 1.4          | 1.8   | 16.1                      | 15.9   | 15.7  |  |  |  |
| Female                          | 7.4                       | 7.3                 | 7.3   | 1.4                       | 1.3          | 1.8   | 15.0                      | 14.8   | 15.7  |  |  |  |
| Male                            | 0.5                       | *0.5                | 0.0   | *0.1                      | *0.1         | -     | 1.0                       | *1.1   | 0.0   |  |  |  |
| Nonsurgically sterile           | 1.5                       | 1.6                 | *1.4  | 0.9                       | *1.0         | *0.7  | 2.3                       | 2.4    | *2.5  |  |  |  |
| Pregnant, post partum           | 5.0                       | 4.9                 | 5.6   | 6.9                       | 6.6          | 8.3   | 2.4                       | 2.6    | *1.4  |  |  |  |
| Seeking pregnancy               | 4.2                       | 4.0                 | 5.4   | 4.6                       | 4.6          | 4.6   | 3.7                       | 3.3    | 6.5   |  |  |  |
| Other nonusers                  | 27.0                      | 26.3                | 29.6  | 37.3                      | 37.1         | 36.0  | 13.7                      | 12.7   | 19.9  |  |  |  |
| Never had intercourse           | 13.7                      | 13.9                | 10.3  | 22.7                      | 23,4         | 16.6  | 2.0                       | 2.0    | *0.8  |  |  |  |
| No intercourse in last 3 months | 6.0                       | 6.0                 | 5.9   | 6.2                       | 6.3          | 5.6   | 5.7                       | 5.6    | 6.4   |  |  |  |
| Intercourse in last 3 months    | 7.3                       | 6.4                 | 13.4  | 8.4                       | 7.4          | 13.9  | 6.0                       | 5.0    | 12.6  |  |  |  |
| Nonsurgical contraceptors       | 36.6                      | 37.1                | 35.7  | 43.2                      | 43.9         | 41.5  | 28.1                      | 28.5   | 26.7  |  |  |  |
| Pill                            | 15.5                      | 15.1                | 19.8  | 23.3                      | 22.9         | 27.8  | 5.6                       | 5.3    | 7.7   |  |  |  |
| IUD                             | 3.9                       | 3.8                 | 4.7   | 3.1                       | 2.9          | 4.1   | 5.0                       | 5.0    | 5.7   |  |  |  |
| Diaphragm                       | 4.5                       | 5.0                 | 1.8   | 5.2                       | 5.9          | *1.2  | 3.6                       | 3.9    | 2     |  |  |  |
| Condom                          | 6.7                       | 7.2                 | 3.2   | 6.1                       | 6.5          | 3.5   | 7.5                       | 8.0    |       |  |  |  |
| Foam                            | 1.3                       | 1.4                 | 1.4   | 1.0                       | 1.1          | *0.8  | 1.7                       | 1.7    | *     |  |  |  |
| Periodic abstinence             | 2.2                       | 2.2                 | 1.6   | 1.8                       | 1.9          | *1.5  | 2.6                       | 2.7    | *1.8  |  |  |  |
| Natural family planning         | 0.3                       | *0.4                | *0.1  | *0.3                      | *0.3         | *0.1  | *0.4                      | *0.4   | *0.3  |  |  |  |
| Withdrawal                      | 1.1                       | 1.2                 | *0.7  | 1.4                       | 1.6          | *0.7  | *0.6                      | *0.7   | *0.7  |  |  |  |
| Douche                          | *0.1                      | 0.0                 | *0.7  | *0.1                      | -            | *0.6  | *0.1                      | 0.0    | *0.9  |  |  |  |
| Other                           | 1.3                       | 1.2                 | 1.7   | 1.2                       | 1.3          | *1.4  | 1.3                       | 1.2    | *2.2  |  |  |  |
| Suppositories                   | 0.7                       | 0.6                 | *1.0  | *0.5                      | *0.4         | *1.0  | *0.9                      | *0.9   | *1.1  |  |  |  |

<sup>1</sup>Includes white, black, and other races.

(15 percent) used the oral contraceptive pill. By contrast, white women were more likely than black women to rely on the diaphragm (5 percent compared with 2 percent) and condom (7 percent compared with 3 percent). Differences by race in use of the pill and diaphragm were significant among women aged 15-29, but not among older women.

A smaller proportion of women 15–29 years of age compared with women 30–44 years of age was using a method of contraception (49 compared with 62 percent, including sterilization). This difference occurs because of substantial differences in the proportions of younger and older women who had never had sexual intercourse (23 and 2 percent, respectively), or were pregnant, post partum, or seeking pregnancy (12 and 6 percent); and despite the fact that younger women are less likely than older women to be nonusers because they are sterile for noncontraceptive reasons (2 and 18 percent, respectively). To some extent, the lower proportion of younger than older women using a method also reflects the greater predominance of unmarried women among younger women; as discussed in a later section, unmarried women are more likely than currently married women to be having intercourse but not using a method.

Use of contraceptive sterilization and oral contraceptives

differed markedly by age. About 23 percent of women 15-29 years of age were using the pill, compared with less than 6 percent of women aged 30-44. By contrast, less than 6 percent of women aged 15-29, compared with about 34 percent of women aged 30-44, used sterilization as a method of contraception. These differences in method choices probably reflect a number of factors, including the greater probability that older women had completed their families and were able to choose permanent methods of contraception, and concerns about the health effects of pill use among older women.<sup>4</sup>

### Trends among currently married women

Table 2 presents data on the contraceptive status and method choices of currently married women for the years 1973, 1976, and 1982. This table focuses on currently married women because never married women were not fully represented in t surveys conducted in 1973 and 1976 (see Technical note "Other nonusers"—women who were not using contraception for reasons other than pregnancy or noncontraceptive sterility are not differentiated in table 2 by whether they ever or recently had sexual intercourse, because data are not available for the Table 2. Number of currently married women 15–44 years of age and percent distribution by current contraceptive status and method, according to race: United States, 1973, 1976, and 1982

tistics are based on samples of the household population of the conterminous United States. See Technical notes for estimates of sampling variability and definitions terms. Data for 1982 are preliminary]

|                                 |                      | All races <sup>1</sup> |                   | White  |        |                   | Black |       |                   |  |  |
|---------------------------------|----------------------|------------------------|-------------------|--------|--------|-------------------|-------|-------|-------------------|--|--|
| Contraceptive status and method | 1982                 | 1976²                  | 1973 <sup>2</sup> | 1982   | 1976²  | 1973 <sup>2</sup> | 1982  | 1976² | 1973 <sup>2</sup> |  |  |
|                                 |                      |                        |                   |        |        |                   |       |       |                   |  |  |
| All currently married women     | 28,231               | 27,488                 | 26,646            | 25,195 | 24,795 | 24,249            | 2,130 | 2,169 | 2,081             |  |  |
|                                 | Percent distribution |                        |                   |        |        |                   |       |       |                   |  |  |
| Total                           | 100.0                | 100.0                  | 100.0             | 100.0  | 100.0  | 100.0             | 100.0 | 100.0 | 100.0             |  |  |
| Sterile                         | 40.9                 | 30.0                   | 23.9              | 41.1   | 30.7   | 24.0              | 37.8  | 24.4  | 22.7              |  |  |
| Surgically sterile              | 38.9                 | 28.2                   | 22.9              | 38.9   | 29.0   | 23.2              | 36.3  | 21.6  | 20.8              |  |  |
| Contraceptively sterile         | 27.9                 | 18.6                   | 16.4              | 28.2   | 19.3   | 16.5              | 23.2  | 12.7  | 14.6              |  |  |
| Female                          | 17.4                 | 9.5                    | 8.6               | 17.0   | 9.6    | 8.2               | 21.0  | 10.9  | 13.6              |  |  |
| Male                            | 10.4                 | 9.0                    | 7.8               | 11.2   | 9.7    | 8.4               | 2.2   | *1.7  | 1.0               |  |  |
| Noncontraceptively sterile      | 11.1                 | 9.7                    | 6.5               | 10.7   | 9.7    | 6.6               | 13.2  | 9.0   | 6.2               |  |  |
| Female                          | 10.1                 | 8.9                    | 6.3               | 9.8    | 8.9    | 6.3               | 13.1  | 8.7   | 6.1               |  |  |
| Male                            | *1.0                 | 0.7                    | 0.2               | *1.0   | 0.8    | 0.3               | *0.1  |       | *0.1              |  |  |
| Nonsurgically sterile           | *2.0                 | 1.7                    | 0.9               | *2.1   | 1.7    | 0.8               | *1.4  | 2.7   | 1.9               |  |  |
| Pregnant, post partum           | 7.2                  | 6.8                    | 7.3               | 7.2    | 6.8    | 7.4               | 6.1   | 6.8   | 6.8               |  |  |
| Seeking pregnancy               | 6.7                  | 6.5                    | 7.0               | 6.6    | 5.9    | 6.8               | 8.5   | 9.6   | 7.1               |  |  |
| Other nonusers                  | 5.0                  | 7.6                    | 8.7               | 4.5    | 7.1    | 7.8               | 9.8   | 13.3  | 17.9              |  |  |
| Nonsurgical contraceptors       | 40.1                 | 49.2                   | 53.2              | 40.6   | 49.5   | 54.0              | 37.8  | 45.9  | 45.4              |  |  |
| Pill                            | 13.5                 | 22.5                   | 25.1              | 13.4   | 22.6   | 25.1              | 15.6  | 22.2  | 26.3              |  |  |
| IUD                             | 4.8                  | 6.3                    | 6.7               | 4.8    | 6.3    | 6.6               | 5.9   | 6.2   | 7.6               |  |  |
| Diaphragm                       | 4.5                  | 2.9                    | 2.4               | 4.7    | 3.0    | 2.5               | 3.3   | 1.8   | 1.2               |  |  |
| Condom                          | 9.8                  | 7.3                    | 9.4               | 10.2   | 7.5    | 9.9               | 4.3   | 4.6   | 3.2               |  |  |
| Foam                            | 2.0                  | 3.0                    | 3.5               | 2.0    | 2.9    | 3.5               | *2.1  | 3.8   | 3.0               |  |  |
| Periodic abstinence             | 3.2                  | 3.4                    | 2.8               | 3.3    | 3.5    | 2.9               | *2.4  | *1.4  | *0.8              |  |  |
| Withdrawal                      | *1.2                 | 2.0                    | 1.5               | *1.2   | 2.1    | 1.6               | *0.1  | 1.8   | *0.4              |  |  |
| Douche                          | *0.1                 | 0.7                    | 0.6               | 0.0    | 0.6    | 0.5               | *1.0  | 2.7   | 1.8               |  |  |
| Other                           | *1.0                 | 1.0                    | 1.3               | *0.9   | 1.0    | 1.4               | *2.1  | *1.4  | 1.0               |  |  |

<sup>1</sup>Includes white, black, and other races.

<sup>2</sup>Includes unmarried women living with a partner.

previous cycles, and, in 1982, virtually all currently married women had had intercourse within the last 3 months.

During the period 1973–82, the proportion of currently married women who were other nonusers declined from about 9 percent in 1973 to 5 percent in 1982. The proportions pregnant or post partum, or seeking pregnancy did not change significantly over the decade, while the proportion surgically sterile for noncontraceptive reasons increased. The percent of all wives using a method (including sterilization) remained about the same. However, among wives at risk of an unintended pregnancy (excluding those who were pregnant or post partum, seeking pregnancy, or nonsurgically or noncontraceptively sterile), the proportion using contraception increased from 89 percent in 1973 to 93 percent in 1982 (calculated from table 2).

As reported elsewhere,<sup>3,5</sup> the rather substantial increase in noncontraceptive surgical sterility between 1973 and 1976 was largely or entirely due to a change in the wording of a question concerning the contraceptive intent of sterilizing operations (see Technical notes). If surgical sterilizations had ren classified in 1976 and 1982 by the same question as in 973, we would expect the percents using contraceptive sterilization and using any method of contraception in 1976 and 1982 to be somewhat higher.

During the period 1973-82, the proportion of currently married women using the pill declined substantially, from 25 to

14 percent, while the proportion using contraceptive sterilization increased substantially, from 16 to 28 percent. These changes occurred mainly between 1976 and 1982. The increase in sterilization between 1976 and 1982 was limited mainly to female operations (10 percent of wives in 1976 and 17 percent in 1982). Use of the IUD declined slightly between 1973 and 1982, from 7 to 5 percent, while use of the diaphragm increased slightly, from 2 to 5 percent. The proportion of wives using the condom declined from 9 percent in 1973 to 7 percent in 1976, and then increased again to 10 percent in 1982.

#### Never married women

As table 3 shows, one half of never married women either had never had sexual intercourse (39 percent), or were not having intercourse during the 3 months prior to the interview (an additional 11 percent). Very few of the never married women were pregnant, post partum, or seeking pregnancy (4 percent), and even fewer were noncontraceptively sterile (2 percent, data not shown). About 35 percent were using some method of contraception, including sterilization, and 10 percent had had intercourse in the 3 months before the interview but were not using a method.

The proportion of never married women using contraception is largely determined by the proportions who have ever had sexual intercourse, and who have had intercourse recently Table 3. Number of never married women 15–44 years of age and percent distribution by current contraceptive status and method, according to age and race: United States, 1982

[Preliminary data based on a sample of the household population of the conterminous United States. See Technical notes for estimates of sampling variability and definiti of terms]

|   |                           | 15–19 years         |                   |                           |                     |                     |                           |                      |                     |                           |                      |                     |
|---|---------------------------|---------------------|-------------------|---------------------------|---------------------|---------------------|---------------------------|----------------------|---------------------|---------------------------|----------------------|---------------------|
|   | 1                         | 5–44 year:          | \$                |                           | Total               | •                   | 1                         | 5—17 yea             | rs                  | 20                        | 0–44 yeai            | <i>'S</i>           |
| Contraceptive status<br>and method                                | All<br>races <sup>1</sup> | White               | Black             | All<br>races <sup>1</sup> | White               | Black               | All<br>races <sup>1</sup> | White                | Black               | All<br>races <sup>1</sup> | White                | Black               |
|   |                           |                     |                   |                           | N                   | umber in            | thousands                 | ì                    |                     |                           |                      |                     |
| All never married women   | 19,162                    | 14,948              | 3,543             | 8,839                     | 7,193               | 1,377               | 4,968                     | 3,971                | 818                 | 10,323                    | 7,755                | 2,166               |
|   |                           |                     |                   |                           | F                   | Percent di          | stribution                |                      |                     |                           |                      |                     |
| Total   | 100.0                     | 100.0               | 100.0             | 100.0                     | 100.0               | 100.0               | 100.0                     | 100.0                | 100.0               | 100.0                     | 100.0                | 100.0               |
| Sterile<br>Contraceptively sterile<br>Female                      | 3.3<br>1.8<br>1.1         | 2.0<br>*1.0<br>*0.3 | 8.6<br>5.3<br>5.1 | *0.5<br>*0.1              | *0.6<br>*0.1        | *0.4<br>-<br>-      | *0.5<br>-<br>-            | *0.5<br>-<br>-       | *0.4<br>-<br>-      | 5.6<br>3.2<br>2.1         | 3.4<br>*1.9<br>*0.5  | 13.8<br>8.6<br>8.3  |
| Pregnant, post partum,  | *0.6                      | *0.8                | *0.2              | *0.1                      | *0.1                | -                   | -                         | -                    | -                   | *1.1                      | *1.4                 | *0.3                |
| Other nonusers<br>Never had intercourse<br>No intercourse in last | 3.7<br>59.9<br>38.7       | 63.5<br>42.4        | 43.1<br>20.3      | 4.0<br>73.6<br>57.1       | 3.0<br>75.5<br>59.8 | 9.2<br>61.7<br>42.1 | *3.6<br>82.9<br>69.6      | *2.5<br>84.8<br>72,1 | 9.1<br>72.3<br>55.9 | 3.5<br>48.2<br>22.8       | -1.6<br>52.2<br>26.1 | 10.9<br>31.3<br>6.5 |
| 3 months  | 11.3                      | 12.5                | 7.2               | 6.5                       | 6.9                 | *3.6                | 4.9                       | 5.0                  | *3.8                | 15.4                      | 17.7                 | 9.4                 |
| 3 months  | 10.0<br>33.1              | 8.6<br>32.2         | 15.5<br>38.0      | 10.0<br>21.9              | 8.8<br>21.0         | 15.8<br>28.7        | 8.3<br>13.1               | 7.7<br>12 2          | 12.6<br>18.2        | 10.0                      | 8.4<br>42 7          | 15.4<br>44.0        |
| Pill  | 18.5                      | 17.2                | 25.5              | 13.7                      | 12.6                | 20.5                | 8.3                       | 7.6                  | 11.8                | 22.7                      | 21.4                 | 28.7                |
| Diaphragm   | 4.8                       | 5.7                 | *1.1<br>3.4       | *1.4<br>4 9               | *1.6                | *0.6                | *0.5<br>*3.3              | *0.5<br>*3.5         | *0.3                | 7.6                       | 9.5<br>3.5           | *1.5                |
| Foam  | *0.4<br>*0.9              | *0.3<br>*0.8        | *1.1<br>*1.0      | *0.1<br>*0.5              | *0.5                | *0.6<br>*0.7        | *0.1<br>*0.2              | *0.1                 | *0.4<br>*0.6        | *0.7<br>*1.2              | *0.5<br>*1.0         | ***                 |
| Natural family planning   | *0.1                      | *0.1                | -                 | -                         | -                   | -                   | -                         | -                    | -                   | *0.1                      | *0.2                 |                     |
| Withdrawal  | 1.2<br>*0.1               | 1.4<br>-            | *0.6<br>*0.6      | *0.7<br>*0.1              | *0.8<br>-           | *0.5<br>*0.4        | *0.5<br>*0.1              | *0.4<br>-            | *0.6<br>*0.6        | *1.6<br>*0.1              | *2.0                 | *0.7<br>*0.7        |
| Other<br>Suppositories  | 1.3<br>*0.4               | 1.4<br>*0.3         | *1.2<br>*0.8      | *0.3<br>*0.1              | *0.3<br>*0.1        | *0.5<br>*0.3        | *0.1<br>*0.0              | -                    | *0.4<br>*0.1        | 2.1<br>*0.7               | *2.4<br>*0.6         | *1.7<br>*1.1        |

<sup>1</sup>Includes white, black, and other races.

(in the 3 months prior to interview). These proportions vary sharply by the age and race of never married women. About 70 percent of women aged 15-17, 57 percent of women aged 15-19, and 23 percent of women aged 20-44 had never had intercourse. An additional 5, 7, and 15 percent of these women, respectively, had not had intercourse in the 3 months prior to the interview. Black, never married women were more likely than white women to have had intercourse, both ever and in the 3 months prior to interview.

Table 4 shows the percent of never married women using a method of contraception among those who were exposed to the risk of unintended pregnancy (that is, contraceptors and non-contraceptors who had sexual intercourse in the 3 months before the interview and were not noncontraceptively sterile, pregnant, post partum, or seeking pregnancy). Among these women, white and black women were about equally likely to be using a method of contraception (77 and 73 percent, respectively). Women 20–44 years of age were more likely to be using a method than women 15–19 years of age (80 percent compared with 68 percent).

Table 4 also shows that over half of never married women who used some method of contraception used the oral contraceptive pill (53 percent). The diaphragm and condom were next in popularity, used by 14 and 12 percent of contraceptors, respectively. About 5 percent of never married contraceptors used sterilization, and 5 percent used the IUD. About 11 percent used other methods, including withdrawal (3 percent), periodic abstinence (3 percent), foam (1 percent), and suppositories (1 percent, data not shown).

As in the case of all women, the method choices of never married women differed appreciably by age and race. Younger women (aged 15–19) were more likely than older women (aged 20–44) to use the pill or condom, while older women were more likely to use a diaphragm, IUD, or sterilization. White women were more likely than black women to use the diaphragm. Race differences for other individual methods were not statistically significant, but taken as a group, the more effective methods (pill, IUD, or sterilization) were more commonly used by black than white women.

Compared with currently married women, never marr women who were apparently at risk of an unintended pregnancy were less likely to be using a method of contraception. Excluding noncontracepting women who had never had intercourse; had not had intercourse during the 3 months prior to interview; Table 4. Number of never married women 15–44 years of age who were exposed to the risk of an unintended pregnancy, and percent using a method of contraception, by race and age, and percent distribution of contraceptors by method of contraception, according to race and age: United States, 1982

Preliminary data based on a sample of the household population of the conterminous United States. See Technical notes for estimates of sampling variability and definitions of terms]

| Race and age                        |                                  |                              | Method of contraception          |                           |                              |                              |                              |                              |                               |  |  |
|-------------------------------------|----------------------------------|------------------------------|----------------------------------|---------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|--|--|
|                                     | Exposed <sup>1</sup>             | Using a<br>method            | All<br>methods                   | Sterilization             | Pill                         | IUD                          | Diaphragm                    | Condom                       | Other<br>methods <sup>2</sup> |  |  |
| All <sup>°</sup> races <sup>3</sup> | Number in<br>thousands           | Percent                      |                                  |                           | Perc                         | cent dist                    | ribution                     |                              |                               |  |  |
| 15–44<br>15–19<br>15–17<br>20–44    | 8,727<br>2,872<br>1,081<br>5,855 | 76.1<br>67.6<br>60.0<br>80.3 | 100.0<br>100.0<br>100.0<br>100.0 | 5.1<br>*0.4<br>-<br>7.0   | 53.2<br>62.2<br>63.7<br>49.5 | 5.0<br>*0.9<br>*1.3<br>6.7   | 13.7<br>*6.4<br>*3.6<br>16.6 | 11.8<br>22.3<br>25.0<br>7.5  | 11.2<br>*7.6<br>*6.4<br>12.7  |  |  |
| White                               |                                  |                              |                                  |                           |                              |                              |                              |                              |                               |  |  |
| 15–44<br>15–19<br>15–17<br>20–44    | 6,372<br>2,188<br>803<br>4,184   | 77.4<br>69.0<br>60.2<br>81.8 | 100.0<br>100.0<br>100.0<br>100.0 | *3.1<br>*0.6<br>-<br>*4.2 | 51.6<br>59.6<br>62.4<br>48.1 | *3.7<br>*0.1<br>*0.3<br>*5.4 | 17.1<br>*7.8<br>*4.4<br>21.2 | 13.0<br>24.7<br>*28.6<br>7.9 | 11.4<br>*7.3<br>*4.2<br>13.2  |  |  |
| Black                               |                                  |                              |                                  |                           |                              |                              |                              |                              |                               |  |  |
| 15–44<br>15–19<br>15–17<br>20–44    | 2,098<br>618<br>253<br>1,480     | 73.0<br>63.9<br>58.7<br>76.9 | 100.0<br>100.0<br>100.0<br>100.0 | 12.1<br>-<br>16.3         | 58.9<br>71.4<br>65.1<br>54.6 | 8.0<br>*4.2<br>*4.5<br>9.4   | *2.6<br>*2.0<br>*1.5<br>*2.9 | 7.9<br>*13.0<br>*14.5<br>6.1 | 10.4<br>*9.5<br>*14.3<br>10.7 |  |  |

<sup>1</sup>Includes women using contraception and those not using contraception who had sexual intercourse in the last 3 months and were not pregnant, post partum, seeking pregnancy, or noncontraceptively sterile. <sup>2</sup>Includes foam, periodic abstinence, withdrawal, douche, suppositories, and other methods.

<sup>2</sup>Includes foam, periodic abstinence, withdrawal, douche, suppositories, and other methods <sup>3</sup>Includes white, black, and other races.

moldes white, block, and blifer races.

were noncontraceptively sterile; or were pregnant, post partum, or seeking pregnancy, 93 percent of currently married women, compared with 76 percent of never married women, were using a method. Never married women who used a method were about as likely as currently married contraceptors to use one of

the more effective methods—the pill, IUD, or sterilization (63 versus 68 percent, respectively). However, pill use was much more common among never married women, and sterilization was much more common among currently married women, reflecting differences in age and previous childbearing experience.

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<sup>5</sup>W. Pratt, W. Grady, J. Menken, and J. Trussell: An overview of experience with vaginal contraceptives in the United States, in G. Zatuchni, A. Sobrero, J. Speidel, and J. Sciarra, eds., *Vaginal Contraception: New Developments.* Hagerstown, Md. Harper and Row, 1980.

<sup>6</sup>National Center for Health Statistics, D. French: The National Survey of Family Growth, Cycle I: Sample design, estimation procedures, and variance estimation. *Vital and Health Statistics*. Series 2, No. 76. DHEW Pub. No. (PHS) 78–1350. Public Health Service. Washington. U.S. Government Printing Office, Jan. 1978.

<sup>7</sup>National Center for Health Statistics, W. Grady: The National Survey of Family Growth, Cycle II: Sample design, estimation procedures, and variance estimation. *Vital and Health Statistics*. Series 2, No. 87. DHHS Pub. No. (PHS) 81–1361. Public Health Service. Washington. U.S. Government Printing Office, Feb. 1981.

# **Technical notes**

### Survey design

The National Survey of Family Growth is conducted periodically by the National Center for Health Statistics to collect data on fertility, family planning, and related aspects of maternal and child health. Field work for Cycle I was conducted under contract in 1973 by the National Opinion Research Center. Field work for Cycles II and III was conducted by Westat, Inc., in 1976 and 1982, respectively.

In all cycles, personal interviews were conducted with a multistage area probability sample of women 15–44 years of age in the noninstitutional population of the conterminous United States. In Cycles I and II, ever married women and never married women with offspring living in the household were eligible for the survey. In Cycle III, all women 15–44 years were eligible regardless of marital status or the presence of offspring. Women living in group quarters (such as college dormitories) were excluded from the samples in Cycles I and II, but included in Cycle III. Interviews were conducted with 9,797 women in Cycle I, 8,611 in Cycle II, and 7,969 in Cycle III. The sample designs of Cycles I and II are described in more detail in other reports of the National Center for Health Statistics.<sup>6,7</sup>

Field work for Cycle III was conducted between August 1982 and February 1983. Black women and women aged 15–19 were oversampled. Interviews were conducted by trained female interviewers and lasted an average of one hour. The interview focused on a woman's pregnancy history; use of contraceptives in each pregnancy interval; ability to bear children; future childbearing expectations; use of family planning and infertility services; marital history; labor force participation; and a wide range of social, economic, and demographic characteristics.

#### Reliability of estimates

Because the statistics presented in this report are based on a sample, they may differ from the statistics that would result if all 54 million women represented by the National Survey of Family Growth had been interviewed. The standard error of an estimate (SE) is a measure of such differences. The standard error of an estimated number or percent presented in this report may be calculated by using the appropriate values of A and Bfrom table I in the equations,

$$\operatorname{SE}_{(N')} = \left(A + \frac{B}{N'}\right)^{1/2} \times N$$

and

$$SE_{(P')} = \left(B \times P' \times \frac{100 - P'}{X'}\right)^{1/2}$$

where N' is the number of women, P' is the percent, and X' is the number of women in the denominator of the percent. Approximate standard errors for estimated percents of women of all races in Cycle III are shown in table II.

Table I. Estimates of A and B for calculating standard errors, by cycle, marital status, and race: National Survey of Family Growth

| Cycle, marital status, and race       | А   | В                                   |
|---------------------------------------|---|-------------------------------------|
| CYCLE                                 |   |                                     |
| Currently married women               |   |                                     |
| All races and white                   | 0.000017613<br>0.000040219                | 4493.7916<br>1600.4393              |
| CYCLE II                              |   |                                     |
| Currently married women               |   |                                     |
| All races<br>White and other<br>Black | 0.000185899<br>0.000205624<br>0.000631040 | 6751.0619<br>7021.1665<br>2798.6440 |
| CYCLE III                             |   |                                     |
| Ever married women                    |   |                                     |
| All races and white                   | -0.001097329<br>-0.000908632              | 39809.1677<br>6346.0484             |
| Never married women                   |   |                                     |
| All races and white                   | 0.000935104<br>0.000908632                | 17608.8833<br>6346.0484             |
|                                       |   |                                     |

Table II. Approximate standard errors for estimated percents (expressed in percent) for women of all races: National Survey of Family Growth, Cycle III

|                    | Estimated percent |            |             |             |             |             |      |  |  |  |  |
|--------------------|-------------------|------------|-------------|-------------|-------------|-------------|------|--|--|--|--|
| Base of<br>percent | 2 or<br>98        | 5 or<br>95 | 10 or<br>90 | 20 or<br>80 | 30 or<br>70 | 40 or<br>60 | 50   |  |  |  |  |
| 100,000            | 6.5               | 10.1       | 13.8        | 18.5        | 21.2        | 22.6        | 23.  |  |  |  |  |
| 500,000            | 2.9               | 4.5        | 6.2         | 8.3         | 9.5         | 10.1        | 10.3 |  |  |  |  |
| 1,000,000          | 2.0               | 3.2        | 4.4         | 5.8         | 6.7         | 7.2         | 7.:  |  |  |  |  |
| 5,000,000          | 0.9               | 1.4        | 2.0         | 2.6         | 3.0         | 3.2         | 3.3  |  |  |  |  |
| 10,000,000         | 0.6               | 1.0        | 1.4         | 1.8         | 2.1         | 2.3         | 2.3  |  |  |  |  |
| 30,000,000         | 0.4               | 0.6        | 0.8         | 1.1         | 1.2         | 1.3         | 1.:  |  |  |  |  |
| 50,000,000         | 0.3               | 0.4        | 0.6         | 0.8         | 0.9         | 1.0         | 1.0  |  |  |  |  |

The chances are about 68 in 100 that a sample estimate would fall within one standard error, and about 95 in 100 that it would fall within two standard errors of a statistic based on a complete count of the population represented by the National Survey of Family Growth. Differences between percents discussed in this report were found to be statistically significant at the 95-percent confidence level using a two-tailed *t*-test with 39 degrees of freedom. This means that in repeated samples of the same type and size, a difference as large as the one observed would occur in only 5 percent of samples, if there were, in fact, no difference between the percents in the population.

The relative standard error of a statistic is the ratio of the standard error to the statistic and is usually expressed as a percent of the estimate. In this report, statistics with relativ standard errors of 30 percent or larger are indicated with an asterisk (\*). These estimates are considered unreliable by themselves, but may be combined with other estimates to make comparisons of greater precision.

Statistics in this report also may be subject to nonsampling error, that is, errors or omissions in responding to the interview, ecording answers, and processing data. The data have been adjusted for nonsampling error resulting from nonresponse by means of adjustments to the sample weights assigned to each case. Other types of nonsampling error were minimized by a series of stringent quality control measures similar to those used in Cycles I and II.<sup>6,7</sup>

### **Definitions of terms**

#### **Contraceptive status**

Sterile—A currently married woman was classified as sterile for the purposes of determining current contraceptive status if she reported that it was impossible for her and her husband to have a baby. An unmarried woman was classified as sterile if she reported that it was impossible for her to have a baby, or if her current method of contraception was male sterilization.

Nonsurgical—A woman (or couple) was classified as nonsurgically sterile if she reported that it was impossible for her to have a baby for any reason other than surgical sterilization. Reported nonsurgical reasons for sterility included menopause and sterility resulting from accident, illness, or congenital causes.

Surgical—A woman (or couple) was classified as surgically sterile if she or her husband were completely sterile due to an operation.

Because surgical sterilizations are very frequently obtained exclusively or partly as methods of contraception; that is, because of their complete effectiveness against conception rather than for purely therapeutic reasons, they have been further classified as contraceptive and noncontraceptive. In Cycle I, a sterilizing operation was contraceptive if the respondent answered "yes" to the question "Was the operation done at least partly so that you would not have any more children?" The question was reworded in Cycles II and III to "Was one reason for the operation because you had all the children you wanted?"

The percents of women contraceptively and noncontraceptively sterile are not fully comparable between Cycle I and Cycles II and III. The rewording of the question cited above probably reduced the percent of sterilizing operations classified as contraceptive, because an operation done to prevent a pregnancy that would be dangerous to the woman's health usually would have been reported as contraceptive in Cycle I, but as noncontraceptive in Cycles II and III. Also, in Cycle I, if a couple had had more than one sterilizing operation—for example, a vasectomy followed a few years later by a hysterectomy—the interviewer coded the earliest operation. In Cycles II and III, however, the woman's operation was given priority. Both of these factors tended to increase the proportion of sterilizing operations classified as noncontraceptive in 1976 and 1982 compared with 1973.

It should be noted that the estimates of male contraceptive sterilization reflect the numbers of *women* relying on this method, and not necessarily the numbers of men who have been sterilized for contraceptive reasons. *Pregnant*—A woman (or couple) was classified as pregnant if she replied affirmatively to the question "Are you pregnant now?" or, for those in doubt, "Do you think you probably are pregnant or not?" However, a woman who reported that the onset of her last menstrual period was within the 30 days prior to the interview was automatically considered not pregnant.

Seeking pregnancy—A woman (or couple) was classified as seeking pregnancy if she reported she was not using a method at the time of interview because she wanted to become pregnant.

*Post partum*—A woman (or couple) was classified as post partum if she reported she was not currently using a method, was not seeking a pregnancy, and her last pregnancy had terminated within 2 months before the date she was interviewed.

Other nonusers—Women (or couples) who reported they were currently using no contraceptive method and could not be classified in any of the preceding categories of noncontraceptors were classified here. Among these are women who had never had intercourse, had not had intercourse in the last 3 months, were indifferent to the chances of pregnancy, had a very low risk of pregnancy due to some fecundity impairment, or objected to contraceptive methods for personal or religious reasons.

Never had intercourse—A woman (or couple) was classified as never having had intercourse if she was not currently using a method and she had never had sexual intercourse at any time up to the time of interview, or if she had had sexual intercourse but not since her menstrual periods began.

No intercourse in last 3 months—A woman (or couple) was classified as not having had intercourse in the last 3 months if she was not currently using a method and reported not having sexual intercourse in any of the 3 months before the interview.

Intercourse in last 3 months—A woman (or couple) was classified as having intercourse in the last 3 months if she was not currently using a method and was having sexual intercourse currently or in any of the 3 months preceding the interview.

*Contraceptors*—A woman (or couple) who reported use of a contraceptive method other than a surgical sterilization at the date of interview was classified according to the specific method used. Methods used by extremely small proportions of the population such as jelly, cream, suppositories, or abstinence, not in combination with any other methods, were grouped in the category "Other." Where more than one method was reported in current use, the method generally considered the most effective was used for classification purposes.

#### **Demographic terms**

Age—Age is classified by the age of the respondent at her last birthday before the date of interview.

*Race*—Race refers to the race of the woman interviewed and is reported as black, white, or other. In Cycle III, race was classified according to the woman's report of which race best described her. In Cycles I and II, race was classified by the observation of the interviewer. Comparisons of Cycle III data indicate that results using either method of classification are very similar.

Marital status—Persons were classified by marital status as married, widowed, divorced, separated, or never married. In Cycles I and II, informally married women—women who volunteered that they were sharing living quarters with their sexual

# 8 advancedata

partner—were classified as currently married. These women constituted about 2 percent of currently married respondents in Cycle I and 3 percent in Cycle II. In Cycle III, such women were classified according to their legal marital status. Thus, statistics on currently married women for 1982 shown in this report are not strictly comparable to those for 1973 and 1976. However, reclassifying women in the 1973 and 1976 surveys

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### Symbols

- --- Data not available
- ... Category not applicable
- Quantity zero
- 0.0 Quantity more than zero but less than 0.05
- Quantity more than zero but less than
  500 where numbers are rounded to
  thousands
- Figure does not meet standards of reliability or precision (30 percent or more relative standard error)

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