## Fertility of American Women: June 2002

Population Characteristics

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#### INTRODUCTION

This report profiles current fertility patterns of American women and is based on data collected in the June 2002 supplement to the Current Population Survey (CPS).1 Unlike annual fertility statistics compiled from birth certificates by the National Center for Health Statistics (NCHS), CPS data are collected from two questions asked of women 15 to 44 years old: (1) the number of children they have ever had, and (2) the date of birth of their last child. The report provides current estimates of fertility and out-of-wedlock childbearing, highlighting differences among women by race, ethnicity, and nativity status. Historical data from previous surveys are also used in this report to show the fluctuations since 1976 in the labor force participation of women with infants (children under 1 year of age), and to illustrate how women completing their childbearing today differ from women a generation earlier, whose principal childbearing years occurred during the Baby Boom (1946 to 1964).

Data from NCHS indicate that fertility rates have fluctuated sharply since the peak of the Baby Boom in the late 1950s, when women were having children at a rate of more than 3.5 births per woman. By the mid-1970s, the total fertility rate fell by one-half to about 1.8 births per

woman.<sup>2</sup> During the past decade, fertility rates have fluctuated between 2.0 and 2.1 births per woman, a rate below the level required for the natural replacement of the population (about 2.1 births per woman).<sup>3</sup>

### **CURRENT FERTILITY**

### Overall patterns of fertility

Table 1 shows fertility levels for women in June 2002 by age, race, and Hispanic origin.<sup>4</sup> Of the 61.4 million women who were 15 to 44 years old in June 2002, 3.8 million gave birth in the preceding 12 months; 1.4 million were first births.<sup>5</sup> This produced an estimated fertility rate of 61 births per 1,000 women 15 to 44 years old and a corresponding first-birth rate of 23 births per 1,000 women. In

### Current Population Reports

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Demographic Programs







<sup>&</sup>lt;sup>1</sup> The data in this report are from the Fertility Supplement to the June 2002 Current Population Survey. The population represented (the population universe) is the female civilian noninstitutionalized population, 15 to 44 years old, of the United States.

<sup>&</sup>lt;sup>2</sup> The total fertility rate for a given year is a hypothetical estimate of completed fertility. It indicates how many births a woman would have by the end of her reproductive life if, for all of her childbearing years, she was to experience the age-specific birth rates for that given year.

<sup>&</sup>lt;sup>3</sup> The level required for the natural replacement of the population is the average number of children a woman must have to replace herself with a female living to the average age of childbearing. Taking into account that slightly more boy than girl babies are born and that not all children survive to the childbearing ages, this level is about 2.1 births per woman.

<sup>&</sup>lt;sup>4</sup> The estimates in this report are based on responses from a sample of the population. As with all surveys, estimates may vary from the actual (population) values because of sampling variation or other factors. All comparisons made in this report have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

<sup>&</sup>lt;sup>5</sup> Preliminary vital statistics estimates for the calendar year 2002 indicate that there were about 4 million births, of which 1.6 million were first births (Brady E. Hamilton, et al., "Births: Preliminary Data for 2002." *National Vital Statistics Report*, Vol. 51, No. 11. National Center for Health Statistics, Hyattsville, MD, 2003, Table 2).

Table 1.

Fertility Indicators for Women 15 to 44 Years Old by Age, Race, and Hispanic Origin:
June 2002

			Wo				
Characteristic				Births pe	r 1,000 women	First births per 1,000 women	Children ever born per 1,000 women
	Number of women	Percent childless	1	Rate	90-percent confi- dence interval		
AGE							
Total.  15 to 19 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years 40 to 44 years	61,361 9,809 9,683 9,221 10,284 10,803 11,561	43.5 91.2 67.0 45.2 27.6 20.2 17.9	<b>3,766</b> 549 872 897 859 452 137	61.4 55.9 90.0 97.2 83.6 41.9	<b>59.4 - 63.4</b> 50.9 - 60.9 83.0 - 97.0 90.2 - 104.2 77.6 - 89.6 36.9 - 46.9 9.9 - 13.9	23.1 27.7 45.3 33.2 26.4 7.9 3.6	1,211 140 525 1,050 1,543 1,849 1,930
RACE AND ETHNICITY							
White							
Total.  15 to 19 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years 40 to 44 years	48,481 7,699 7,604 7,151 8,057 8,658 9,313	43.9 91.9 69.5 46.6 27.2 20.2 17.9	2,958 394 631 723 717 374 120	61.0 51.1 83.0 101.1 88.9 43.2 12.8	58.0 - 64.0 45.1 - 57.1 76.0 - 90.0 93.1 - 109.1 81.7 - 95.1 38.2 - 48.2 9.8 - 15.8	22.9 24.7 42.8 34.7 29.5 7.9 4.2	1,196 129 473 1,018 1,530 1,842 1,917
White, Non-Hispanic							
Total.  15 to 19 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years 40 to 44 years	<b>40,017</b> 6,296 6,138 5,599 6,544 7,281 8,160	45.6 93.0 73.2 51.1 29.9 21.5 18.5	2,262 289 437 555 576 300 106	56.5 45.8 71.1 99.2 88.0 41.2 13.0	<b>53.5 - 59.5</b> 39.8 - 51.8 63.1 - 79.1 90.2 - 108.2 80.0 - 96.0 36.2 - 46.2 10.0 - 16.0	21.3 21.7 37.4 37.4 28.7 7.7 4.2	1,130 116 406 881 1,413 1,755 1,842
Black							
Total.  15 to 19 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years 40 to 44 years	8,846 1,535 1,497 1,351 1,440 1,506 1,518	39.0 86.7 51.1 31.6 23.9 19.7	571 125 193 98 95 52 8	64.6 81.4 128.9 72.7 66.1 34.2 5.6	58.6 - 70.6 65.4 - 97.4 108.9 - 148.9 56.7 - 88.7 51.1 - 81.1 23.2 - 45.2 1.6 - 9.6	22.3 38.0 61.2 18.6 10.1 5.0	1,354 214 828 1,392 1,790 1,942 1,991
Asian and Pacific Islander							
Total.  15 to 19 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years 40 to 44 years	3,267 447 481 608 632 530 568	50.8 94.2 81.0 60.7 41.2 23.3 16.8	181 23 22 66 40 21	55.4 51.1 45.1 109.1 62.5 40.6 15.7	<b>46.4 - 64.4</b> 27.1 - 75.1 23.1 - 67.1 79.1 - 139.1 40.5 - 84.5 20.6 - 60.6 3.7 - 27.7	27.3 34.9 29.5 45.2 31.3 17.7 4.8	994 86 297 631 1,124 1,605 1,974
Hispanic (of any race)							
Total.  15 to 19 years 20 to 24 years 25 to 29 years 30 to 34 years 35 to 39 years	9,141 1,517 1,574 1,682 1,620 1,481	35.8 87.8 52.9 29.5 15.6 13.4	750 105 226 176 152 77	82.0 69.3 143.7 104.6 93.7 52.1	73.0 - 91.0 48.3 - 90.3 115.7 - 171.7 80.6 - 128.6 70.7 - 116.7 34.1 - 70.1	30.4 35.4 70.8 25.8 32.6 8.1	1,511 172 768 1,522 2,043 2,287
30 to 34 years	1,620	15.6	152	93.7	70.7 - 116.7	32.6	2

<sup>-</sup> Represents zero or rounds to zero.

Source: U.S. Census Bureau, Current Population Survey, June 2002.

Table 2. Children Ever Born Per 1,000 Women 40 to 44 Years Old: Selected Years, 1976 to 2002

		Children	Children Percent distribution of women by number of children ever born								
Year	Number of women	per 1,000 women	Total	None	1 child	2 children	3 children	4 children	5 or more children		
1976	5,684	3,091	100.0	10.2	9.6	21.7	22.7	15.8	20.1		
1980	5,983	2,988	100.0	10.1	9.6	24.6	22.6	15.5	17.6		
1985	7,226	2,447	100.0	11.4	12.6	32.9	23.1	10.9	9.1		
1990	8,905	2,045	100.0	16.0	16.9	35.0	19.4	8.0	4.8		
1995	10,244	1,961	100.0	17.5	17.6	35.2	18.5	7.4	3.9		
1998	11,113	1,877	100.0	19.0	17.3	35.8	18.2	6.1	3.5		
2000	11,447	1,913	100.0	19.0	16.4	35.0	19.1	7.2	3.3		
2002	11,561	1,930	100.0	17.9	17.4	35.4	18.9	6.8	3.6		

Source: U.S. Census Bureau, Current Population Survey, selected years, June 1976 to June 2002.

this report, the fertility rate is defined as the number of women who reported having a child in the 12-month period ending in June 2002 per 1,000 women in the specified age and/or characteristic group at the time of the survey.

Overall, 44 percent of women in the childbearing ages were childless in 2002. Table 2 shows that among women 40 to 44 years old (who were nearing the completion of their childbearing years), 18 percent were childless, almost twice as high as among women who were the same age in 1976 (10 percent). Women 40 to 44 years old in 2002 will probably end their childbearing years with an average of 1.9 children, more than one child fewer than the average for women in this same age group in 1976 (3.1 children).

This shift in average number of children born by age 44 reflects the decline in families with four or more children, from 36 percent to 10 percent, and the corresponding increase in families with one or two children from 31 percent to 53 percent.

## Fertility differences by race and ethnicity

Hispanic women had the highest fertility rate in 2002 among all race and origin groups shown in Table 1 (82 births per 1,000 women 15 to 44 years old). Among Hispanic women, 750,000 gave birth in the year prior to the survey, representing 20 percent of all births in 2002. The proportion of all women 15 to 44 years old who were Hispanic was 15 percent in 2002. The fertility rate of non-Hispanic White women (57 births per 1,000 women) was considerably lower than that of Hispanic women.

Among women 40 to 44 years old in 2002, only Hispanic women, with an average of 2.4 births, exceeded the level required for the natural replacement of the population (about 2.1 births per woman). White women and non-Hispanic White women had fertility levels significantly below the replacement

level, averaging 1.9 and 1.8 births per woman, respectively.
Corresponding to their relatively high level of completed fertility, only 13 percent of Hispanic women 40 to 44 years old were childless, compared with 19 percent of non-Hispanic White women.

## Fertility differences by nativity status

Table 3 shows that 8.9 million foreign-born women 15 to 44 years old lived in the United States in June 2002, representing 15 percent of women in the childbearing ages.7 In the year prior to the survey, 637,000 foreign-born women gave birth, resulting in a fertility rate of 71 births per 1,000 women. Fortyone percent of births to foreignborn women were first births. The fertility rate for native women was considerably lower, at 60 births per 1,000 women, although the percentage of first births (37 percent) was not significantly different from that of foreign-born women.

<sup>&</sup>lt;sup>6</sup> People of Hispanic origin may be of any race. Data for the American Indian and Alaska Native population are not shown in this report because of their small sample size in the CPS. Based on the population of women 15 to 44 years old surveyed in the June 2002 CPS, 4.7 percent of the Black population and 2.6 percent of the Asian and Pacific Islander population were also of Hispanic origin.

<sup>&</sup>lt;sup>7</sup> In this report, "native" is used to designate people born in the United States, Puerto Rico, the outlying areas or territories of the Unites States, or abroad to at least one U.S.-citizen parent. "Foreign born" refers to all other people. The Current Population Survey sample does not include Puerto Rico or other outlying areas.

Table 3.

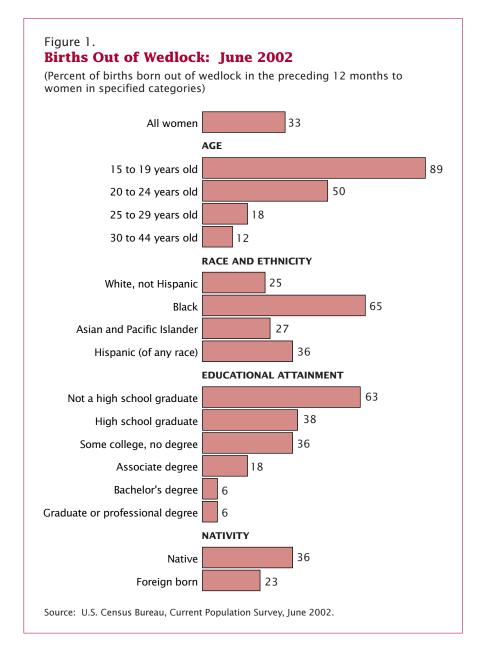
Fertility Indicators for Women 15 to 44 Years Old by Selected Characteristics: June 2002

Number of women	Percent childless	Number	Births per 1,000 women	First births per 1,000 women	Children ever born per 1,000 women
61,361	43.5	3,766	61.4	23.1	1,211
30,275 27,828 2,446 5,303 25,782	18.7 18.5 21.1 21.1 77.2	2,505 2,382 124 143 1,118	82.8 85.6 50.5 26.9 43.3	28.6 29.6 17.0 6.6 19.9	1,792 1,784 1,878 1,724 423
13,096 16,644 31,621 12,451 5,113 10,592 3,465	58.8 30.7 43.9 45.9 33.0 46.6 44.6	812 1,005 1,949 750 221 683 294	62.0 60.4 61.6 60.2 43.2 64.5 84.9	20.1 22.8 24.4 24.0 15.5 25.1 36.8	1,043 1,478 1,140 1,124 1,374 1,059
43,360 40,150 3,210 18,001	44.0 43.2 52.8 42.4	2,056 1,867 189 1,710	47.4 46.5 58.8 95.0	19.5 18.4 32.9 31.6	1,165 1,178 1,011 1,320
4,203 5,760 3,348 3,464 3,612 8,477 10,613 13,771 8,114	40.0 39.9 38.2 41.9 43.7 43.0 43.6 47.2	355 472 215 194 264 457 554 826	84.5 81.9 64.3 56.1 73.2 53.9 52.2 60.0	30.5 34.8 21.9 15.9 23.1 19.0 23.3 21.4	1,449 1,334 1,338 1,221 1,206 1,204 1,176 1,098
0,111		120	02.0		1,100
11,616 14,041 21,680 14,024	46.1 43.8 40.9 45.1	694 780 1,453 838	59.7 55.6 67.0 59.8	21.2 21.6 25.9 21.7	1,148 1,212 1,234 1,226
50,755 18,804 31,950 10,606	44.8 46.4 43.8 37.3	3,032 1,163 1,869 734	59.7 61.8 58.5 69.2	22.6 22.9 22.5 25.1	1,180 1,167 1,188 1,357
E0 400	44.0	0.100	50.7	00.0	1 100
4,739 47,689 38,485 8,933 4,402 4,531	43.7 45.0 45.7 35.6 27.4 43.5	371 2,758 2,170 637 379 258	78.3 57.8 56.4 71.3 86.0 56.9	28.5 21.3 21.1 29.3 32.5 26.2	1,169 1,285 1,157 1,127 1,455 1,755 1,166 1,195
	women 61,361 30,275 27,828 2,446 5,303 25,782 13,096 16,644 31,621 12,451 5,113 10,592 3,465 43,360 40,150 3,210 18,001 4,203 5,760 3,348 3,464 3,612 8,477 10,613 13,771 8,114 11,616 14,041 21,680 14,024 50,755 18,804 31,950 10,606	women         childless           61,361         43.5           30,275         18.7           27,828         18.5           2,446         21.1           5,303         21.1           25,782         77.2           13,096         58.8           16,644         30.7           31,621         43.9           12,451         45.9           5,113         33.0           10,592         46.6           3,465         44.6           43,360         44.0           40,150         43.2           3,210         52.8           18,001         42.4           4,203         40.0           5,760         39.9           3,348         38.2           3,464         41.9           3,612         43.7           8,477         43.0           10,613         43.6           13,771         47.2           8,114         44.7           50,755         44.8           14,024         45.1           50,755         44.8           18,804         43.4           10,606	women         childless         Number           61,361         43.5         3,766           30,275         18.7         2,505           27,828         18.5         2,382           2,446         21.1         124           5,303         21.1         143           25,782         77.2         1,118           13,096         58.8         812           16,644         30.7         1,005           31,621         43.9         1,949           12,451         45.9         750           5,113         33.0         221           10,592         46.6         683           3,465         44.6         294           43,360         44.0         2,056           40,150         43.2         1,867           3,210         52.8         189           18,001         42.4         1,710           4,203         40.0         355           5,760         39.9         472           3,348         38.2         215           3,464         41.9         194           3,612         43.7         264           8,477         43.0 <td>women         childless         Number         1,000 women           61,361         43.5         3,766         61.4           30,275         18.7         2,505         82.8           27,828         18.5         2,382         85.6           2,446         21.1         124         50.5           5,303         21.1         143         26.9           25,782         77.2         1,118         43.3           13,096         58.8         812         62.0           16,644         30.7         1,005         60.4           31,621         43.9         1,949         61.6           12,451         45.9         750         60.2           5,113         33.0         221         43.2           10,592         46.6         683         64.5           3,465         44.6         294         84.9           43,360         44.0         2,056         47.4           40,150         43.2         1,867         46.5           3,210         52.8         189         58.8           18,001         42.4         1,710         95.0           4,203         40.0         355<td>women         childless         Number         1,000 women         women           61,361         43.5         3,766         61.4         23.1           30,275         18.7         2,505         82.8         28.6           27,828         18.5         2,382         85.6         29.6           2,446         21.1         124         50.5         17.0           5,303         21.1         143         26.9         6.6           25,782         77.2         1,118         43.3         19.9           13,096         58.8         812         62.0         20.1           16,644         30.7         1,005         60.4         22.8           31,621         43.9         1,949         61.6         24.0           5,113         33.0         221         43.2         15.5           10,592         46.6         683         64.5         25.1           3,465         44.0         2,056         47.4         19.5           40,150         43.2         1,867         46.5         18.4           3,210         52.8         189         58.8         32.9           18,001         42.4         1,</td></td>	women         childless         Number         1,000 women           61,361         43.5         3,766         61.4           30,275         18.7         2,505         82.8           27,828         18.5         2,382         85.6           2,446         21.1         124         50.5           5,303         21.1         143         26.9           25,782         77.2         1,118         43.3           13,096         58.8         812         62.0           16,644         30.7         1,005         60.4           31,621         43.9         1,949         61.6           12,451         45.9         750         60.2           5,113         33.0         221         43.2           10,592         46.6         683         64.5           3,465         44.6         294         84.9           43,360         44.0         2,056         47.4           40,150         43.2         1,867         46.5           3,210         52.8         189         58.8           18,001         42.4         1,710         95.0           4,203         40.0         355 <td>women         childless         Number         1,000 women         women           61,361         43.5         3,766         61.4         23.1           30,275         18.7         2,505         82.8         28.6           27,828         18.5         2,382         85.6         29.6           2,446         21.1         124         50.5         17.0           5,303         21.1         143         26.9         6.6           25,782         77.2         1,118         43.3         19.9           13,096         58.8         812         62.0         20.1           16,644         30.7         1,005         60.4         22.8           31,621         43.9         1,949         61.6         24.0           5,113         33.0         221         43.2         15.5           10,592         46.6         683         64.5         25.1           3,465         44.0         2,056         47.4         19.5           40,150         43.2         1,867         46.5         18.4           3,210         52.8         189         58.8         32.9           18,001         42.4         1,</td>	women         childless         Number         1,000 women         women           61,361         43.5         3,766         61.4         23.1           30,275         18.7         2,505         82.8         28.6           27,828         18.5         2,382         85.6         29.6           2,446         21.1         124         50.5         17.0           5,303         21.1         143         26.9         6.6           25,782         77.2         1,118         43.3         19.9           13,096         58.8         812         62.0         20.1           16,644         30.7         1,005         60.4         22.8           31,621         43.9         1,949         61.6         24.0           5,113         33.0         221         43.2         15.5           10,592         46.6         683         64.5         25.1           3,465         44.0         2,056         47.4         19.5           40,150         43.2         1,867         46.5         18.4           3,210         52.8         189         58.8         32.9           18,001         42.4         1,

<sup>&</sup>lt;sup>1</sup>Includes separated women.

Note: Since the number of women who have had a birth during the 12-month period was tabulated and not the actual numbers of births themselves, a small underestimation of fertility for this period may exist because of the omission of: (1) multiple births; (2) more than one live birth occurring to a woman in a 12-month period (the woman is only counted once); (3) women who had births in the period and who died by the survey date; (4) women who were in institutions and therefore not in the survey universe; (5) 2 percent of births in a 12-month period (only 51 weeks of data are tabulated in the CPS due to the mid-to late-June interview schedule). These losses may be somewhat offset by the inclusion in the CPS of births to immigrants who did not have their children born in the United States and births to nonresident women who had their children born in the United States. These births would not have been recorded in the vital registration system. The ages of the women in this table and similar tables in this report refer to the age of women at the time of the survey and not at the birth of the child.

Source: U.S. Census Bureau, Current Population Survey, June 2002.



Among foreign-born women 15 to 44 years old, those of Hispanic origin had a higher fertility rate in 2002 (86 births per 1,000 women) than those not of Hispanic origin (57 births per 1,000 women), and a higher average number of births per woman (1.8 and 1.2, respectively).8 Consistent with their higher fertility rates, foreign-born Hispanic

women were less likely to be childless (27 percent) than were foreignborn women not of Hispanic origin (44 percent). In 2002, 59 percent of births to foreign-born women were to women of Hispanic origin, although they represented only 49 percent of foreign-born women in the childbearing ages.

June CPS. Hispanic women who were foreignborn had an estimated total rate of 2.5 births per woman compared with 1.7 births per woman for non-Hispanic women who were foreign born. Also, see footnote 1. Among native women, fertility rates for Hispanic women were also higher than those of non-Hispanic women (78 births per 1,000 and 58 births per 1,000, respectively), as were the average number of children born per woman (1.3 and 1.2, respectively). However, levels of childlessness were not significantly different between the two groups. A key reason for the difference in overall fertility rates between Hispanic and non-Hispanic native women was the high fertility of Hispanic women 20 to 24 years old. Among Hispanic women 20 to 24 years old, the fertility rate was 131 births per 1,000 women; the corresponding fertility rate for non-Hispanic women was 81 births per 1,000 women. At other ages, there were no significant differences in fertility rates between the two groups.

### OUT-OF-WEDLOCK CHILDBEARING

### **Annual estimates for 2002**

Estimates from the June 2002 CPS indicate that approximately 1.3 million women gave birth out of wedlock in the 12-month period preceding the survey, representing 33 percent of all births during this period. About 1.1 million births were to never-married women, while 143,000 were to women who were widowed or divorced at the time of the survey (see Table 3). These estimates may vary slightly from those reported by NCHS because marital status in the CPS is recorded at the time of the survey and not at the time of the actual birth.9 Some women in the CPS

<sup>8</sup> In order to control for differences in the age distributions of Hispanic and non-Hispanic immigrants, the total fertility rate for each of these populations was constructed from age-specific fertility rates from the

<sup>&</sup>lt;sup>9</sup> Preliminary vital statistics estimates for the calendar year 2002 indicate that unmarried women (all ages) had 1.4 million births, 34 percent of all births. (Brady E. Hamilton, et al., "Births: Preliminary Data for 2002." *National Vital Statistics Report*, Vol. 51, No. 11. National Center for Health Statistics, Hyattsville, MD, 2003, Table C).

Table 4.

Fertility Indicators for Women 15 to 44 Years Old by Cohabitation Status: June 2002

				Women who had a child in the last year			Children
Cohabitation status	Number of women	Mean age in years	Percent childless	Number with a birth	Births per 1,000 women	First births per 1,000 women	ever born per 1,000 women
Total	61,361	30.0	43.5	3,766	61.4	23.1	1,211
Married, spouse in household Unmarried partner in household <sup>1</sup> No partner in household <sup>2</sup>	27,828 3,531 30,001	34.5 29.2 26.0	18.5 45.0 66.5	2,382 307 1,077	85.6 87.0 35.9	29.6 42.8 14.6	1,784 1,124 689

<sup>&</sup>lt;sup>1</sup>Includes women of any marital status who were living with an opposite sex unmarried partner at the time of the survey.

who gave birth in the last year may have subsequently married or divorced by the time of the survey. In addition, out-of-wedlock birth data from NCHS are recorded by the physician on the birth certificate at the time of the child's birth, whereas CPS estimates of out-of-wedlock births are based on the information provided by the respondent at the time of the interview.

## Characteristics of women with an out-of-wedlock birth

Out-of-wedlock childbearing occurs most frequently among younger women (see Figure 1). In 2002, 89 percent of births to teenagers were out of wedlock, compared with 50 percent of births to women in their early twenties. The proportion declined to 12 percent for women 30 years old and over. The majoritv (65 percent) of births to Black women in 2002 were out of wedlock, compared with 36 percent for Hispanic women and 25 percent for non-Hispanic White women. The proportion of births born out of wedlock among foreign-born women was considerably lower (23 percent) than among native women (36 percent).

Figure 1 also shows an inverse relationship between educational attainment and the proportion of

births out of wedlock, which ranged from 63 percent among mothers who had not graduated from high school to only 6 percent among women who had either a bachelor's degree or a graduate/professional degree.

### Births to cohabiting women

Cohabitation between unmarriedopposite-sex partners may increase the likelihood of an out-of-wedlock birth compared with unmarried people who are not cohabiting, as living with a partner may increase sexual activity.<sup>10</sup> Table 4 shows that the birth rate among women who were living with an unmarried partner, 87 per 1,000 women, is not different from that of women living with a husband (86 per 1,000 women), but much higher than the rate of women living without an opposite-sex partner (36 per 1,000 women).

First-birth rates were highest among cohabiting women, followed by women living with a husband, and then women without partners. Levels of childlessness reflect a different pattern, with married-husband-present women the least likely to be childless, followed by cohabiting women, and women without partners (19 percent, 45 percent, and 67 percent, respectively). Cohabiting women probably had higher first-birth rates and levels of childlessness than currently married women because they were younger on average and had fewer years during which they could be in a partnered union.

### LABOR FORCE CHARACTERISTICS OF MOTHERS WITH INFANTS

## Change in labor force patterns since 1976

In June 2002, 2.1 million women who had infants were in the labor force: 1.9 million (91 percent) were employed at the time of the survey, while another 189,000 were unemployed (see Table 3). The Census Bureau first recorded labor force participation rates of mothers

<sup>&</sup>lt;sup>2</sup>Includes women of any marital status who were **not** living with an opposite sex partner at the time of the survey.

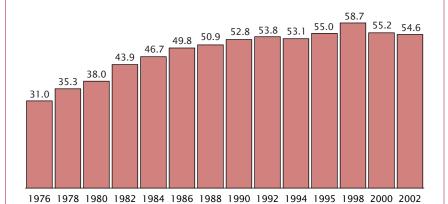
Source: U.S. Census Bureau, Current Population Survey, June 2002.

<sup>10</sup> See Davis, Kingsley and Judith Blake. 1956. "Social Structures and Fertility," Economic Development and Cultural Change, 4 (211-235).

Cohabitation, in this report, is determined by whether a woman is living with a male unmarried partner, where either the woman or her partner is the householder. People in a partnered relationship but who are not living together in the same household, or if neither is identified as the householder, are not tabulated in this report (for example, the daughter of the householder living with her partner who would be identified as a nonrelative of the householder would not be tabulated).

# Figure 2. **Labor Force Participation Among Mothers**With Infants: 1976 to 2002

(Percent of all women age 15-44 who had a child in the last 12 months who were in the labor force)



Source: U.S. Census Bureau, Current Population Survey, selected years, June 1976 to June 2002.

with infants in 1976, when the rate was 31 percent among women who had had a child in the past year.11 New mothers' labor force involvement increased or held steady from 1976 through 1998, when it peaked at 59 percent (see Figure 2). The 2000 participation level of 55 percent was the first statistically significant decline since 1976 and its level was not different from 2002 (also 55 percent). Changes in the labor force participation of women with infants could signal changes in the need for child care, in child rearing practices, in future childbearing and birth spacing patterns, and in the demand for employer-sponsored maternity leave benefits.

Table 5 shows trends in the labor force participation of mothers with infants from 1990 to 2002. In both 1990 and 1994, the overall rate was 53 percent. The only group that increased their labor force participation rate in this period was women whose marital status was not "married — husband present": from 44 percent to 50 percent.

During the next 4-year period, from 1994 to 1998, the overall labor force participation rate increased from 53 percent to 59 percent. Increases occurred among women 25 years old and over, women with two or more children, Black women, both married and unmarried women, and women who were high school graduates.

From 1998 to 2000, the overall participation rate of mothers with infants dropped from 59 percent to 55 percent. Declines occurred in this period among mothers 30 years old and over, mothers who were White, and mothers who had 1 or more years of college.

While the rate for married mothers with infants during this period declined from 60 percent to 54 percent — back to its 1994 level — the rate for unmarried mothers with infants remained unchanged in 2000 at 57 percent.

Between 2000 and 2002, the labor force participation rate remained unchanged at 55 percent. Declines, however, occurred in the labor force participation of Black mothers and those with less than a high school education. The declines since 1998 suggest that economic or lifestyle changes may be underway that merit continued scrutiny.

## Current labor force participation among mothers

Table 6 shows the differences in labor force participation of mothers 15 to 44 years old by whether or not they had a child between July 2001 and June 2002. Mothers who had a child in the last year recorded lower labor force participation rates (55 percent) than did other mothers (72 percent). Among childless women, 71 percent were in the labor force, not significantly different from mothers without infants.<sup>12</sup>

Women who seek to return to work shortly after giving birth may want part-time employment so they can devote more time to providing care to their newborns. Figure 3 shows that among employed mothers,

<sup>&</sup>quot;The labor force participation rate is defined as the percentage of people in a specified population group who are either employed or looking for work. Mothers are defined in this report as women age 15 to 44 years old who have had at least one live birth, regardless of whether any of their children currently reside with them. Infants are defined as children under 1 year (less than 12 months) old.

<sup>&</sup>lt;sup>12</sup> A comparison of childless women and mothers without infants yields no difference in labor force participation. Motherhood likely has the greatest impact on employment during the first year. After that, mothers and childless women may have similar labor force participation rates. Data for first-time mothers who had a child in the period 1991-94 indicate that 78 percent of women who worked during their first pregnancy returned to work within 12 months of their child's birth (see Kristin Smith, Barbara Downs and Martin O'Connell. Maternity Leave and Employment Patterns: 1961-1995. Current Population Reports, P70-79. U.S. Census Bureau. Washington, DC, 2001; Table I).

Table 5.

Changes in Labor Force Participation Among Mothers 15 to 44 Years Old With Infants by Selected Characteristics: June 1990, 1994, 1998, 2000, and 2002

(Numbers in thousands. Limited to women with a birth in the 12-month period preceding the survey)

Characteristic	1990	ercent of m	others in th	e labor force 2000	e 2002	Percentage point difference 1990-1994	Percentage point difference 1994-1998	Percentage point difference 1998-2000	Percentage point difference 2000-2002
Total number of mothers with infants  Percent in labor force	<b>3,913</b> 52.8	<b>3,890</b> 53.1	<b>3,671</b> 58.7	<b>3,934</b> 55.2	<b>3,766</b> 54.6	(X) 0.3	(X) *5.6	(X) *-3.5	(X) -0.6
AGE 15 to 19 years	42.8	39.3	43.2	46.0	38.9	-3.5	3.9	2.8	-7.1
	45.5	51.0	56.4	51.9	54.7	5.5	5.4	-4.5	2.8
	55.3	54.5	61.9	59.5	54.0	-0.8	*7.4	-2.4	-5.5
	58.9	57.1	63.0	57.7	60.9	-1.8	*5.9	*-5.3	3.2
CHILDREN EVER BORN One child	59.7	59.0	60.8	57.5	59.8	-0.7	1.8	-3.3	2.3
	48.4	48.9	57.3	53.5	51.5	0.5	*8.4	-3.8	-2.0
RACE AND ETHNICITY White	54.5 (NA) 46.9 48.0	55.4 59.2 47.0 37.7	58.4 61.6 63.0 49.9 45.7	53.1 56.8 65.8 56.3 41.8	53.8 56.8 57.4 51.1 45.2	0.9 (NA) 0.1 -10.3	3.0 (NA) *16.0 12.2 8.0	*-5.3 *-4.8 2.8 6.4 -3.9	0.7 - *-8.4 -5.2 3.4
MARITAL STATUS  Married-husband present  All other <sup>1</sup>	56.4	54.5	59.5	54.1	55.4	-1.9	*5.0	*–5.4	1.3
	43.5	49.7	57.1	57.2	53.3	*6.2	*7.4	0.1	-3.9
EDUCATIONAL ATTAINMENT <sup>2</sup> Not a high school graduate High school graduate College, 1 or more years Some college or Associate degree Bachelor's degree and above	31.5	33.5	37.7	39.0	32.2	2.0	4.2	1.3	*-6.8
	51.9	48.1	58.4	55.0	56.1	-3.8	*10.3	-3.4	1.1
	65.3	66.2	67.9	63.5	63.2	0.9	1.7	*-4.4	-0.3
	62.8	63.3	67.3	63.2	62.9	0.5	4.0	-4.1	-0.3
	68.0	69.6	68.5	63.8	63.5	1.6	-1.1	-4.7	-0.3

<sup>\*</sup> Indicates significant differences at the 90-percent confidence level. - Represents zero or rounds to zero. NA Not available. X Not applicable.

1 Includes married, spouse absent; separated; divorced; widowed; and never-married women.

2 Educational attainment categories in 1990 based on years of school completed.

Source: U.S. Census Bureau, Current Population Survey, June 2002.

those with infants were more likely to work part-time (29 percent) than were those without infants (23 percent).<sup>13</sup> Mothers of all ages who had infants, except for teenage mothers, worked full-time more often than part-time. School may compete with employment for teenage mothers' time, making them more likely to work part-time rather than full-time (see Table 6).

# Differences in full-time and part-time employment by educational attainment

Labor force participation is appreciably higher among college-educated mothers with infants than those with a high school education or less. In 2002, 63 percent of women with 1 or more years of college who had had a child in the previous year were in the labor force, compared with 56 percent of high school graduates with infants and only 32 percent of new mothers who were not high school graduates.

New mothers with a graduate or professional degree were three times as likely to work at full-time jobs as at part-time jobs. New mothers who were high school graduates or who had attended college and received an associate degree were twice as likely to work full-time as part-time, while women who did not complete high school were equally likely to work full-time as part-time. Mothers at all education levels with no infant children were at least twice as likely to work full-time.

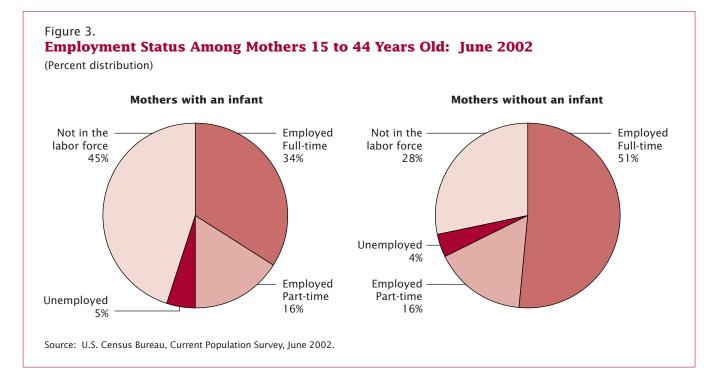
<sup>&</sup>lt;sup>13</sup> Full-time workers are employed people who worked 35 or more hours per week in the interview reference week.

Table 6. **Labor Force Participation Among Mothers 15 to 44 Years Old by Fertility Status and Selected Characteristics: June 2002** 

(Numbers in thousands. Limited to women with at least one child ever born)

	Moth	others who had a child in the last year				Mothers who did not have a child in the last year					
Characteristic	Percent in labor force						Percent in labor force				
	of mothers	Total	Full-time	Part-time	Unem- ployed	Number of mothers	Total	Full-time	Part-time	Unem- ployed	
Total	3,766	54.6	33.8	15.7	5.0	30,905	72.0	51.3	16.4	4.3	
AGE											
15 to 19 years	549 872 897 1,449	38.9 54.7 54.0 60.9	12.6 32.3 38.5 39.9	18.4 14.5 11.9 17.9	7.9 7.9 3.6 3.1	318 2,327 4,156 24,104	56.9 66.4 69.0 73.2	23.7 43.5 47.1 53.1	20.1 15.1 16.2 16.5	13.0 7.8 5.8 3.6	
CHILDREN EVER BORN AND AGE OF WOMAN											
One child	1,415 272 438 306 399	59.8 48.3 58.3 59.6 69.5	37.0 15.4 34.6 41.0 51.3	15.3 20.7 12.8 14.6 15.0	7.5 12.2 10.8 4.0 3.2	9,298 242 1,455 1,746 5,855	75.2 56.9 68.2 76.1 77.5	56.4 23.8 44.7 55.9 60.8	14.7 19.1 16.8 16.3 13.6	4.1 13.9 6.7 3.9 3.1	
Two or more children	2,351 277 433 591 1,050	51.5 29.7 51.0 51.1 57.6	31.9 9.9 30.0 37.2 35.6	16.0 16.1 16.2 10.5 19.0	3.5 3.7 4.9 3.4 3.0	21,607 76 872 2,410 18,249	70.6 56.7 63.3 64.0 71.9	49.1 23.4 41.6 40.7 50.7	17.1 23.1 12.1 16.1 17.5	4.4 10.2 9.6 7.1 3.7	
RACE AND ETHNICITY											
White	2,958 2,262 571 181	53.8 56.8 57.4 51.1	33.0 34.0 36.7 35.2	16.9 19.5 10.0 11.7	3.9 3.4 10.6 4.1	24,230 19,516 4,823 1,426	71.5 73.2 76.4 66.3	49.4 50.1 60.0 52.2	18.3 19.7 9.1 10.7	3.8 3.4 7.3 3.4	
Hispanic (of any race)	750	45.2	29.9	8.7	6.6	5,115	64.2	46.3	12.6	5.2	
MARITAL STATUS											
Married-husband present Married-husband absent, separated, divorced, or	2,382	55.4	36.4	16.3	2.7	20,297	69.1	48.0	18.3	2.8	
widowed Never married	266 1,118	62.9 51.0	44.8 25.8	9.8 16.0	8.4 9.2	5,848 4,760	80.3 73.8	62.0 51.9	11.9 13.9	6.5 8.0	
EDUCATIONAL ATTAINMENT											
Not a high school graduate	812 1,005 1,949 750 221 683	32.2 56.1 63.2 60.8 70.0 63.2	13.0 31.6 43.7 41.4 43.7 45.0	11.0 17.4 16.9 16.0 19.4 17.0	8.1 7.1 2.6 3.4 7.0 1.2	4,590 10,527 15,789 5,983 3,205 4,975	55.4 73.0 76.1 75.8 80.0 73.3	34.4 53.0 55.1 54.5 55.6 54.1	14.0 15.0 18.1 17.0 20.6 17.7	7.0 5.1 3.0 4.4 3.8 1.5	
ANNUAL FAMILY INCOME			_			, ,					
Under \$10,000 \$10,000 to \$19,999 \$20,000 to \$24,999 \$25,000 to \$29,999 \$30,000 to \$34,999 \$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 and over Not ascertained	355 472 215 194 264 457 554 826 428	50.1 43.2 48.5 42.7 57.1 60.9 58.6 65.0 45.9	20.7 26.2 26.8 22.9 41.3 37.2 38.3 44.2 27.7	14.1 12.7 13.0 13.9 10.6 18.9 17.1 18.8 14.9	15.4 4.4 8.7 5.9 5.2 4.8 3.2 2.0 3.3	2,167 2,992 1,853 1,819 1,768 4,371 5,429 6,448 4,056	55.0 66.2 70.9 72.2 74.1 75.2 78.8 75.5 66.6	25.8 42.7 53.3 52.4 54.5 54.6 59.2 53.6 50.5	16.5 16.0 12.6 12.3 15.7 16.7 17.5 20.1	12.7 7.5 5.0 7.4 3.9 3.9 2.2 1.8 3.2	
NATIVITY Native born	3,129 637	57.2 41.6	35.0 28.3	17.4 7.8	4.9 5.6	25,787 5,118	74.4 59.8	52.9 43.2	17.2 12.5	4.3 4.1	

Source: U.S. Census Bureau, Current Population Survey, June 2002.



These data suggest that women with higher levels of education return to work more rapidly after giving birth and are more likely to return as full-time workers than are women with fewer years of schooling. The likelihood of returning to work after a child's birth is highly related to work experience prior to and during pregnancy (for example, hours worked per week and when the woman stopped working).<sup>14</sup>

## Demographic differences in labor force participation

What other factors influence the decision to return to work after childbirth? The marital status of the mother is related to her labor force participation. Women who are unmarried and who lack a spouse's income may be more dependent on

their own employment to support their families. However, the absence of a husband may restrict the economic resources available for child care services and means one fewer adult is available as a potential child care provider.

Table 6 shows that despite these potential impediments to working, 45 percent of separated, divorced, and widowed women with infants were employed full-time — about the same as women who were married (36 percent) and more than women who had never married (26 percent). Among mothers in the labor force who have infants, unmarried women or those living without their spouses were most likely to be unemployed and possibly in need of child care services or job training assistance.

Among mothers without infants, those who were separated, divorced, and widowed were the most likely to work full-time, followed by those who never married, then those living with a

husband. Never-married mothers without infants were most likely to be unemployed, while their married counterparts were least likely to be looking for work.

Native women with infants participated in the labor force at a considerably higher rate (57 percent) than foreign-born women with infants (42 percent). A similar difference was evident for native and foreign-born mothers without infants (74 percent compared to 60 percent), perhaps suggesting that language or job skills influence these differences.

Young mothers, regardless of the age of their children, are less likely to be in the labor force than older mothers. Thirty-nine percent of teen mothers with infants were in the labor force, compared to 61 percent of new mothers age 30 and over. A similar pattern existed among mothers without infants.

Which mothers with infants experience the greatest difficulty in

<sup>&</sup>lt;sup>14</sup> Martin O'Connell. *Maternity Leave Arrangements: 1961-85.* Current Population Reports, P23-165. U.S. Census Bureau. Washington, DC, 1990; Kristin Smith, Barbara Downs and Martin O'Connell. *Maternity Leave and Employment Patterns: 1961-1995.* Current Population Reports, P70-79. U.S. Census Bureau. Washington, DC, 2001.

finding jobs? About 20 percent of teenaged mothers who were in the labor force were unemployed.15 Among never-married women with infants, relatively high proportions of those in the labor force were unemployed compared with their currently married counterparts. Among all women with infants, a significantly higher proportion with a high school education or less was unemployed than those with 1 or more years of college. Among mothers with infants living in families with incomes under \$10,000 per year, 31 percent of those in the labor force were unemployed.

In summary, these data indicate that the majority of women with infant children participate in the labor force during their child's first year of life and twice as many are employed full-time as part-time. However, many teenage mothers and women with less than a high school education appear to experience considerable difficulty securing employment.

### **SOURCE OF THE DATA**

Most estimates in this report come from data obtained in the June 2002 Current Population Survey (CPS). Some estimates are based on data obtained by the CPS in earlier years. The U.S. Census Bureau conducts this survey every month, although this report uses only data from the June surveys for its estimates. Comparative estimates on annual births are made with data collected in the Vital Statistics Registration system and are published by the National Center for Health Statistics.

The population represented (the population universe) in the Fertility Supplement to the June 2002 CPS is

the female civilian noninstitutionalized population, 15 to 44 years old, of the United States. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized population in Census 2000).

## ACCURACY OF THE ESTIMATES

Statistics from surveys are subject to sampling and nonsampling error. All comparisons presented in this report have taken sampling error into account and are significant at the 90-percent confidence level. This means the 90-percent confidence interval for the difference between the estimates being compared does not include zero. Nonsampling errors in surveys may be attributed to a variety of sources, such as how the survey was designed, how respondents interpret questions, how able and willing respondents are to provide correct answers, and how accurately the answers are coded and classified. The Census Bureau employs quality control procedures throughout the production process including the overall design of surveys, the wording of questions, review of the work of interviewers and coders, and statistical review of reports to minimize these errors.

The Current Population Survey weighting procedure uses ratio estimation whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, and Hispanic origin. How this weighting procedure affects other

variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources.

For further information on statistical standards and the computation and use of standard errors, go to www.census.gov/population/www/socdemo/fertility/2002/sa02.html or contact Jana Shepherd of the Census Bureau Demographic Statistical Methods Division on the Internet at dsmd.source.and.accuracy@census.gov.

### MORE INFORMATION

Detailed tables with characteristics of women in the childbearing ages by fertility indicators are available on the Internet (www.census.gov); search by clicking on "F" for "Fertility of American Women Data" under the "Subjects A to Z" heading on the Census Bureau home page.

#### **CONTACTS**

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### **USER COMMENTS**

The Census Bureau welcomes the comments and advice of users of its data and reports. If you have any suggestions or comments, please write to:

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### **SUGGESTED CITATION**

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<sup>&</sup>lt;sup>15</sup> Unemployment rates (percentages) are computed by dividing the number of people in the unemployed category by the total number of people in the labor force.

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