Teenagers:

Marriages, Divorces,

Parenthood, and Mortality

Analysis of teenage marriage, divorce, parenthood
(including information on illegitimacy rates and
ratios), and mortality during the 1960's.

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TEENAGERS: MARRIAGES, DIVORCES, PARENTHOOD, AND MORTALITY

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INTRODUCTION

There are more teenagers in the United States today than ever before in the history of the country.

In 1969 there were an estimated 18.6 million persons 15 through 19 years of age, the group accounting for most of the teenage marriages, divorces, parenthood, and mortality. This was 5.6 million more than in 1959 and nearly 8 million more than in 1949. The number of teenagers will continue to increase during the 1970's but at a slower pace. After a slight interruption during the 1980's, the upward trend is expected to continue. According to current projections the teenage population is likely to be in the neighborhood of 25 million by the year 2000 (figure 1).
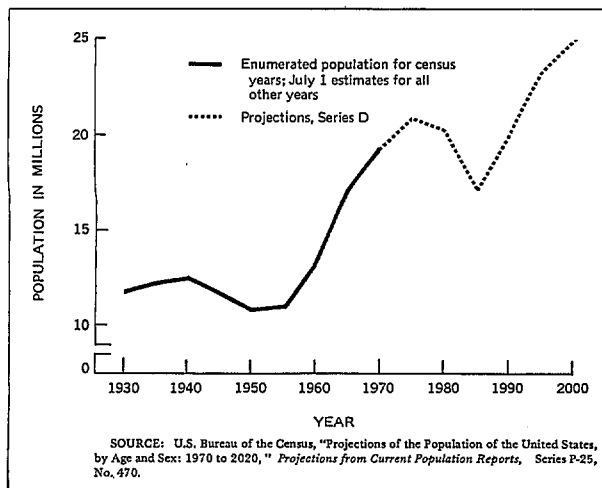

Figure 1. Teenage population 15-19 years of age: United States, 1930-2000.

The tremendous growth in the population aged 15-19 is even more impressive when viewed against the fact that for more than 25 years (from 1930 to 1958) this segment of the population stayed within the bounds of 10 and 12.5 million. Then in just 11 years it increased almost 50 percent.

The proportion of the total population accounted for by teenagers has also changed under the influence of varying size cohorts moving through the age groups. During the 1930's the proportion of teenagers was relatively stable, staying at 9.4 or 9.5 percent, but during the 1940's and early fifties it declined steadily. By 1952 teenagers aged 15-19 years accounted for only 6.7 percent of the total population. This proportion remained constant until 1957, when a decided upward progression began. During the 1960's babies born to parents married during the post-World War II marriage boom increased the ranks of the teenage population. By 1969 the 15-19 group accounted for 9.1 percent of the population.

In sheer numbers teenagers account for a large share of the marriages and births, especially of illegitimate births. In 1969 about one-third of all brides and 14 percent of grooms were teenagers; in 1968 17 percent of all births and nearly 50 percent of the illegitimate births were to teenage mothers.

On the other hand, the proportion of divorces granted to teenagers is small—about 4 percent of all divorces for women and 1 percent for men in 1969. More significant is the large proportion of divorces granted to persons who married in

1

their teens (46 percent for women and 19 percent for men).

The total number of deaths among teenagers also is small and the death rate from all causes combined is low. Motor vehicle accidents, however, take a heavy toll from the teenage group; in 1969 the age group 15-19 years ranked a close second to the group aged 20-24 years in having more deaths from this cause than any of the other 5-year age groups throughout the entire life span. The death rate for teenagers was among the highest of the age-specific fatality rates for motor vehicle accidents.

These and other facts presented in this report on teenagers were derived from the vital statistics of the United States and publications of the U.S. Bureau of the Census. Figures for marriages and divorces were obtained or estimated from data provided by States having the necessary information on their marriage and divorce records. Discussions of estimating procedures and of reliability of the estimates appear in the appendix to this report.

MARRIAGES

The Married Teenage Population

Early marriage is more common now than it was at the turn of the century but slightly less common than it was 20 years ago. A gradual upward trend from 1890 to 1930 and a decline in the 1930's preceded an upsurge in the married teenage population right after World War II.

The increase from 1940 to 1950 was greater than any that had taken place in the previous half century. According to the census enumerations, in 1950, 31 percent of all women 18-19 years of age had already married in contrast to 22 percent in 1940. For men at the same ages the increase was from 3.7 to 6.6 percent. Similar increases were observed at ages 15-17, but even in 1950 only about 7 percent of the females and 1 percent of the males in this group had married.

From 1950 to 1960 the proportion married declined slightly in the female population 15-17 years old, but for females aged 18-19 and for both subgroups of males the proportion married continued to increase (table A). In 1970 there was a substantial decline from 1960 in the proportion married for females in both age groups and a slight decline for males 18-19 years of age. The proportion married among teenagers, however, was still much lower for males than for females.

Teenage Marriages During the 1960's

An increase in the number of teenagers 15-19 years of age during the period 1960-69 accounted

Table A. Percent of teenage population ever married, by sex and age: United States, 1890-1970

Year	Female			Male		
	15-19 years	15-17 years	18-19 years	15-19 years	15-17 years	18-19 years
1970	11.9	4.7	23.4	4.1	1.4	8.7
1960	16.1	6.8	32.1	3.9	1.2	8.9
1950	17.1	7.2	31.1	3.3	1.1	6.6
1940	11.9	4.6	22.2	1.7	0.4	3.7
1930	13.1	5.4	24.6	1.8	0.3	4.1
1920	12.9	5.2	24.6	2.1	0.5	4.7
1910	11.7	---	---	1.2	---	---
1900	11.2	---	---	1.0	---	---
1890	9.7	---	---	0.5	---	---

SOURCES: U.S. Bureau of the Census, U.S. Census of Population: 1960, Detailed Characteristics, United States Summary, Final Report PC(1)-1D, tables 177 and 179, 1963, and U.S. Census of Population: 1970, Marital Status, Subject Report PC(2)-4C, table 1, 1973. Washington, U.S. Government Printing Office.

for 50 percent of the growth in the total unmarried population 15 years of age and over. This rapid growth of the teenage population had a marked effect on the number of marriages performed.

About one-third of the women and 14 percent of the men who married during 1969 were teenagers. An estimated 717,000 women and 311,000 men married at ages under 20 years (table 1). This was more than for any of the previous 4 years and an increase over 1960 of 160,000 women and 110,000 men (table B). The number of teenage marriages was up nearly 30 percent for women and over 50 percent for men in 1969 as compared with 1960.

Annual increases in the number of marriages were greatest in the middle and late sixties, when the unusually large birth cohorts of the immediate post-World War II years were reaching marriageable ages. Even with this tremendous increase in the number of teenage marriages, between 1960 and 1969 the teenage marriage *rate* actually declined for women and increased only slightly for men (table B). In other words, the increase in the number of teenage marriages did not keep pace with the increase in the teenage population for women and did not exceed it greatly for men.

If no significant changes occur in the teenage marriage rate, the number of teenage marriages will continue to increase at a diminishing rate until the late seventies. By then the downward

Figure 2. Estimated marriage rates per 1,000 unmarried teenagers aged 15-19 years, by sex: United States, 1960 and 1969.

trend in births that began in 1958 and continued through the sixties will have ended this postwar wave of teenage eligibles.

In 1969 the teenage marriage rate, computed by relating the estimated number of marriages at ages under 20 years to the unmarried population 15-19 years of age, was 88 per 1,000 for women and 35 per 1,000 for men. This was 12 percent below the rate of 100 per 1,000 observed for women in 1960 and 13 percent above the rate of 31 per 1,000 for men (figure 2).

The opposite trend in teenage marriage rates for brides and for grooms may be part of the phenomenon referred to in recent literature as the "marriage squeeze."[1,2] A shortage of suitable partners was predicted for the large number of girls from the post-World War II birth cohorts who, because women in the United States customarily marry at younger ages than men, reached a marriageable age sooner than boys from the same cohorts.

Even with the large number of teenage marriages during the 1960's, the teenage marriage

Table B. Estimated number and rate of marriages for teenagers aged 15-19 years, by sex: United States, 1960 and 1965-69

[See appendix for method of computation. Rates per 1,000 unmarried population 15-19 years of age]

Year	Number		Rate	
	Female	Male	Female	Male
1969 ---	717,000	311,000	87.7	34.6
1968 ---	689,000	294,000	86.2	33.3
1967 ---	663,000	285,000	85.7	33.0
1966 ---	689,000	299,000	89.0	34.5
1965 ---	661,000	252,000	89.8	30.4
1960 ---	557,000	201,000	100.3	31.2

[1]Glick, P. C., Heer, D. M., and Beresford, J. C.: Family formation and family composition, trends and prospects, in Marvin B. Sussman, ed., *Sourcebook in Marriage and the Family*. New York. Houghton Mifflin Co., 1963. p. 38.

[2]Akers, Donald S.: On measuring the marriage squeeze. *Demography* 4(2):907-924, 1967.

Table C. Estimated number and rate of marriages, by age and sex: United States, 1969

[See appendix for method of computation. Rates per 1,000 unmarried population in specified group]

Age	Female		Male	
	Number	Rate	Number	Rate
Total-----------------------	2,145,000	80.0	2,145,000	98.7
15-19 years-----------------	717,000	87.7	311,000	34.6
20-24 years-----------------	843,000	273.5	985,000	221.1
25-34 years-----------------	311,000	189.7	491,000	234.1
35-44 years-----------------	129,000	86.0	163,000	123.5
45-54 years-----------------	84,000	38.4	101,000	73.2
55-64 years-----------------	43,000	14.2	56,000	48.7
65 years and over-----------	19,000	2.7	39,000	16.4

rate in 1969 was far below the rate for the next age group, 20-24. In fact, for males it was the lowest marriage rate of any age group under 65, and for females it was the lowest under age 35. The estimated number of marriages and marriage rates by age for women and men in the United States during 1969 appear in table C.

Marriages in the MRA

Sample data from the marriage-registration area (MRA) are the closest approximation to national data on detailed characteristics now available. In general, marriage rates in the MRA are considered reasonable estimates for the Nation. It has been observed, however, that the teenage marriage rates in the MRA have been below those for the entire United States, indicating that States outside the MRA had high early marriage rates. In 1969 the marriage rate for the MRA was 78.9 per 1,000 unmarried females aged 15-19 and 30.8 per 1,000 unmarried males 15-19, as compared with estimated rates of 87.7 and 34.6 for the United States as a whole.

In spite of this deficiency, MRA data provide marriage information not otherwise available. Although the *number* of marriages performed in the MRA are not comparable from year to year because of the growth of the registration area, the marriage *rates* over these years are much less

affected and are useful indicators of trends. Both numbers and rates provide reliable information on various relationships for a given year.

Number of marriages.—To give some information on annual changes in the number of teenage marriages during the 1960's, data from the 34 States (and the District of Columbia) that have been in the MRA since 1961 are shown in table D. By holding the States constant, year-to-year inconsistencies arising from States entering the MRA are eliminated. This provides comparable figures on numbers of teenage marriages for the years 1961-69, including a breakdown showing the early and late teens separately.

There were far more teenage marriages at ages 18 and 19 than at ages under 18. In each of the years 1961-69, from 65 to 71 percent of the teenage brides and 89 to 91 percent of the teenage grooms were 18 or over.

The year of greatest increase in teenage marriages was different for the group under 18 years than for the group aged 18 and over, varying for the most part with the number of persons entering the particular age group. For ages under 18, mostly 16- and 17-year-olds, the largest annual increase in marriages occurred in 1964; for ages 18 and 19 the greatest increase was in 1965. These increases tied in with the large increases that had occurred in the 1946, '47, and '48 birth cohorts then reaching those ages.

Table D. Number of teenage brides and grooms at specified ages and percent change from preceding year: uniform group of 34 marriage-registration States and the District of Columbia, 1961-69

[Based on sample data]

Year	Bride			Groom		
	Under 20 years	Under 18 years	18-19 years	Under 20 years	Under 18 years	18-19 years
	Number					
1969	422,281	129,844	292,437	181,893	18,448	163,445
1968	410,574	123,794	286,780	176,274	17,422	158,852
1967	392,545	116,677	275,868	167,995	15,903	152,092
1966	409,565	119,771	289,794	178,407	15,888	162,519
1965	394,401	124,109	270,292	154,353	14,549	139,804
1964	366,681	128,986	237,695	129,164	13,870	115,294
1963	349,121	114,874	234,247	125,540	12,345	113,195
1962	349,456	[1]102,952	[1]246,504	127,804	[1]11,701	[1]116,103
1961	344,349	[1]104,329	[1]240,020	120,585	[1]11,925	[1]108,660
	Percent change from previous year					
1969	+2.9	+4.9	+2.0	+3.2	+5.9	+2.9
1968	+4.6	+6.1	+4.0	+4.9	+9.6	+4.4
1967	-4.2	-2.6	-4.8	-5.8	+0.1	-6.4
1966	+3.8	-3.5	+7.2	+15.6	+9.2	+16.2
1965	+7.6	-3.8	+13.7	+19.5	+4.9	+21.3
1964	+5.0	+12.3	+1.5	+2.9	+12.4	+1.9
1963	-0.1	+11.6	-5.0	-1.8	+5.5	-2.5
1962	+1.5	-1.3	+2.7	+6.0	-1.9	+6.8

[1]Data are estimated. See appendix for estimating procedure.

Marriage rates.—Teenage marriage rates, available in greater detail for the marriage-registration States than for any other areas, are shown in tables E and F for age subgroups and single years of age.

As was shown by the U.S. estimates, women in the age group 15-19 married at a slightly lower rate in 1969 than in 1965, while the opposite was true for men in the same age group. The highest teenage marriage rates during the middle and late sixties were in 1965 for women and in 1966 and 1969 for men. From 1964 through 1969 the marriage rate for teenage women was much lower than in 1960, but this was not true for men. (Comparable rates for 1961-63 are not available.) The same general pattern is apparent in the rates for the 15-17 and 18-19 age subgroups.

Between 1964 and 1969, except at the very young ages (14 and 15 years) teenage marriage

rates by single years of age show a generally downward trend for females (table F). The reduction was greatest at age 18, where the rate for 1969 was 16 percent below the rate for 1964. An upward trend was observed for males, with the greatest percentage increases in the very early ages (16 and 17 years).

Selected characteristics.—Most marriages involving teenagers are first marriages; 98 percent of teenage brides and 99 percent of teenage grooms in the MRA during 1969 were marrying for the first time. This was in sharp contrast to the proportion of first marriages among those marrying at ages 20 and over (67 percent for brides and 73 percent for grooms) and was somewhat greater than for those marrying at ages 20-24 (90 percent for brides and 95 percent for grooms).

From 1960 to 1969 the age gap narrowed between teenage brides and grooms and their mar-

Table E. Teenage marriage rates at specified ages, by sex: marriage-registration area, 1960 and 1963-69

[Based on sample data. Rates per 1,000 unmarried population in specified group]

Year	Female			Male		
	15-19 years	15-17 years	18-19 years	15-19 years	15-17 years	18-19 years
1969-----------------	78.9	35.5	165.5	30.8	5.0	77.0
1968-----------------	78.7	35.0	164.7	30.3	4.7	75.4
1967-----------------	76.3	33.5	157.3	29.1	4.1	72.1
1966-----------------	79.8	34.6	163.0	30.8	4.2	73.8
1965-----------------	81.0	36.6	171.5	27.7	4.1	70.0
1964-----------------	78.9	37.7	181.9	24.6	3.8	69.4
1963-----------------	---	---	181.0	---	---	68.4
1960-----------------	95.1	45.3	213.1	28.6	4.7	76.6

Table F. Teenage marriage rates by single years of age and sex: marriage-registration area, 1964-69

[Based on sample data. Rates per 1,000 unmarried population in specified group]

Age	1969	1968	1967	1966	1965	1964
Female						
14 years[1]---------------	1.6	1.4	1.3	1.4	1.5	1.6
15 years-----------------	7.9	7.2	6.3	6.7	7.0	7.3
16 years-----------------	35.8	35.0	33.9	36.1	36.9	38.4
17 years-----------------	64.1	61.9	62.0	61.8	66.1	65.8
18 years-----------------	146.8	140.6	140.4	153.3	154.8	174.3
19 years-----------------	188.4	179.8	176.9	173.3	199.1	190.9
Male						
16 years[1]---------------	2.4	2.3	1.8	1.8	1.8	1.9
17 years-----------------	13.2	12.4	10.9	10.9	10.5	9.3
18 years-----------------	57.8	54.7	53.6	55.5	49.5	51.1
19 years-----------------	98.8	97.9	92.5	93.1	100.5	89.2

[1]Includes any marriage under this age.

riage partners, as shown by the median age of spouse for teenage brides and grooms at first marriage of both partners (table G). For brides 18 years of age, the median age of groom decreased over half a year, from 21.3 in 1960 to 20.6 in 1969, and for grooms 18 years old, the median age of brides increased, from 17.9 to 18.1.

In 1969 a typical teenage bride was 18 to 19 years of age, she married a groom close to 2½ years older, both were residents of the State in which the marriage occurred, and the marriage was performed in a religious ceremony in a summer month.

More specifically, about 70 percent of the teenage brides were 18 or 19 years old. Where

Table G. Median age of spouse, by specified age of teenage bride or groom at first marriage of both: marriage-registration area, 1960-69

[Based on sample data]

Year	Specified age of bride			Specified age of groom		
	Under 18 years	18 years	19 years	Under 18 years	18 years	19 years
	Median age of spouse					
1969	19.7	20.6	21.3	17.3	18.1	18.7
1968	19.7	20.6	21.3	17.3	18.2	18.7
1967	19.8	20.5	21.3	17.5	18.2	18.7
1966	19.7	20.5	21.4	17.3	18.2	18.7
1965	20.0	20.7	21.4	17.7	18.1	18.6
1964	20.1	21.0	21.5	17.2	17.8	18.5
1963	20.0	21.0	21.5	17.2	17.9	18.5
1962	20.0	21.0	21.5	---	---	18.6
1961	20.2	21.1	21.6	---	---	18.6
1960	20.2	21.3	21.8	17.2	17.9	18.4

both partners were marrying for the first time, the median age of grooms was 20.6 years for those marrying 18-year-old brides and 21.3 for those marrying brides aged 19. For those marrying for the first time, approximately 89 percent of the teenage brides and 87 percent of the grooms were residents of the State where married; 78 percent of the brides and 76 percent of the grooms were married in religious ceremonies; and approximately one-third were married in June, July, or August (table H). Close to 90 percent of the teenage brides and grooms were white.

Except for the difference in age of partners, which narrowed in the twenties and widened at older ages, most of these characteristics were similar to those for brides and grooms who married at later ages. Teenage brides and grooms married in a civil ceremony more often than first-married brides and grooms aged 20-24, and they married a little more randomly throughout the year. Teenage brides were also a little more frequently nonresidents of the State where married than brides aged 20-24, while teenage grooms, except for the very young, were less frequently nonresidents than older grooms (table H).

Sex and color differentials.—Available data show a number of interesting differences in teenage marriages by sex and color.

The marriage rate is higher for females than for males throughout the teens, but the difference is much greater in the early teens than later. MRA data for 1969 showed a marriage rate for females aged 15-17 that was 7 times the rate for males in the same age group, while at ages 18-19 the rate for females was only a little over twice the rate for males (table E). These ratios are lower than those observed earlier in the decade. In 1964 the marriage rate for females 15-17 was about 10 times the rate for males at those ages, and at 18-19 years of age it was slightly over 2½ times the rate for males. This change in ratio resulted from the decline in marriage rates for female teenagers and the increase in rates for males.

Another difference between the sexes, though slight, was in residency. In first marriages, young men were somewhat more inclined to marry out of their State of residence than women, especially at the very young ages.

Type of ceremony also varied somewhat by sex. Relatively fewer of the teenage grooms than brides were married in a religious ceremony, especially at the early ages (table H).

Only minor differences in seasonality were noted. Slightly more of the teenage men than women married during the winter months and

Table H. Percent distributions of first-married brides and grooms at specified ages by selected characteristics: marriage-registration area, 1969

[Based on sample data. Computed on totals excluding figures for not stated]

Characteristic	All ages	Under 20 years			20 years and over			
		Total	15-17 years	18-19 years	Total	20-24 years	25-29 years	30 years or more
All marriages------------	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Color		Bride						
White-----------------------	87.7	88.5	86.7	89.4	87.1	89.3	81.4	71.4
All other--------------------	12.3	11.5	13.3	10.6	12.9	10.7	18.6	28.6
Resident status								
Resident--------------------	90.1	89.2	88.5	89.5	90.7	91.5	88.5	86.0
Nonresident-----------------	9.9	10.8	11.5	10.5	9.3	8.5	11.5	14.0
Type of ceremony[1]								
Civil-----------------------	19.4	22.0	27.7	19.6	17.1	14.3	22.8	32.5
Religious--------------------	80.6	78.0	72.3	80.4	82.9	85.7	77.2	67.5
Month of marriage								
January----------------------	5.5	6.0	6.6	5.8	5.1	4.9	5.4	6.1
February---------------------	6.1	6.8	6.9	6.7	5.6	5.5	6.1	6.5
March------------------------	6.3	6.9	7.5	6.6	5.9	5.8	5.8	7.8
April------------------------	6.7	6.8	6.7	6.8	6.7	6.6	7.1	6.4
May--------------------------	8.3	7.6	7.7	7.5	8.9	8.8	9.1	9.4
June-------------------------	13.7	12.8	12.7	12.8	14.3	14.9	13.2	9.9
July-------------------------	8.3	8.8	8.8	8.8	8.0	7.9	8.2	8.5
August-----------------------	12.9	11.7	10.9	12.0	13.7	14.2	12.0	11.1
September---------------------	8.7	8.5	8.0	8.7	8.8	9.0	7.8	8.0
October----------------------	7.4	7.7	7.7	7.7	7.2	6.9	8.0	8.9
November---------------------	8.0	8.3	8.4	8.3	7.7	7.5	8.5	8.9
December---------------------	8.2	8.2	8.3	8.2	8.1	8.0	8.9	8.5
Color		Groom						
White------------------------	87.9	88.5	90.2	88.2	87.8	89.4	86.6	77.8
All other--------------------	12.1	11.5	9.8	11.8	12.2	10.6	13.4	22.2
Resident status								
Resident---------------------	84.4	87.1	79.7	87.9	83.8	84.2	82.9	82.2
Nonresident------------------	15.6	12.9	20.3	12.1	16.2	15.8	17.1	17.8
Type of ceremony[1]								
Civil------------------------	20.0	24.5	36.7	23.2	19.1	17.0	18.3	31.6
Religious--------------------	80.0	75.5	63.3	76.8	80.9	83.0	81.7	68.4
Month of marriage								
January----------------------	5.5	6.3	7.8	6.1	5.3	5.3	5.1	5.6
February---------------------	6.2	7.2	6.6	7.3	6.0	5.8	6.3	6.6
March------------------------	6.3	7.2	7.2	7.3	6.2	6.0	5.9	7.4
April------------------------	6.7	6.7	6.3	6.8	6.7	6.5	7.1	7.3
May--------------------------	8.4	7.7	7.3	7.7	8.5	8.3	8.9	9.5
June-------------------------	13.6	12.2	11.3	12.3	14.0	14.5	13.5	11.1
July-------------------------	8.3	8.5	8.5	8.5	8.3	8.2	8.2	8.6
August-----------------------	12.9	11.5	10.3	11.6	13.2	13.7	12.2	11.6
September---------------------	8.6	8.4	8.5	8.4	8.6	8.7	8.6	7.6
October----------------------	7.3	7.6	8.8	7.4	7.3	7.1	7.7	7.9
November---------------------	8.0	8.4	9.5	8.3	7.9	7.7	8.2	8.6
December---------------------	8.2	8.4	7.8	8.4	8.1	8.0	8.4	8.3

[1] 1965 data.

Table J. Teenage marriage rates for females and males, by color and age: marriage-registration area, 1960

Sex and color	Age in years		
	15-19	15-17	18-19
Female			
White-----------	97.8	44.0	227.2
All other--------	83.7	56.2	146.7
Male			
White-----------	29.0	4.7	77.7
All other--------	26.8	6.3	67.4

fewer married during the summer. For both brides and grooms the June and August seasonal peaks were a little less decided for those marrying at ages under 18 than for those 18 and over.

Teenage marriage rates by race or color for the MRA in intercensal years are not computed because population bases are not available. The most recent rates are those computed for all marriages, including remarriages, in the MRA in 1960 and shown in table J.

At ages 18-19 marriage rates, especially those for females, were higher for white persons

Table K. Percent distribution of first marriages for brides and grooms by age, according to color: marriage-registration area, 1969

[Based on sample data]

Age	Bride		Groom	
	White	All other	White	All other
All ages-	100.0	100.0	100.0	100.0
Under 20 years-----	44.5	41.3	19.5	18.5
Under 18 years-------	14.0	15.4	2.3	1.8
18-19 years--	30.5	25.9	17.2	16.7
20 years and over--	55.5	58.7	80.5	81.5

than for persons of all other races, but the former had lower rates at ages under 18.

Although total marriage rates are not available for 1969, a similar relationship by age and color is indicated by the age distributions of first marriages during that year. Teenagers accounted for slightly more of the white brides and grooms than of all other brides and grooms, but there was a difference between younger and older teenage brides. At ages 18-19 there were relatively more white brides than all other brides, but the reverse was true at the very early ages. Percentage distributions for first marriages in the MRA during 1969 are as shown in table K.

Geographic Variation in U.S. Marriages

During the sixties the number of teenage marriages was growing in all regions of the country, but the rate of growth was not uniform. Numerical increases in the four regions were greatest in the South and West, moderate in the North Central, and smallest in the Northeast (table L). This reflects differences in the size and age composition of the population and variation in the rate of teenage marriage throughout the Nation.

Marked variation in teenage marriage rates was observed in 1960 among the four regions. Rates per 1,000 unmarried population aged 15-19 were highest in the South and West, lower in the North Central, and lowest in the Northeast. The South and West exhibited similar rates that were substantially above the national rates. The Northeast, on the other hand, had rates about one-half those in the South and West and appreciably below the U.S. rates. The North Central Region had rates closest to the national rates. Marriage rates per 1,000 unmarried population aged 15-19 by region in 1960 were as shown in table M.

Data are not available for computing comparable rates for 1969. However, regional data for the MRA in 1969 showed similar relationships in the proportions of total marriages involving teenagers (table N). The highest proportion of teenage marriages occurred in the South, which was followed by the North Central and West with intermediate proportions and the Northeast with the smallest proportion.

In the South, one-half of all first marriages involved women under 20, and nearly one-fifth

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Table L. Estimated number of teenage brides and grooms, with percent change: United States and each geographic region, 1960 and 1969

[By area of occurrence. See appendix for method of computation]

Region	Bride			Groom		
	1969	1960	Percent change	1969	1960	Percent change
United States ------------	717,000	557,000	+28.7	311,000	201,000	+54.7
Northeast --------------------	102,000	92,000	+10.9	38,000	29,000	+31.0
North Central -----------------	185,000	152,000	+21.7	83,000	58,000	+43.1
South ------------------------	291,000	214,000	+36.0	131,000	77,000	+70.1
West -------------------------	140,000	99,000	+41.4	59,000	38,000	+55.3

involved women under 18. In the Northeast, however, less than one-third of all first marriages were to women under 20, and a much smaller proportion were to women under 18.

Over one-fifth of all grooms in the South marrying for the first time were under 20, twice the proportion in the Northeast, and very early marriage, at ages under 18, was most predominant in the South (figure 3).

The majority of States observed the pattern occurring in their region. Rankings were assigned to 44 States and the District of Columbia on a scale from highest to lowest for proportions of total marriages in 1969 involving teenagers (figure 4). Most States with high rankings (where

Table M. Teenage marriage rates, by sex: United States and each geographic region, 1960

[By area of occurrence. Rates per 1,000 unmarried population in specified group. See appendix for method of computation]

Region	Female	Male
United States -----	100.3	31.2
South --------------------	121.6	35.2
West --------------------	120.6	37.5
North Central -----------	95.8	32.6
Northeast --------------	66.2	19.5

40 percent or more of all brides were under age 20) were located in the South. An exception was Utah, in the West. Most States with low rankings (30 percent and less) were situated in the Northeast.

It is interesting that the States with the highest and lowest values were in the same region. In the South, Kentucky had the highest proportion of
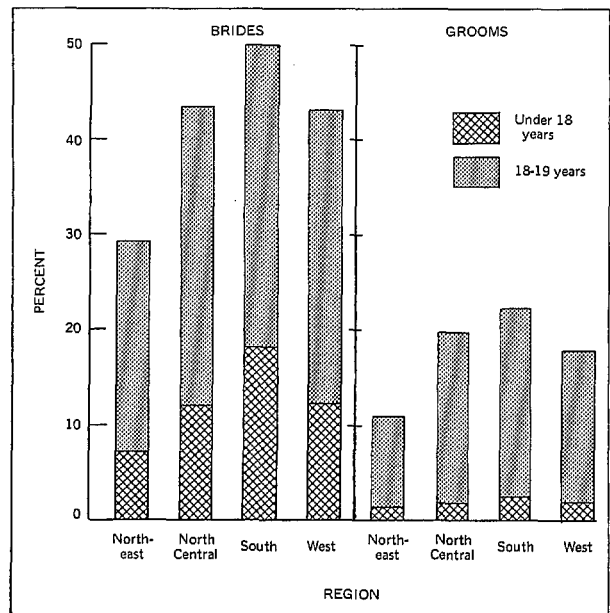

Figure 3. Percent of first marriages involving teenage brides and grooms, by age: marriage-registration area States grouped by geographic region, 1969.

BRIDES   GROOMS

PERCENT

50   40   30   20   10   0   0   10   20   30   40   50

RANK	STATE	Brides Percent	Grooms Percent	STATE	RANK
1	Kentucky	47.4	24.7	Kentucky	1
2	Alabama	46.5	22.5	North Carolina	2
3	North Carolina	45.4	22.5	South Carolina	2
4	South Carolina	44.7	20.3	Missouri	4
5	Arkansas	44.2	20.0	Alabama	5
6	West Virginia	42.3	19.6	Utah	6
7	Utah	42.0	19.5	Arkansas	7
8	Mississippi	40.6	18.6	Tennessee	8
9	Louisiana	40.1	18.3	Mississippi	9
10	Missouri	39.4	18.1	Indiana	10
11	Kansas	39.0	17.8	Texas	11
12	Tennessee	38.9	17.8	West Virginia	11
13	Indiana	38.6	17.7	Louisiana	13
14	Iowa	38.3	17.3	Michigan	14
15	Texas	38.2	17.1	Iowa	15
16	Montana	37.2	16.5	Kansas	16
16	Oregon	37.2	15.3	Oregon	17
18	Maine	36.6	15.1	Georgia	18
19	Maryland	35.5	14.7	Ohio	19
20	Vermont	35.2	14.5	South Dakota	20
21	Michigan	35.1	14.1	Delaware	21
22	North Dakota	35.0	14.0	Maine	22
23	South Dakota	34.0	14.0	Nebraska	22
24	Georgia	33.8	13.7	Idaho	24
25	Nebraska	32.9	13.7	Virginia	24
26	California	32.8	13.6	California	26
27	Wyoming	32.5	13.2	Wyoming	27
28	Virginia	32.4	13.1	Montana	28
29	Idaho	32.3	13.0	Vermont	29
30	Ohio	31.4	12.9	Maryland	30
31	Alaska	31.1	12.1	Pennsylvania	31
31	Delaware	31.1	11.3	Minnesota	32
33	Wisconsin	30.5	11.3	North Dakota	32
34	Minnesota	29.9	11.1	Illinois	34
35	Florida	29.3	11.0	Florida	35
36	Illinois	28.4	11.0	Wisconsin	35
37	New Hampshire	28.3	9.2	Massachusetts	37
38	Pennsylvania	27.3	9.1	Rhode Island	38
39	Hawaii	24.2	9.0	Alaska	39
40	Massachusetts	24.1	9.0	New Hampshire	39
41	Rhode Island	23.5	8.1	Hawaii	41
42	New Jersey	22.9	8.1	New Jersey	41
43	New York	22.7	7.7	New York	43
44	Connecticut	20.6	7.4	Connecticut	44
45	District of Columbia	19.2	6.3	District of Columbia	45

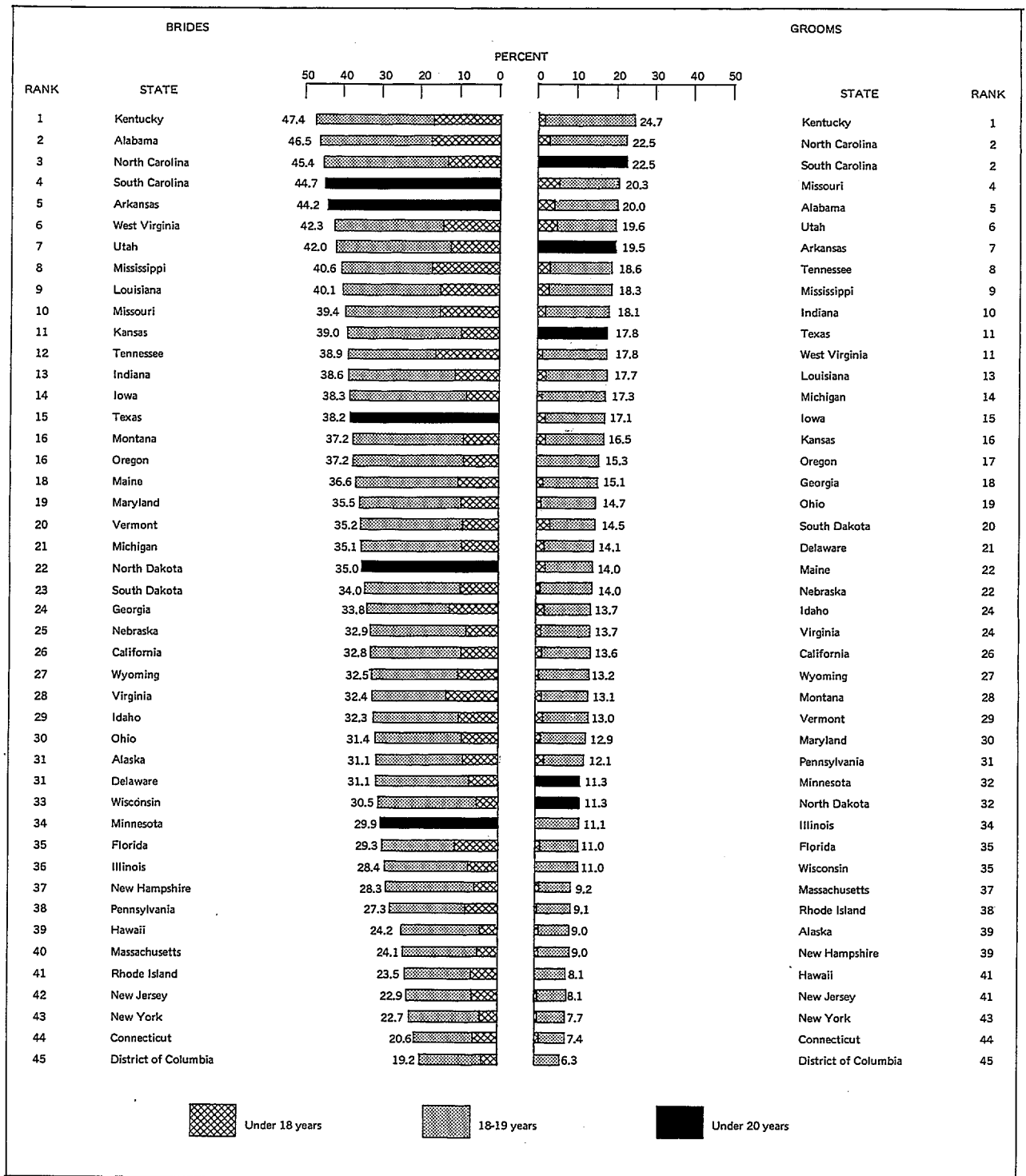Under 18 years   18-19 years   Under 20 years

Figure 4. State rankings by percent of all marriages involving teenage brides and grooms, by age: 44 reporting States and the District of Columbia, 1969.

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Table N. Percent distribution of brides and grooms at specified ages by marriage order: marriage-registration area and each geographic region, 1969

[By area of occurrence. Based on sample data]

Sex and age	Marriage-registration area	Region			
		Northeast	North Central[1]	South[2]	West[3]
Bride					
All marriages--------	100.0	100.0	100.0	100.0	100.0
Under 20 years---------	32.6	24.5	33.7	37.8	33.3
Under 18 years------------	9.8	6.0	9.2	13.5	9.4
18-19 years----------------	22.8	18.4	24.4	24.3	23.9
20 years and over------	67.4	75.6	66.3	62.2	66.7
First marriages------	100.0	100.0	100.0	100.0	100.0
Under 20 years---------	41.4	29.0	43.3	49.9	43.1
Under 18 years------------	12.5	7.1	12.0	18.1	12.3
18-19 years----------------	28.9	21.9	31.3	31.8	30.8
20 years and over------	58.6	71.0	56.7	50.1	56.9
Groom					
All marriages--------	100.0	100.0	100.0	100.0	100.0
Under 20 years---------	13.9	9.2	15.2	16.7	13.7
Under 18 years------------	1.5	1.2	1.4	1.9	1.3
18-19 years----------------	12.5	8.0	13.9	14.8	12.3
20 years and over------	86.1	90.8	84.8	83.3	86.3
First marriages------	100.0	100.0	100.0	100.0	100.0
Under 20 years---------	18.0	11.0	19.8	22.3	17.8
Under 18 years------------	1.9	1.4	1.7	2.5	1.8
18-19 years----------------	16.1	9.7	18.1	19.8	16.1
20 years and over------	82.0	89.0	80.2	77.7	82.2

[1]Excludes Minnesota and North Dakota.
[2]Excludes Arkansas, Oklahoma, Texas, and South Carolina.
[3]Excludes Colorado, New Mexico, Arizona, Nevada, and Washington.

teenage marriages, 47 percent for brides and 25 percent for grooms, while the District of Columbia had the lowest, 19 percent for brides and 6 percent for grooms.

State Marriage Laws

A number of factors affect the incidence of teenage marriage in a particular State and variation between States within the same geographic division and region. Among them are State marriage laws and population composition by age, race, sex, and marital status.

Laws regarding age at marriage are established by a State for marriages that occur within its jurisdiction. In most States marriage is permitted with parental consent if the groom is at least 18 years old and the bride at least 16 years. In 1969, 15 States had legal minimum age with consent for males below this standard; no State had a higher minimum; and one State had no provision in its law. The age for females was lower than 16 in 11 States and higher in two.

Generally, the legal minimum age without parental consent is 21 for males and 18 for

females. This age requirement was lower for males in nine States and higher for females in 14 States; no State had a higher requirement for males nor a lower requirement for females. Practically all States have established procedures whereby younger parties may obtain licenses to marry in case of special circumstances such as pregnancy or parenthood.

To some extent teenage marriage occurs more frequently in States which are permissive in their standards regarding age at marriage. Of the States for which data on age at marriage were available in 1969, 20 had a relatively low legal minimum age for at least one partner. Of these 20 States, 12 had proportions of teenage marriages above the U.S. average of 33.4 for brides and 14.5 for grooms. These States are Kentucky, Alabama, North Carolina, South Carolina, Utah, Mississippi, Missouri, Tennessee, Texas, Oregon, Michigan, and Georgia. Seven of the 12 States are located in the South. All but three of the 12 States allowed females under 16 years, males under 18, or both to marry with parental consent.

Legislation regarding age at marriage was revised or enacted in several States during the sixties. A review of the nature of these revisions showed three distinct trends: (1) more uniformity brought about by States raising or lowering their legal minimum age to the standard limits, (2) a legal minimum age corresponding to the legal voting age, and (3) lessening of the gap in age requirements by sex.

Changes in marriage laws may affect year-to-year differences in the number of teenagers married in the State where the change is enacted and also in adjacent States.

Following a change in the Iowa marriage law that raised the legal minimum age with parental consent, the number of teenagers married in that State fell from 15,020 in 1960 to 10,740 in 1962, the first full year after the change—a 29-percent decline.

A change of even greater magnitude occurred in Idaho in 1967 after the law was revised to raise the legal minimum age with and without consent and to establish a 3-day waiting period. The number of teenagers married declined from 12,665 in 1966 to 5,020 in 1968, a 60-percent drop. Increases, although small, occurred in the adjoining States of Montana, Oregon, Utah, and

Wyoming. Counts of marriages by age were not available for the adjoining States of Nevada and Washington.

In addition, decreases were observed in Montana between 1960 and 1962 after a 5-day waiting period before issuance of license was instituted, in Rhode Island between 1961 and 1962 after Massachusetts reduced its waiting period from 5 to 3 days, and in the District of Columbia between 1966 and 1967 after a blood test for venereal disease became mandatory.

The opposite effect was produced in Kentucky when limits were relaxed for both partners in marriage without parental consent. The number of teenagers marrying rose from 18,030 in 1967 to 26,190 in 1969, the first full year after the change—a 45-percent increase.

Effective in 1969, Texas lowered the age at which consent for males is required and dropped the 3-day waiting period before issuance of a license. The number of brides and grooms under 20 marrying in Texas increased from 62,135 in 1968 to 79,863 in 1969 (an increase of 29 percent).

In Hawaii, which had large numbers of servicemen on rest and rehabilitation programs, a lower age requirement for females and the abolition of a 3-day waiting period before issuance of a license raised the number of teenagers marrying from 2,592 in 1968 to 3,194 in 1969—a 23-percent increase after the law had been in effect for only 6 months.

International Comparisons

The United States has a relatively high teenage marriage rate compared with other industrialized nations. Rates for selected countries, as published in the United Nations *Demographic Yearbook, 1968,* are shown in table O. For men, the United States had the highest teenage marriage rate of any country for which comparative data were available; its teenage marriage rate for women was exceeded only in Romania, Bulgaria, Australia, and Hungary.

Marriage rates for teenage women in the United States were closest to those for Hungary, New Zealand, and Australia and considerably higher than those for the British Isles and Western Europe. The rate for teenage males in the United States was twice the rates for most of the

Table O. Teenage marriage rates, by sex: United States and selected countries, 1960 and 1966

[Rates based on number of marriages in which the bride and groom were under 20 years of age, per 1,000 unmarried female and male population aged 15-19 years enumerated that year. Data are formal marriages, the legality of which may be established by civil, religious, or other means recognized by the law of the country. Populations used in computing rates were from census data, postcensal estimates, or results of a sample survey]

Country	1966		1960	
	Female	Male	Female	Male
Romania------------------------------------	110.9	12.0	---	---
Bulgaria[1]------------------------------------	[2]99.5	[2]14.9	---	---
Australia[3,4]------------------------------------	98.4	14.9	[5]56.8	[5]10.5
Hungary------------------------------------	90.8	12.0	96.3	15.4
United States------------------------------------	[6]89.0	[6]34.5	100.3	31.3
New Zealand[7]------------------------------------	83.4	18.5	[5]76.6	[5]13.4
Czechoslovakia------------------------------------	71.9	10.4	[5]78.4	[5]8.1
England and Wales[3]------------------------------------	66.2	17.8	57.7	11.7
Scotland[3]------------------------------------	65.2	23.4	53.1	14.1
Austria[1]------------------------------------	64.0	9.3	[5]52.2	[5]8.3
East Germany (incl. E. Berlin)-----------	60.6	9.6	---	---
West Germany (excl. W. Berlin)-----------	[8]58.2	[8]5.5	43.8	4.4
Canada------------------------------------	56.8	12.7	[5]63.3	[5]12.2
Denmark------------------------------------	52.5	8.7	45.1	5.7
Luxembourg------------------------------------	47.7	5.6	41.5	3.2
Finland[9]------------------------------------	[2]47.1	[2]13.4	39.5	10.4
Portugal------------------------------------	43.7	12.8	34.0	6.9
France[10]------------------------------------	41.5	5.8	34.6	5.3
Sweden------------------------------------	40.0	5.7	27.9	3.7
Northern Ireland[3]------------------------------------	36.3	10.9	[5]29.7	[5]7.6
Netherlands------------------------------------	36.0	8.1	25.0	4.7
Ireland[3]------------------------------------	14.2	3.5	[5]10.5	[5]2.2
Japan[1]------------------------------------	[2]5.1	[2]0.5	6.3	0.5

[1]Excluding marriages of aliens temporarily in area.
[2]Data for 1965.
[3]Data tabulated by year of registration rather than year of occurrence.
[4]Excluding full-blooded aborigine population.
[5]Data for 1961.
[6]Computed on estimated number of teenage marriages.
[7]Computed on population aged 16-19 years.
[8]Provisional data.
[9]Based on marriages for which bride was domiciled in country.
[10]Including armed forces stationed outside country.

SOURCE: United Nations Demographic Yearbook, 1968. New York. United Nations, 1969. Table 28.

English-speaking countries and 3 or 4 times the rates in many European countries. Canada had early marriage rates closer to those observed in European countries than to those of the neighboring United States. In Ireland, where late marriage is customary, the teenage marriage rate for women was one-sixth the rate in the United States, and the rate for men was one-tenth the U.S. rate.

Japan, the only non-Western country for which reasonably comparable data are available, reported extremely low teenage marriage rates.

Early marriage may be more common in countries for which data are lacking or too incomplete for inclusion here, e.g., those in Africa, Asia, and Latin America. Common law unions, i.e., couples living together without a

Table P. Ratio of teenage marriage rate for females to rate for males: United States and selected countries, 1966

[Ratios computed from rates shown in table O]

Country	Ratio of teenage marriage rate female/male
Romania	9.2
Bulgaria[1,2]	6.7
Australia[3]	6.6
Hungary	7.6
United States[4]	2.6
New Zealand[5]	4.5
Czechoslovakia	6.9
England and Wales	3.7
Scotland	2.8
Austria[1]	6.9
East Germany (incl. E. Berlin)	6.3
West Germany (excl. W. Berlin)[6]	10.6
Canada	4.5
Denmark	6.0
Luxembourg	8.5
Finland[2,7]	3.5
Portugal	3.4
France[8]	7.2
Sweden	7.0
Northern Ireland	3.3
Netherlands	4.4
Ireland	4.1
Japan[1,2]	10.2

[1]Excluding marriages of aliens temporarily in area.
[2]Data for 1965.
[3]Excluding full-blooded aborigine population.
[4]Computed on estimated number of teenage marriages.
[5]Computed on population aged 16-19 years.
[6]Provisional data.
[7]Based on marriages for which bride was domiciled in country.
[8]Including armed forces stationed outside country.

formal or recognized marriage, are believed to be prevalent in these areas. Census enumerations in these countries have shown high proportions married among the teenage population, while the vital statistics show few teenage marriages.

During the sixties the general trend in U.S. teenage marriage rates has been downward for females and slightly upward for males, while rates in most European countries have increased for both females and males. Of the countries listed in table O, only Hungary, Czechoslovakia, Canada, and Japan did not show increases.

In all countries shown, the teenage marriage rate was much higher for women than for men. The difference was less in the United States than in any of the other countries. The greatest difference between the teenage marriage rates for men and for women was observed in West Germany and Japan, where the rate for women was 10 times the rate for men (table P). Next to the United States, where the rate for women was only about 2½ times the rate for men, the smallest differences were in Scotland and Northern Ireland.

DIVORCES

Concern over teenage marriage focuses on the stability of these unions and whether they are more likely to end in divorce than marriages contracted at older ages. In 1969 an estimated 28,000 teenage women and 6,000 teenage men were granted divorces. Expressed as divorce rates, approximately 28 of every 1,000 teenage wives and 19 of every 1,000 teenage husbands were granted a divorce during that year. For women this teenage divorce rate was a little lower than for those aged 20-24 but higher than for any other age group. For men the divorce rate was lower than the rates not only for those aged 20-24 but also for those aged 25-29 and 30-34 (table Q).

Annual age-specific divorce rates, relating the number of divorces granted during a year by age at divorce to the married population at the same ages, do not adequately reflect the instability of teenage marriages. A major consideration is the very short time a marriage is at risk of ending in divorce during teenage years. A person who marries at age 19 scarcely has time to obtain a divorce while still a teenager. Since in most States the legal requirements alone result in lapses of at least several months, many relatively quick breakups of teenage marriages do

Table Q. Estimated number and rate of divorces, by age at time of decree and sex: United States, 1969

[See appendix for method of computation. Rates per 1,000 married population in specified group]

Age	Female		Male	
	Number	Rate	Number	Rate
All ages ---	639,000	13.4	639,000	13.8
Under 20 years ---	27,900	28.2	5,800	19.0
20-24 years ------	153,700	30.7	102,000	34.0
25-29 years ------	136,200	24.3	139,800	27.7
30-34 years ------	89,800	17.8	102,700	21.8
35-44 years ------	136,900	13.1	154,900	15.5
45-54 years ------	68,800	7.1	90,600	9.3
55-64 years ------	20,200	3.1	32,100	4.3
65 years and over -----------	5,500	1.4	11,200	1.9

Table R. Percent of brides and grooms and of divorced husbands and wives married when teenagers: 21 selected registration States,[1] 1960-69

[Based on sample data. Computed on totals excluding figures for age not stated]

Year	Bride	Di- vorced wife	Groom	Di- vorced husband
1969 ------	34.1	48.7	14.9	21.1
1968 ------	34.3	49.2	15.1	20.7
1967 ------	35.5	48.4	15.5	20.9
1966 ------	38.1	48.0	17.2	19.5
1965 ------	37.9	48.0	15.1	19.2
1964 ------	36.8	48.0	13.2	19.7
1963 ------	36.9	46.2	13.5	18.8
1962 ------	38.9	---	14.5	---
1961 ------	39.2	---	14.0	---
1960 ------	38.8	---	13.4	---

[1] Alabama, Alaska, Georgia, Hawaii, Idaho, Iowa, Kansas, Maryland, Michigan, Montana, Nebraska, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Virginia, Wisconsin, Wyoming.

not show up in the teenage divorce rate. The effect of this time factor is even greater for men than for women because most teenage grooms are at the upper end of the age group and are exposed to the risk of divorce only a very short time before leaving the teenage group.

Although data are not available for computing divorce rates by age at marriage, other methods have been used to demonstrate the relative instability of teenage marriages. One of these is a comparison of the proportion of brides and grooms under 20 years of age with the proportion of divorcing persons who had married when under 20. This was done for the years 1957-65 for a uniform group of 15 States.[3] The percentage of teenage marriages was considerably higher among divorcing persons than among those who married, indicating that teenage marriages are more likely to end in divorce than marriages occurring at other ages. This was true for both sexes for all years included in the study.

For the present report, a comparison was made of 21 selected States in the years 1960-69, and similar results were obtained (table R and

figure 5). These findings are compatible with those from another source. In its recent publication "Social and Economic Variations in Marriage, Divorce, and Remarriage: 1967," Series P-20.
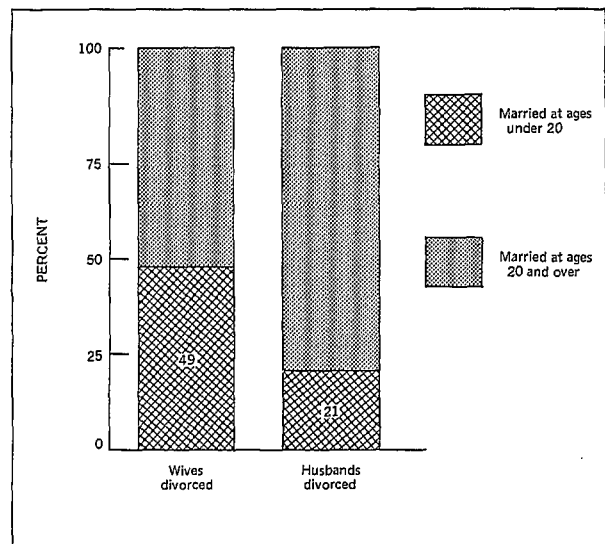

Figure 5. Percent of husbands and wives divorced in 1969 who had married as teenagers: 21 reporting States.

[3] National Center for Health Statistics: Divorce statistics analysis, United States, 1964 and 1965. *Vital and Health Statistics.* PHS Pub. No. 1000-Series 21-No. 17. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1969. pp. 6 and 31.

Table S. Percent of divorced husbands and wives who were teenagers at time of decree and percent married when teenagers: divorce-registration area and 20 reporting States, grouped by region, 1969

[Based on sample data. By place of occurrence. Computed on totals excluding figures for age not stated]

Region and State	Divorced husbands who were teenagers at time of:		Divorced wives who were teenagers at time of:	
	Decree	Marriage	Decree	Marriage
	Percent			
Divorce-registration area[1] ----------	0.9	19.2	4.4	45.8
Northeast------------------------------	0.5	17.7	2.8	45.8
Vermont--------------------------------	0.4	19.5	2.6	51.4
Rhode Island---------------------------	0.3	16.3	2.1	44.8
Connecticut----------------------------	0.2	15.2	1.9	42.1
New York-------------------------------	0.5	15.3	2.2	43.6
Pennsylvania---------------------------	0.7	20.6	3.7	48.9
North Central--------------------------	1.0	19.4	5.3	47.0
Illinois-------------------------------	0.8	17.6	4.5	45.1
Wisconsin------------------------------	0.3	16.9	2.0	48.1
Iowa-----------------------------------	1.8	22.9	6.4	50.2
Missouri-------------------------------	1.3	22.0	6.7	48.1
Nebraska-------------------------------	0.8	17.3	5.6	46.2
Kansas---------------------------------	1.7	21.8	7.3	49.5
South----------------------------------	1.6	25.1	7.1	52.5
Virginia-------------------------------	0.5	24.1	3.4	52.3
Kentucky-------------------------------	1.8	25.7	9.2	52.4
Tennessee------------------------------	2.2	25.5	8.8	52.7
West-----------------------------------	0.6	16.2	2.9	40.8
Montana--------------------------------	1.3	12.7	6.2	41.2
Idaho----------------------------------	2.1	14.5	6.9	41.0
Oregon---------------------------------	1.0	16.9	4.1	44.0
California-----------------------------	0.5	16.4	2.5	40.7
Alaska---------------------------------	0.3	13.5	4.3	41.5
Hawaii---------------------------------	0.1	13.2	2.1	34.7

[1]Includes cases for Alabama, Georgia, Maryland, Michigan, Ohio, South Dakota, Utah, and Wyoming, which are not shown separately.

No. 223 of the *Current Population Reports*, on page 1, the U.S. Bureau of the Census reported that "27 percent of the women with teenage marriages were known to have been divorced within 20 or more years, as compared with 14 percent of those who entered first marriage after they had reached their twenties." The same comparison was not made for teenage men, but "28 percent of those who married before the age of 22 years were known to have been divorced, as compared with 13 percent of those who married for the first time after they had reached 22 years of age." (These

figures are based on a nationwide survey conducted for the Office of Economic Opportunity in the early months of 1967.) In other words, divorce was twice as likely for early marriages as for those contracted at later ages.

Persons who married before age 20 account for varying proportions of divorces from State to State, and regional differences are apparent in the available figures (table S). In 1969 the highest proportion of such divorces was shown by the South (based on data for only three States of that region). The North Central and Northeast Regions ranked second and third, and in the West persons who had married in their teens accounted for the smallest proportion of divorces granted during the year, giving that region a rank of fourth.

As observed earlier, the South also accounted for the greatest proportion of teenage marriages. However, comparisons that may be made between marriage and divorce data by region are limited because data on divorces are not available for all States reporting marriage data.

PARENTHOOD

In 1968, the latest year for which natality statistics were available for inclusion in this report, there were 600,816 births to teenage mothers. This comprised 17 percent of all births in the United States during that year. Of these births, 591,312 (98 percent) were to mothers 15-19 years of age, and 9,504 (2 percent) were to mothers under 15 years of age. In terms of birth order, it was a first child in 77 percent of these births, a second child in 18 percent, and a third or higher order child in 4 percent.

Birth Rates

Birth rates, in which all live births to women 15-19 years of age are related to the total married and unmarried female population of those ages, show that 6.6 percent of teenage women 15-19 years of age gave birth to a child during 1968, the lowest birth rate of any age group between ages 15 and 35 (table T).

On the other hand, birth rates for married women, in which legitimate live births are related to the population of married women, indicate that almost half (46 percent) of the married women

Table T. Birth rates by age of mother, with percent change: United States, 1960 and 1968

[Rates are live births per 1,000 women in specified group]

Age	1968	1960	Percent change
15-44 years[1]	85.7	118.0	-27.4
10-14 years	1.0	0.8	+25.0
15-19 years	66.1	89.1	-25.8
20-24 years	167.4	258.1	-35.2
25-29 years	140.3	197.4	-28.9
30-34 years	74.9	112.7	-33.6
35-39 years	35.6	56.2	-36.7
40-44 years	9.6	15.5	-38.1
45-49 years	0.6	0.9	-33.3

[1]Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

at ages 15-19 gave birth to a child in 1968. This was higher by far than the birth rate for any other age group of married women. Only about one-fourth of the married women aged 20-24, the group with the next highest birth rate, gave birth to a child in that year (table U).

The birth rate for all women aged 15-19 declined steadily during the sixties—from 89 per 1,000 in 1960 to 66 per 1,000 in 1968 (table W). This happened during a period when birth rates were declining rapidly for women at other ages. In fact, as shown in table T, the group aged 15-19 showed the least reduction of any age group except the 10-14 group, where the rate, though very small, was actually higher in 1968 than in 1960.

The birth rate for married women aged 15-19 was slightly lower in 1968 than in 1960, but when legitimate live births were related to the population of married women at specific ages, the teenage group was the only age group that did not show a consistent downward trend through the sixties (table U).

Premarital Conceptions

Over one-fourth of the births to teenage women in 1968 were illegitimate. This figure probably understates considerably the extent of premarital conceptions among teenagers. Such a

Table U. Estimated birth rates for married women, by age of mother: United States, 1960-68

[Rates are legitimate live births per 1,000 married women in specified group. Legitimate births are estimated for the United States from data for registration areas in which legitimacy is reported]

Year	15-44 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years
1968	117.9	455.2	248.9	156.5	80.8	38.4	11.3
1967	119.0	432.6	246.6	158.5	85.1	41.5	11.6
1966	123.7	455.6	255.5	166.1	92.1	45.1	12.8
1965	131.1	452.9	279.7	178.9	101.1	50.1	14.1
1964	140.9	376.1	310.4	197.9	109.2	54.6	15.4
1963	146.3	490.1	325.5	205.7	114.2	55.5	15.4
1962	152.1	475.5	335.4	213.8	120.3	58.4	16.5
1961	156.5	538.1	349.1	221.2	124.6	60.9	17.1
1960	156.3	483.5	354.4	222.3	123.3	61.7	17.4

Table W. Birth rates for women 15-19 years of age: United States, 1960-68

[Rates are live births per 1,000 women in age group]

Year	Rate
1968	66.1
1967	67.9
1966	70.6
1965	70.4
1964	72.8
1963	76.4
1962	81.2
1961	88.0
1960	89.1

count would include conceptions that did not terminate in a live birth (for which no estimates are available) and births that were legitimized by marriage between the time of conception and birth, as well as illegitimate births.

Marriage because of pregnancy is not uncommon among teenagers. According to data from the 1964-66 National Natality Survey, 42 percent of the women 15-19 years for whom the interval from first marriage to legitimate first birth was reported had been married for less than 8 months.[4]

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[4]National Center for Health Statistics: Interval between first marriage and legitimate first birth, United States, 1964-66. *Monthly Vital Statistics Report*, Vol. 18, No. 12, Supplement. Rockville, Md. Public Health Service, Mar. 27, 1970.

If these approximations held in 1968, and assuming that most of the first births tabulated as being within 8 months of first marriage were premarital conceptions, somewhere in the neighborhood of 60 percent of the infants born to teenage mothers that year were conceived out of wedlock.

Illegitimate Births

In 1968, while accounting for 14 percent of legitimate births in the United States, teenage women accounted for 49 percent of illegitimate births (figure 6). The estimated 165,700 illegiti-
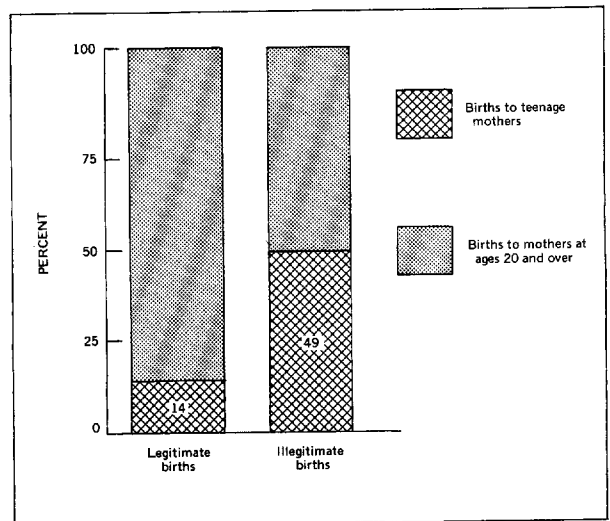

Figure 6. Percent of births to teenage mothers by estimated legitimacy status: United States, 1968.

mate births to teenage mothers that year were almost as many as were recorded for all other age groups of women combined. This count was about 80 percent above the number in 1960, a much greater increase than occurred in illegitimate births to women at all other ages (31 percent). In contrast, legitimate births to teenagers were 13 percent fewer than in 1960, a smaller decrease than the older women experienced (23 percent).

Illegitimacy ratio.—Illegitimate births accounted for a larger proportion of all births for teenage women than for women in any other age group. In 1968, an estimated 276 of every 1,000 births to women under 20 years of age were illegitimate, and the younger the teenage mother, the greater the likelihood of illegitimacy. At ages under 15 years an estimated 810 of every 1,000 births were illegitimate, at ages 15-17 the ratio was 404 per 1,000, and at ages 18-19 it was 201 per 1,000 (table Y).

A more detailed analysis of the illegitimacy ratios shows the same decline with increasing single years of age—the highest proportion of illegitimate births were at age 15 (625 per 1,000) and the proportion diminished at each single year thereafter, reaching 176 per 1,000 at age 19 (table 2).

The proportion of illegitimate live births increased for teenage mothers throughout the sixties (figure 7). From 1960 to 1968 the increase in the proportion of illegitimate births was greater for teenage mothers than for mothers in any other
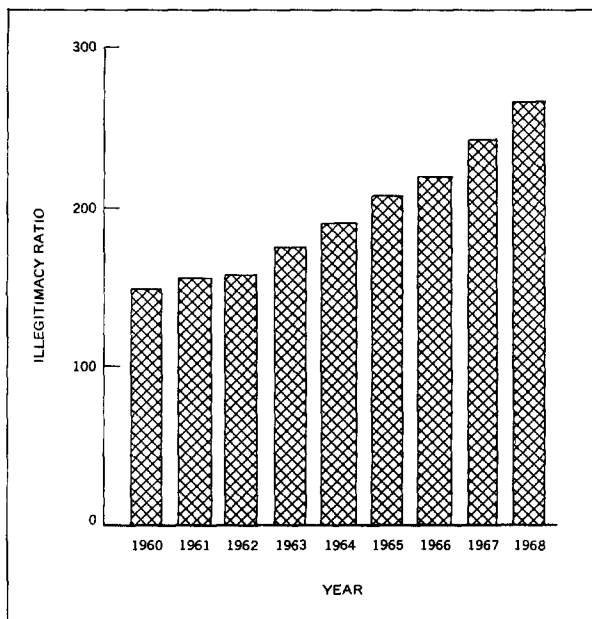
Figure 7. Estimated illegitimacy ratios per 1,000 live births for births to mothers aged 15-19: United States, 1960-68.

Table Y. Estimated number and ratio of illegitimate births, by age of mother and color: United States, 1968

[Due to rounding estimates to the nearest hundred, figures by color may not add to totals. Ratios per 1,000 total live births in specified group]

Age	Number			Ratio		
	Total	White	All other	Total	White	All other
Total	339,200	155,200	183,900	96.9	53.3	312.0
Under 15 years	7,700	1,900	5,800	810.2	610.1	907.7
15-19 years	158,000	67,400	90,600	267.2	158.0	549.7
15-17 years	77,900	28,400	49,400	403.7	234.4	688.0
18-19 years	80,100	39,000	41,200	201.1	127.7	443.0
20-24 years	107,900	56,800	51,100	82.6	51.0	264.0
25-29 years	35,200	16,100	19,100	38.9	20.4	168.0
30-34 years	17,200	7,300	10,000	41.0	20.5	155.3
35-39 years	9,700	4,200	5,500	47.1	24.5	157.2
40 years and over	3,300	1,500	1,800	51.4	28.4	156.5

age group. The increase for teenagers was least at age 15 and more for each subsequent single year of age, being greatest at age 19, where the proportion almost doubled.

Illegitimacy rate.—Another measure of illegitimacy, the illegitimacy rate, relates the number of illegitimate live births to the unmarried females in specified age groups. In spite of the high proportion of illegitimate births to teenagers and the large proportion of the births to teenage mothers that were illegitimate, this measure shows that illegitimate births occurred less frequently among unmarried teenage women than among the unmarried women of any other age group under 35 years. In 1968 there were 20 illegitimate births per 1,000 unmarried females at ages 15-19. This rate was scarcely over half the rate for the next age group, 37 per 1,000 for women 20-24 years old.

The illegitimacy rate for teenage women increased during the sixties, more rapidly in the second half of the decade than in the first. In 1968 the illegitimacy rate was lower or only slightly higher than in 1960 for women in every age group except the group aged 15-19 years, whose rate increased nearly 30 percent, from 15.3 per 1,000 unmarried women in 1960, to 16.7 in 1965, to 19.8 in 1968 (table 3).

To summarize, the converse relationships of teenage women having the lowest birth rate of all women under 35 but the highest birth rate of married women reflect the following conditions:

There were a relatively large number of women in the age group 15-19 as compared with older age groups.

In the age group 15-19 the proportion of married women was much smaller than the proportion married at older ages.

The number of births to women 15-19 years was large relative to the number of married women in that group but small relative to the total number of women in the age group.

Similarly, teenage women had the "highest illegitimacy ratio" but one of the "lowest illegitimacy rates" because:

A large proportion of the births to women aged 15-19 were illegitimate.

Although the number of illegitimate births to women 15-19 years was larger than for those in any other age group, it was small relative to the large population of unmarried women in that group.

These relationships are evident when the population figures and number of births for women in the age group 15-19 are compared with those for the 20-24 group. The comparison for 1968 is shown in table Z.

Table Z. Marital status of population and legitimacy status of births for females at ages 15-19 and 20-24: United States, 1968

Status	Age of females	
	15-19 years	20-24 years
Population		
Total--------	8,949,000	7,809,000
Married----------	952,000	4,818,000
Unmarried--------	7,997,000	2,991,000
Births		
Total-------	591,312	1,306,872
Legitimate--------	433,312	1,198,972
Illegitimate------	158,000	107,900

Births by Color

Of the births to teenage women in 1968, 429,616 (72 percent) were to white mothers and 171,200 (28 percent) were to mothers of all other races. The birth rate for teenage women of all other races was much higher than that for white women and this difference was far greater for teenagers than for any other age group. The comparison for 1968 is shown in table AA.

Birth order.—The proportion of births to teenage women of all other races increased as birth order increased. Women of all other races accounted for one-fourth of the births of a first

Table AA. Birth rates, by age of mother and color: United States, 1968

[Rates are live births per 1,000 women in specified group]

Age	Total	White	All other
15-44 years[1] ------	85.7	81.5	114.9
10-14 years -------	1.0	0.4	4.4
15-19 years -------	66.1	55.3	133.3
20-24 years -------	167.4	162.6	200.8
25-29 years -------	140.3	139.7	144.8
30-34 years -------	74.9	72.5	91.2
35-39 years -------	35.6	33.8	48.6
40-44 years -------	9.6	8.9	15.0

[1]Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

child to teenage mothers, a little over one-third of the births of a second child, slightly above one-half for the third child, and nearly two-thirds for the fourth child. The distribution of births to teenage mothers by color and birth order for 1968 is shown in table BB.

Similarly, the birth rates by live-birth order for teenage women show increasing differences between white women and all other women as birth order increases. In 1968 approximately 45 per 1,000 white women at ages 15-19 gave birth to a first child and 11 per 1,000 gave birth to a second or higher order child. The corresponding rates for all other women at ages 15-19 were

Table BB. Percent distribution of births to teenagers by color, according to live-birth order: United States, 1968

Live-birth order	Total	White	All other
All births --	100.0	71.5	28.5
First child -------	100.0	74.7	25.3
Second child ------	100.0	63.8	36.2
Third child -------	100.0	48.3	51.7
Fourth child ------	100.0	36.7	63.3
Fifth child and over -----------	100.0	31.0	69.0

90 per 1,000 for a first child and 43 per 1,000 for a second or higher order child. In other words, the rate for first births to all other women was about twice that for those to white women, but for second and higher order births it was about 4 times the rate of births to white women (table CC).

Illegitimate births.—Of the illegitimate births to teenage women in 1968, 69,300 (42 percent) were to white mothers, and 96,400 (58 percent) were to mothers in the all other group. The proportion of illegitimate births accounted for by all other mothers varied markedly by age of mother. They accounted for 75 percent of the illegitimate births to girls at ages under 15 years, 63 percent at ages 15-17, and 51 percent at ages 18-19 (table Y).

Table CC. Births and birth rates for women 15-19 years of age, by live-birth order and color: United States, 1968

[Live-birth order refers to number of children born alive to mother. For birth rates, figures for birth order not stated are distributed. Birth rates are live births per 1,000 women in specified group]

Color and live-birth order	Number	Rate
Total -----------	591,312	66.1
First child ----------	455,006	50.9
Second child ---------	110,744	12.4
Third child ----------	20,942	2.3
Fourth child ----------	3,536	0.4
Fifth child and over--	670	0.1
Not stated -----------	414	...
White -----------	426,502	55.3
First child ----------	343,772	44.6
Second child ---------	70,822	9.2
Third child ----------	10,122	1.3
Fourth child ---------	1,296	0.2
Fifth child and over--	208	0.0
Not stated -----------	282	...
All other -------	164,810	133.3
First child ----------	111,234	90.1
Second child ---------	39,922	32.3
Third child ----------	10,820	8.8
Fourth child ---------	2,240	1.8
Fifth child and over--	462	0.3
Not stated -----------	132	...

The illegitimacy ratio was considerably higher for births to all other mothers than for those to white mothers, and the difference was proportionately greater at the older ages. Illegitimate births per 1,000 live births to mothers in specified teenage color groups for 1968 are shown in table Y.

The illegitimacy rate for the all other group of teenage women 15-19 years in 1968 was over 8 times the rate for white teenage women. The rate was 9.8 illegitimate births per 1,000 unmarried white women and 82.8 illegitimate births per 1,000 unmarried women in the all other group.

Trends in Births by Color

Natality statistics for the 1960's show a number of differences in trends among teenage women grouped by color.

Birth rate.—The decline from 1960 to 1968 in the birth rate for white teenagers 15-19 years was twice that for all other races, 30 percent compared with 16 percent. In 1960 the birth rate for all other women aged 15-19 was double the rate for white women at the same ages, and by 1968 it was 2½ times the rate for white (table DD).

Illegitimacy ratio.—From 1960 to 1968 the ratio of illegitimate births to total births for white teenage women remained well below that for all other teenage women but it showed a much greater increase, narrowing the difference between the ratios for the two groups. At ages 15-19 the illegitimacy ratio more than doubled for white women and increased only 30 percent for all other women in the same age group. For all other women the increase from 1960 to 1968 was about the same at single ages 17, 18, and 19, but for white women the percent increase was greater for each successive age, and at age 19 the 1968 illegitimacy ratio was 2½ times the 1960 ratio (table 2). This phenomenon was not restricted to teenagers. In every age group the percent increase in the illegitimacy ratio from 1960 to 1968 was far greater for white women than for all other women (table EE).

Illegitimacy rates.—This difference between color groups in the trend of illegitimacy is evident in the illegitimacy rates. From 1960 to 1968 the illegitimacy rate increased nearly 50 (48.5) percent for white women 15-19 years and only 8 percent for all other women in the same age group. In fact, for all other women the age group 15-19 years was the only age group showing an increase in illegitimacy rates; substantial declines were noted for all other age groups. Increases occurred for all age groups of white women, but the greatest was for teenagers (table 3).

Table DD. Birth rates, by age of mother and color, with percent change: United States, 1960 and 1968

[Rates are live births per 1,000 women in specified group]

Age	White			All other		
	1968	1960	Percent change	1968	1960	Percent change
15-44 years[1] ---------------------	81.5	113.2	-28.0	114.9	153.6	-25.2
10-14 years---------------------	0.4	0.4	-	4.4	4.0	+10.0
15-19 years---------------------	55.3	79.4	-30.4	133.3	158.2	-15.7
20-24 years---------------------	162.6	252.8	-35.7	200.8	294.2	-31.7
25-29 years---------------------	139.7	194.9	-28.3	144.8	214.6	-32.5
30-34 years---------------------	72.5	109.6	-33.9	91.2	135.6	-32.7
35-39 years---------------------	33.8	54.0	-37.4	48.6	74.2	-34.5
40-44 years---------------------	8.9	14.7	-39.5	15.0	22.0	-31.8
45-49 years---------------------	0.5	0.8	-37.5	1.2	1.7	-29.4

[1]Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

Table EE. Estimated illegitimacy ratios, by age of mother and color, with percent change: United States, 1960 and 1968

[Ratios per 1,000 total live births in specified group]

Age	Total			White			All other		
	1968	1960	Percent change	1968	1960	Percent change	1968	1960	Percent change
Total-------	96.9	52.7	+83.9	53.3	22.9	+132.8	312.0	215.8	+44.6
Under 15 years----	810.2	678.5	+19.4	610.1	475.4	+28.3	907.7	822.4	+10.4
15-19 years-------	267.2	148.4	+80.1	158.0	71.6	+120.7	549.7	421.5	+30.4
20-24 years-------	82.6	47.7	+73.2	51.0	21.9	+132.9	264.0	199.6	+32.3
25-29 years-------	38.9	29.4	+32.3	20.4	11.4	+78.9	168.0	141.3	+18.9
30-34 years-------	41.0	27.5	+49.1	20.5	10.2	+101.0	155.3	129.9	+19.6
35-39 years-------	47.1	29.5	+59.7	24.5	12.7	+92.9	157.2	127.7	+23.1
40 years and over-	51.4	31.0	+65.8	28.4	15.8	+79.7	156.6	116.8	+34.1

Infant Mortality

Infants born to teenage mothers face greater risks of death or deformity than infants born to women at older ages.

The infant mortality rate in the United States, which has not been brought down to the low levels attained by a number of economically and medically advanced Western European countries, has been looked upon with concern in recent years. In the search for possible causes it has been noted that risk of death is greatest for infants physically underdeveloped at time of birth and that the percentage of births in this category is greatest for births to very young mothers.

Table FF. Percent of live births with birth weight of 2,500 grams or less, by age of mother and color: United States, January-March 1950 and the year 1967

Age	Total		White		All other	
	Jan.-March 1950[1]	1967	Jan.-March 1950[1]	1967	Jan.-March 1950[1]	1967
All ages-----------------------	7.4	8.2	7.0	7.1	9.7	13.6
Under 15 years----------------------	15.1	17.2	15.9	12.5	14.7	19.5
15-19 years-------------------------	9.0	10.5	8.0	8.5	12.0	15.7
20-24 years-------------------------	7.3	7.7	6.9	6.7	9.6	13.2
25-29 years-------------------------	6.7	7.2	6.5	6.5	8.4	11.8
30-34 years-------------------------	7.2	7.9	7.0	7.0	8.8	12.6
35-39 years-------------------------	7.7	9.1	7.5	8.3	9.0	13.3
40-44 years-------------------------	7.7	9.6	7.5	9.1	8.9	12.2
45 years and over-------------------	6.1	8.6	5.7	8.1	7.4	10.8

[1]Excludes all live births recorded in Massachusetts.

SOURCE: Vital and Health Statistics, Series 3, No. 15, p. 18.

In the United States, the risk of death in the first year of life among infants who weighed 2,500 grams or less at birth was found to be 17 times the risk among infants weighing more. In addition to the greater risk of death, there was greater prevalence among infants with low birth weight of such conditions as cerebral palsy, epilepsy, mental retardation, congenital anomalies, deafness, and blindness.[5] Infants born to teenage mothers are more likely to be of low birth weight than infants born to older mothers.

The proportion of infants weighing 2,500 grams or less at birth was highest among mothers at the youngest ages. The change in the incidence of infants with low birth weight by age of mother is shown in table FF.

MORTALITY

The number of deaths among teenagers is small and the death rate from all causes combined is low. In 1969, 21,141 teenagers 15-19 years of age lost their lives, accounting for approximately 1 percent of the total deaths in the United States that year.

Differences in teenage mortality for all causes were observed among the sex-color groups. Teenage death rates were higher for males than for females and lower for white persons than for all other persons.

In both color groups the teenage death rate for males was about 2.5 times the rate for females. For both sexes the death rate for the all other group was about 1.5 times the rate for the white group.

From 1960 to 1969 the mortality rate for teenagers 15-19 years of age increased 25 percent, from 92 to 115 per 100,000 population. The increase was greater for all other males than for any of the other three color-sex groups, 42 percent as compared with increases of 23 percent for white males, 18 percent for all other females, and 17 percent for white females.

[5]National Center for Health Statistics: Trends in "prematurity," United States, 1950-67. *Vital and Health Statistics.* Series 3-No. 15. DHEW Pub. No. (HSM)72-1030. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Jan. 1972. pp. 1 and 2.

Leading Causes

Accidents led all causes of death for teenagers 15-19 years of age. Sixty percent of the teenage deaths in 1969 were due to accidents; 40 percent were due to motor vehicle accidents alone. Homicide ranked second, and malignant neoplasms and suicide ranked third and fourth.

These rankings varied by color-sex group. Accidents ranked first for all four groups. Homicide was second for all other males and females. Malignant neoplasms ranked second for white teenagers, both male and female, and suicide ranked third. Neoplasms ranked third for all others. The fourth ranking cause was homicide for white males, influenza and pneumonia for white females, suicide for all other males, and diseases of heart for all other females (table 4).

Another difference in rank was for complications of pregnancy and childbirth, which was the fifth leading cause of death for all other women but tenth for white women.

The rise in teenage mortality during the sixties was due primarily to deaths from violent causes—accidents, homicide, and suicide. Death rates for the major nonviolent causes declined.

The mortality data by cause for 1968 and 1969 are not strictly comparable with those for prior years because of changes in classification and coding procedures that result from the decennial revision of The International Lists of Causes of Death. However, the trends in specific causes referred to in this report were not greatly affected by these changes.

Motor vehicle accidents.—In 1969 there were more deaths from motor vehicle accidents in the 15-19-year group than in any other 5-year age group except the 20-24 group. The death rate for teenagers, 47 per 100,000 in the age group 15-19 years, was among the highest of the age specific fatality rates for this cause (table GG). Motor vehicle accidents took a far greater toll among males than among females and more among white than all other (figure 8). The motor vehicle accident death rate for males 15-19 years of age was nearly 3 times the rate for females, and for white teenagers it was 1½ times the rate for all other teenagers (table 5).

This death rate for teenagers was nearly 40 percent higher in 1969 than in 1960. The in-

Table GG. Death rates for motor vehicle accidents, by age of person injured: United States, 1969

[Rate per 100,000 population]

Age	Rate
All ages----------------	27.6
Under 5 years----------------	11.6
5-9 years----------------	10.3
10-14 years----------------	9.3
15-19 years----------------	47.1
20-24 years----------------	55.5
25-29 years----------------	35.9
30-34 years----------------	28.2
35-39 years----------------	26.6
40-44 years----------------	25.0
45-49 years----------------	24.3
50-54 years----------------	26.4
55-59 years----------------	27.9
60-64 years----------------	28.9
65-69 years----------------	32.9
70-74 years----------------	38.3
75-79 years----------------	42.2
80-84 years----------------	44.1
85 years and over------------	34.5

Figure 8. Death rates per 100,000 population for motor vehicle accidents for teenagers aged 15-19, by color and sex: United States, 1960-69.

crease from 1960 to 1969 was greater for females than for males (an increase of 52 percent as compared with 35 percent). The rate increased more for all other males than for white males (40 percent versus 35 percent) and more for all other females than for white females (about 70 and 50 percent, respectively).

Other accidents.—Deaths due to other accidents, including drowning, firearm accidents, poisoning, and falls, also accounted for a large proportion of teenage deaths. In 1969 the death rate from these and other accidents was 20.7 per 100,000. Like motor vehicle accidents, they produced higher death rates for males than for females and for all others than for whites. Also, the rate increased from 1960 to 1969.

Homicide.—The homicide rate at ages 15-19 was 7.8 per 100,000 in 1969. Homicide occurred much more frequently among all other teenagers than among white teenagers and more frequently among males than among females. In 1969 the homicide rate for the all other group was 10 times the rate for white teenagers and the rate for males was 4 times the rate for females.

From 1960 to 1969 the homicide rate among teenagers almost doubled. It more than doubled for all other males and the increases for all other females and white males and females ranged from 53 to 58 percent.

Malignant neoplasms.—In 1969, 7.2 per 100,000 teenagers 15-19 years of age died as a result of malignant neoplasms. The death rate for this cause was higher for white males than for all other males, but for females it was lower for the white group than for the all other.

The death rate for malignant neoplasms decreased from 1960 to 1969 for all of the color-sex groups except all other females. Although the number of deaths involved was small, for this group the rate increased 40 percent, from 4.3 to 6.0 per 100,000. In 1960, 35 deaths of all other females were assigned this cause, while in 1969 there were 77 deaths in this category.

Suicide.—In 1969, 5.7 per 100,000 teenagers 15-19 years of age committed suicide.

The rate was higher for males than for females, with a greater difference between sexes for white than for all other. The suicide rate was greater for white males (9.0) than for all other males (5.8) but lower for white females (2.6) than for all other females (3.2).

Suicide among teenagers increased from 1960 to 1969—relatively more for females than for males and more for all other than for white.

Other causes.—Declines for all four color-sex groups were observed for the following causes: major cardiovascular-renal diseases (the broad category that includes diseases of heart, acute rheumatic fever and chronic rheumatic heart disease, and cerebrovascular dis-

eases), influenza and pneumonia. Deaths from deliveries and complications of pregnancy and childbirth declined. The death rate for congenital anomalies declined for white teenagers but increased for all others.

Life Expectancy

Teenagers who lost their lives in 1969 had lived only about one-fourth as long as might reasonably have been expected at birth. According to life table values for 1969, males entering the age group 15-19 had an average life expectancy of 54 years and females a life expectancy of 61 years.

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LIST OF DETAILED TABLES

Table 1. Number of teenage brides and grooms: United States, each region, division, and State, 1960-69

[By place of occurrence. Based on sample data unless otherwise noted. See appendix for estimating procedures for numbers of brides and grooms under 20 years of age for the United States and each region, 1965-69]

Region, division, and State	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
	Bride									
United States[1]	717,000	689,000	663,000	689,000	661,000	---	---	---	---	557,000
Region:[1]										
Northeast	102,000	102,000	97,000	100,000	99,000	---	---	---	---	92,000
North Central	185,000	182,000	171,000	180,000	173,000	---	---	---	---	152,000
South	291,000	273,000	266,000	272,000	261,000	---	---	---	---	214,000
West	140,000	133,000	130,000	137,000	128,000	---	---	---	---	99,000
New England:										
Maine	3,814	3,896	3,714	3,872	3,686	3,318	3,468	3,660	3,640	3,450
New Hampshire	2,894	2,764	2,904	3,022	2,978	2,590	2,576	2,670	2,590	2,740
Vermont	1,575	1,564	1,477	1,582	1,469	1,346	1,330	1,300	1,379	1,434
Massachusetts	11,330	11,040	10,680	11,450	10,490	9,380	10,120	10,580	10,120	---
Rhode Island	1,760	1,718	1,542	1,684	1,744	1,628	1,552	1,580	1,910	1,840
Connecticut	5,100	5,010	4,835	5,235	4,940	4,380	4,255	4,800	4,660	4,560
Middle Atlantic:										
New York	36,420	37,180	35,260	36,060	36,580	[2]20,840	[2]19,860	[2]18,100	[2]22,000	[2]18,300
New Jersey	12,740	12,710	11,390	12,520	12,510	12,200	11,140	12,400	11,440	11,200
Pennsylvania	25,860	25,300	24,560	24,680	24,620	20,840	20,325	22,100	19,500	21,600
East North Central:										
Ohio	28,400	29,080	26,900	29,320	26,820	25,000	22,525	22,900	22,200	21,500
Indiana	22,340	21,640	20,990	22,400	20,960	18,970	18,140	17,000	16,600	---
Illinois	33,220	32,440	30,940	32,840	33,320	30,280	---	---	---	---
Michigan[3]	32,760	32,460	32,240	33,940	31,960	26,540	25,650	25,400	26,600	24,800
Wisconsin	10,480	10,150	9,430	9,700	10,030	8,960	7,950	8,780	8,740	9,560
West North Central:										
Minnesota[4]	9,562	9,200	8,607	8,944	8,868	---	---	---	---	---
Iowa	9,425	9,215	8,715	8,745	8,275	8,265	7,570	7,700	9,140	10,720
Missouri	19,880	19,150	[2,4]15,148	[2,4]15,574	[2,4]14,996	---	---	---	---	---
North Dakota[4]	1,890	1,767	1,842	1,934	1,962	1,903	1,866	1,794	1,868	1,760
South Dakota	3,708	3,592	3,158	3,238	3,274	3,182	2,846	2,900	2,760	2,610
Nebraska	4,980	4,395	4,335	4,295	4,335	4,215	4,380	4,000	4,320	4,600
Kansas	8,690	8,350	8,255	8,645	8,185	7,700	7,870	7,520	7,580	7,580
South Atlantic:										
Delaware	1,238	1,155	1,106	1,108	1,093	1,051	990	934	909	886
Maryland	18,740	17,660	17,050	18,140	18,620	17,750	15,970	16,740	16,800	16,520
District of Columbia	1,490	1,620	1,688	2,272	2,016	2,136	2,534	2,840	2,540	---
Virginia	17,030	17,320	16,930	16,680	16,380	15,310	15,380	14,600	14,340	12,860
West Virginia	6,610	6,595	6,240	6,585	6,245	---	---	---	---	---
North Carolina	22,330	21,370	20,490	21,490	19,890	17,310	---	---	---	---
South Carolina[4]	25,127	24,622	23,970	24,159	23,963	20,912	19,995	20,116	19,485	18,997
Georgia	21,580	21,100	20,400	20,300	21,040	24,900	22,880	22,800	21,700	20,700
Florida	19,320	18,680	17,190	17,870	16,690	14,400	13,750	13,080	13,840	13,480
East South Central:										
Kentucky	17,210	15,000	12,330	12,950	12,470	11,960	11,830	10,720	10,400	9,900
Tennessee	17,250	17,030	16,690	17,060	17,660	15,530	15,000	13,780	13,680	13,580
Alabama	21,580	20,530	20,190	20,430	19,470	17,960	16,840	16,620	16,500	14,980
Mississippi	10,550	10,390	9,850	10,365	10,045	9,825	9,375	9,880	9,720	9,580
West South Central:										
Arkansas[4]	10,094	9,899	8,711	10,026	10,071	---	---	---	---	---
Louisiana	13,870	13,660	12,810	13,200	12,355	11,300	10,945	11,160	10,540	10,600
Oklahoma[5]	---	---	---	---	---	---	---	---	---	---
Texas[4]	54,449	44,123	47,935	47,098	---	---	---	---	---	---
Mountain:										
Montana	2,398	2,286	2,126	2,004	1,976	1,930	1,984	1,880	2,250	2,350
Idaho	3,545	3,490	5,190	8,250	7,450	6,575	6,100	6,020	5,560	5,160
Wyoming	1,387	1,342	1,167	1,215	1,251	1,200	1,149	1,149	1,237	1,228
Colorado[5]	---	---	---	---	---	---	---	---	---	---
New Mexico[5]	---	---	---	---	---	---	---	---	---	---
Arizona[5]	---	---	---	---	---	---	---	---	---	---
Utah	4,810	4,170	4,196	3,848	3,676	3,430	3,660	3,730	3,560	3,690
Nevada[5]	---	---	---	---	---	---	---	---	---	---
Pacific:										
Washington[5]	---	---	---	---	---	---	---	---	---	---
Oregon	6,265	5,635	5,410	5,415	5,300	4,765	4,765	4,800	5,160	4,860
California	54,780	53,720	50,640	52,000	48,480	46,080	42,120	41,400	40,400	42,000
Alaska	986	938	803	774	755	677	644	643	734	617
Hawaii	2,396	1,964	1,654	1,356	1,398	1,388	1,508	1,390	1,300	1,500

See footnotes at end of table.

[By place of occurrence. Based on sample data unless otherwise noted. See appendix for estimating procedures for numbers of brides and grooms under 20 years of age for the United States and each region, 1965-69]

Region, division, and State	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
					Groom					
United States[1] -	311,000	294,000	285,000	299,000	252,000	---	---	---	---	201,000
Region:[1]										
Northeast---------	38,000	38,000	37,000	39,000	33,000	---	---	---	---	29,000
North Central------	83,000	81,000	74,000	78,000	67,000	---	---	---	---	58,000
South-------------	131,000	119,000	119,000	124,000	103,000	---	---	---	---	77,000
West--------------	59,000	55,000	55,000	58,000	49,000	---	---	---	---	38,000
New England:										
Maine-------------	1,458	1,416	1,480	1,484	1,376	1,206	1,162	1,370	1,480	1,170
New Hampshire------	914	822	852	804	748	488	526	590	580	630
Vermont-----------	583	581	537	588	509	410	451	489	499	441
Massachusetts------	4,300	4,370	3,790	4,460	3,350	2,980	3,270	3,360	3,100	---
Rhode Island-------	682	594	544	632	638	586	522	540	520	620
Connecticut--------	1,845	1,875	1,775	2,015	1,580	1,300	1,235	1,600	1,100	1,440
Middle Atlantic:										
New York----------	12,320	12,120	12,100	12,080	10,580	[2]5,280	[2]5,720	[2]5,400	[2]6,400	[2]5,400
New Jersey---------	4,500	4,080	3,870	4,440	3,760	3,720	3,290	3,520	3,180	3,260
Pennsylvania-------	11,460	11,500	11,400	12,400	10,560	7,740	7,125	9,300	7,200	7,700
East North Central:										
Ohio--------------	13,320	13,400	11,820	13,340	10,760	8,620	8,150	8,600	7,400	7,600
Indiana-----------	10,480	10,330	9,760	10,260	9,210	7,060	6,830	7,000	6,100	---
Illinois----------	12,920	11,920	11,740	12,760	10,920	9,220	---	---	---	---
Michigan[3]--------	16,160	16,240	15,980	16,660	14,460	9,540	10,200	9,500	11,400	8,900
Wisconsin---------	3,780	3,860	3,710	3,690	3,360	2,320	2,260	2,560	2,540	2,700
West North Central:										
Minnesota[4]-------	3,603	3,447	3,147	3,111	2,674	---	---	---	---	---
Iowa--------------	4,210	4,150	3,870	3,970	3,330	2,830	2,830	3,040	3,460	4,300
Missouri----------	10,250	9,520	[2,4]6,902	[2,4]6,675	[2,4,5]5,544	---	---	---	---	---
North Dakota[4]----	611	518	583	582	539	487	481	546	502	420
South Dakota------	1,580	1,484	1,256	1,244	1,114	1,028	882	750	820	720
Nebraska----------	2,115	2,005	1,795	1,635	1,790	1,215	1,550	1,500	1,720	1,400
Kansas------------	3,680	3,920	3,595	3,650	3,435	3,025	3,025	3,040	2,880	2,580
South Atlantic:										
Delaware----------	563	494	447	463	438	376	370	326	300	281
Maryland----------	6,820	6,910	6,060	7,240	6,300	5,980	4,980	5,920	5,260	4,780
District of										
Columbia----------	490	574	562	700	522	538	612	520	700	---
Virginia----------	7,220	6,860	6,380	6,860	5,630	5,010	5,610	5,040	4,840	4,140
West Virginia------	2,775	2,560	2,530	2,775	2,280	---	---	---	---	---
North Carolina-----	11,080	10,980	10,660	11,600	9,030	7,620	---	---	---	---
South Carolina[4] ----	12,653	12,262	12,233	12,357	10,261	9,065	8,696	8,939	8,420	7,795
Georgia-----------	9,640	9,280	9,080	9,160	8,480	10,360	9,180	8,900	7,600	7,900
Florida-----------	7,270	7,450	6,760	6,840	6,070	4,620	4,490	4,340	4,060	4,240
East South Central:										
Kentucky----------	8,980	7,390	5,700	6,140	5,430	4,810	4,580	4,460	4,160	3,500
Tennessee---------	8,260	7,740	8,210	8,580	7,660	6,550	6,070	5,520	5,340	5,300
Alabama-----------	9,270	8,540	8,420	8,940	7,160	5,810	5,550	5,340	5,580	4,460
Mississippi--------	4,750	4,745	4,570	4,675	4,180	3,810	3,530	3,600	3,420	3,940
West South Central:										
Arkansas[4] --------	4,451	4,198	4,176	4,361	4,034	---	---	---	---	---
Louisiana---------	6,115	6,140	5,700	6,130	5,125	4,135	4,170	4,880	4,120	4,220
Oklahoma[5] --------	---	---	---	---	---	---	---	---	---.	---
Texas[4] -----------	25,414	18,012	21,698	21,586	---	---	---	---	---	---
Mountain:										
Montana-----------	842	724	744	680	586	534	522	520	640	610
Idaho-------------	1,505	1,530	2,650	4,415	3,525	2,810	2,800	2,900	2,140	2,220
Wyoming-----------	562	539	470	487	447	412	406	430	420	435
Colorado[5] --------	---	---	---	---	---	---	---	---	---	---
New Mexico[5] ------	---	---	---	---	---	---	---	---	---	---
Arizona[5] ---------	---	---	---	---	---	---	---	---	---	---
Utah--------------	2,246	1,932	2,062	1,714	1,570	1,494	1,464	1,570	1,510	1,420
Nevada[5] ----------	---	---	---	---	---	---	---	---	---	---
Pacific:[5]										
Washington[5] ------	---	---	---	---	---	---	---	---	---	---
Oregon------------	2,570	2,390	2,155	2,110	1,925	1,610	1,685	1,540	1,620	1,720
California---------	22,640	21,520	21,220	21,280	18,700	15,620	15,600	14,600	14,300	16,700
Alaska------------	285	261	231	207	177	147	155	159	156	147
Hawaii------------	798	628	540	514	448	470	458	480	440	480

[1]Estimated.
[2]Incomplete.
[3]"Secret marriages" included in sample after 1964.
[4]Actual count as published in State report or available through State office.
[5]State does not have age on marriage form or does not have central file of marriage records.

Table 2. Estimated illegitimacy ratios for teenage mothers, by age of mother and color: United States, 1960-68

[Ratios per 1,000 total live births in specified group. See appendix for estimating procedures]

Color and year	Under 15 years	15-19 years	15 years	16 years	17 years	18 years	19 years
Total							
1968--------------------	810.2	267.2	624.5	452.8	326.6	235.9	176.3
1967--------------------	803.0	242.1	597.0	425.7	302.9	213.6	156.3
1966--------------------	762.8	218.5	577.9	406.1	278.4	191.9	139.0
1965--------------------	785.3	208.3	563.6	374.1	257.5	175.5	132.9
1964--------------------	742.1	190.2	529.9	349.2	232.4	160.6	117.5
1963--------------------	711.1	173.6	501.8	315.4	216.4	152.7	106.3
1962--------------------	694.8	157.3	469.5	306.1	204.6	138.2	96.2
1961--------------------	696.9	154.9	465.9	291.8	194.4	136.1	96.7
1960--------------------	678.5	148.4	443.9	281.3	182.4	129.2	91.6
White							
1968--------------------	610.1	158.0	387.1	271.9	192.3	144.3	116.0
1967--------------------	615.7	138.5	355.4	236.8	176.7	129.0	100.6
1966--------------------	525.1	123.6	341.2	227.1	160.2	112.7	89.8
1965--------------------	572.8	114.3	321.6	201.1	141.0	104.4	80.5
1964--------------------	523.2	101.7	300.3	184.3	132.9	88.7	67.8
1963--------------------	487.4	89.9	294.9	171.9	112.8	81.4	59.8
1962--------------------	480.1	78.2	256.2	152.1	103.5	72.4	51.8
1961--------------------	498.6	76.5	260.1	145.6	96.1	71.3	51.5
1960--------------------	475.4	71.6	238.7	140.2	89.9	65.7	46.2
All other							
1968--------------------	907.7	549.7	836.3	722.3	611.7	492.2	398.6
1967--------------------	891.6	521.1	800.3	699.9	574.1	464.3	376.3
1966--------------------	878.8	500.9	790.0	681.9	548.1	443.8	361.3
1965--------------------	864.0	492.0	781.5	659.7	545.2	429.4	349.4
1964--------------------	856.0	468.3	759.1	651.8	517.2	404.5	331.5
1963--------------------	852.4	455.6	740.1	607.5	502.3	409.4	326.8
1962--------------------	842.0	439.3	724.3	607.8	490.9	390.6	316.9
1961--------------------	816.5	439.2	716.4	592.2	489.1	396.5	319.5
1960--------------------	822.4	421.5	700.7	577.8	469.3	376.2	306.2

Table 3. Estimated illegitimacy rates, by age of mother and color: United States, 1960-68

[Rates are illegitimate live births per 1,000 unmarried women in specified group. Figures for age of mother not stated are distributed]

Color and year	15-44 years[1]	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years[2]	40-44 years[2]
Total							
1968	24.4	19.8	37.3	38.6	28.2	14.9	3.8
1967	23.9	18.6	38.3	41.4	29.2	15.4	4.0
1966	23.4	17.5	39.1	45.6	33.0	16.4	4.1
1965	23.5	16.7	39.9	49.3	37.5	17.4	4.5
1964	23.0	15.8	39.9	50.2	37.2	16.3	4.4
1963	22.5	15.2	40.3	49.0	33.2	16.1	4.3
1962	21.9	14.8	40.9	46.7	29.7	15.6	4.0
1961	22.7	15.9	41.7	46.5	28.3	15.4	3.9
1960	21.6	15.3	39.7	45.1	27.8	14.1	3.6
White							
1968	13.2	9.8	23.1	22.1	15.1	4.7	
1967	12.5	9.0	23.1	22.7	14.0	4.7	
1966	12.0	8.5	22.5	23.5	15.7	4.9	
1965	11.6	7.9	22.1	24.3	16.6	4.9	
1964	11.0	7.3	21.2	24.1	15.9	4.8	
1963	10.5	7.0	20.8	22.0	14.2	4.6	
1962	9.8	6.5	20.0	19.8	12.6	4.3	
1961	10.0	7.0	19.7	19.4	11.3	4.2	
1960	9.2	6.6	18.2	18.2	10.8	3.9	
All other							
1968	86.6	82.8	118.3	104.4	80.6	25.2	
1967	89.5	80.2	128.2	118.4	97.2	28.9	
1966	92.8	76.9	139.4	143.8	119.4	33.8	
1965	97.6	75.8	152.6	164.7	137.8	39.0	
1964	97.2	74.0	164.2	168.7	132.3	34.5	
1963	97.1	73.8	161.8	171.5	124.3	34.4	
1962	97.5	74.1	163.6	172.7	115.2	35.5	
1961	100.8	77.6	169.6	172.7	112.0	37.4	
1960	98.3	76.5	166.5	171.8	104.0	35.6	

[1]Rates computed by relating total illegitimate births, regardless of age of mother, to unmarried women 15-44 years.
[2]Total illegitimacy rates computed by relating illegitimate births to women aged 40 and over to unmarried women aged 40-44 years; rates by color computed by relating illegitimate births to mothers aged 35 and over to unmarried women aged 35-44 years.

Table 4. Ten leading causes of death among teenagers 15-19 years of age, by color and sex: United States, 1969

Rank order	Cause of death (Eighth Revision, International Classification of Diseases, Adapted, 1965), color, and sex	Number of deaths
...	Total, both sexes—all causes	21,141
1	Accidents—E800-E949	12,505
...	Motor vehicle accidents—E810-E823	8,691
...	Accidental poisoning—E850-E877	524
...	Accidental falls—E880-E887	190
...	Accidental drowning and submersion—E910	1,241
...	Accident caused by firearm missile—E922	483
2	Homicide—E960-E978	1,435
3	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209	1,336
4	Suicide—E950-E959	1,045
5	Diseases of heart—390-398,402,404,410-429	448
6	Influenza and pneumonia—470-474,480-486	427
7	Congenital anomalies—740-759	392
8	Cerebrovascular diseases—430-438	245
9	Nephritis and nephrosis—580-584	155
10	Complications of pregnancy, childbirth, and the puerperium—630-678	103
...	All other causes—Residual	3,050
...	White, male—all causes	12,352
1	Accidents—E800-E949	8,396
...	Motor vehicle accidents—E810-E823	5,858
...	Accidental poisoning—E850-E877	311
...	Accidental falls—E880-E887	150
...	Accidental drowning and submersion—E910	777
...	Accident caused by firearm missile—E922	334
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209	757
3	Suicide—E950-E959	723
4	Homicide—E960-E978	395
5	Diseases of heart—390-398,402,404,410-429	205
6	Congenital anomalies—740-759	191
7	Influenza and pneumonia—470-474,480-486	183
8	Cerebrovascular diseases—430-438	105
9	Nephritis and nephrosis—580-584	61
10	Meningococcal infections—036	42
...	All other causes—Residual	1,294
...	White, female—all causes	4,615
1	Accidents—E800-E949	2,413
...	Motor vehicle accidents—E810-E823	1,988
...	Accidental poisoning—E850-E877	106
...	Accidental falls—E880-E887	22
...	Accidental drowning and submersion—E910	69
...	Accident caused by firearm missile—E922	30
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209	407
3	Suicide—E950-E959	208
4	Influenza and pneumonia—470-474,480-486	153
5	Homicide—E960-E978	149
6	Congenital anomalies—740-759	137
7	Diseases of heart—390-398,402,404,410-429	105
8	Cerebrovascular diseases—430-438	84
9	Nephritis and nephrosis—580-584	46
10	Complications of pregnancy, childbirth, and the puerperium—630-678	44
...	All other causes—Residual	869

Table 4. Ten leading causes of death among teenagers 15-19 years of age, by color and sex: United States, 1969—Con.

Rank order	Cause of death (Eighth Revision, International Classification of Diseases, Adapted, 1965), color, and sex	Number of deaths
...	All other, male—all causes--	2,964
1	Accidents--E800-E949	1,330
...	Motor vehicle accidents-------------------------------------E810-E823	611
...	Accidental poisoning--E850-E877	69
...	Accidental falls--E880-E887	17
...	Accidental drowning and submersion----------------------------------E910	367
...	Accident caused by firearm missile----------------------------------E922	100
2	Homicide---E960-E978	750
3	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues---140-209	95
4	Suicide--E950-E959	73
5	Diseases of heart---------------------------------390-398,402,404,410-429	68
6	Influenza and pneumonia--------------------------------470-474,480-486	51
7	Congenital anomalies--740-759	34
8	Cerebrovascular diseases--430-438	32
9	Nephritis and nephrosis---580-584	25
10	Meningococcal infections---036	20
...	All other causes--Residual	486
...	All other, female—all causes--	1,210
1	Accidents--E800-E949	366
...	Motor vehicle accidents-------------------------------------E810-E823	234
...	Accidental poisoning--E850-E877	38
...	Accidental falls--E880-E887	1
...	Accidental drowning and submersion----------------------------------E910	28
...	Accident caused by firearm missile----------------------------------E922	19
2	Homicide---E960-E978	141
3	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues---140-209	77
4	Diseases of heart----------------------------------390-398,402,404,410-429	70
5	Complications of pregnancy, childbirth, and the puerperium--------630-678	59
6	Suicide--E950-E959	41
7	Influenza and pneumonia--------------------------------470-474,480-486	40
8	Congenital anomalies--740-759	30
9	Cerebrovascular diseases--430-438	24
10	Nephritis and nephrosis---580-584	23
...	All other causes--Residual	339

Table 5. Death rates for selected causes of death among teenagers 15-19 years of age, by color and sex: United States, 1960-69

[Rates per 100,000 population in specified group]

Cause of death and year	Total			White			All other		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All causes									
1969	114.7	164.8	63.7	106.7	153.7	58.7	164.7	235.8	94.7
1968	108.8	155.9	60.7	102.7	146.8	57.4	147.6	214.6	81.3
1967	102.7	146.4	58.3	97.9	140.2	54.9	133.4	187.8	79.8
1966	102.3	145.3	58.7	98.3	140.0	55.6	129.8	180.9	79.2
1965	95.1	135.6	53.8	91.0	130.8	50.1	123.7	168.9	78.8
1964	93.5	131.8	54.6	89.7	127.7	50.9	119.9	160.6	79.8
1963	90.2	125.4	54.4	86.6	121.7	50.8	119.7	159.0	81.0
1962	87.5	122.2	52.4	83.9	118.6	48.6	117.7	155.2	80.7
1961	87.6	123.1	51.7	83.4	118.8	47.7	117.2	154.9	80.3
1960	92.2	130.1	54.0	87.9	125.2	50.3	122.7	165.8	80.4
Motor vehicle accidents									
1969	47.1	69.6	24.3	49.3	72.9	25.3	33.3	48.6	18.3
1968	45.3	66.4	23.7	47.4	69.0	25.2	32.1	49.8	14.6
1967	44.6	66.7	22.2	46.7	69.7	23.4	30.7	46.9	14.6
1966	45.4	67.3	23.1	47.5	70.4	24.1	31.2	45.8	16.6
1965	40.2	61.0	19.1	41.9	63.5	19.8	28.7	43.2	14.3
1964	36.5	54.3	18.3	38.4	57.1	19.4	23.0	35.0	11.2
1963	34.8	52.0	17.3	36.8	54.8	18.4	23.9	37.5	10.5
1962	33.3	50.1	16.4	35.2	52.9	17.3	21.8	33.1	10.6
1961	32.0	48.8	15.2	33.4	50.8	15.7	22.4	33.7	11.3
1960	33.9	51.7	16.0	35.5	54.0	16.8	22.6	34.8	10.7
Other accidents									
1969	20.7	35.0	6.1	18.6	31.6	5.4	33.6	57.2	10.3
1968	19.7	34.0	5.2	18.0	30.9	4.8	30.5	53.8	7.5
1967	17.8	30.1	5.2	16.7	28.1	5.0	25.0	43.5	6.8
1966	18.0	30.8	4.9	16.7	28.5	4.6	26.6	46.8	6.7
1965	16.5	28.4	4.4	15.5	26.6	4.1	23.8	41.2	6.6
1964	16.8	29.1	4.4	15.4	26.7	3.9	26.5	46.0	7.4
1963	16.6	27.9	5.0	15.3	25.8	4.7	26.4	44.6	8.4
1962	15.4	26.7	4.1	14.3	24.7	3.8	25.2	44.1	6.7
1961	16.4	28.2	4.5	15.3	26.4	4.0	24.3	41.4	7.5
1960	16.8	29.2	4.3	15.5	27.0	4.0	25.8	45.8	6.3
Homicide									
1969	7.8	12.3	3.2	3.4	4.9	1.9	35.1	59.7	11.0
1968	6.9	11.0	2.7	3.3	5.0	1.6	29.5	49.6	9.5
1967	6.1	9.5	2.6	2.9	4.3	1.6	26.4	43.8	9.3
1966	5.1	7.8	2.4	2.5	3.4	1.6	22.9	38.0	7.9
1965	4.3	6.5	2.1	2.2	3.0	1.3	18.9	30.8	7.1
1964	4.3	6.3	2.2	2.2	2.9	1.4	19.1	30.8	7.7
1963	3.6	5.5	1.7	2.0	2.9	1.0	15.5	25.0	6.2
1962	3.7	5.4	1.9	1.9	2.6	1.3	16.6	27.0	6.3
1961	3.6	5.5	1.7	1.9	2.7	1.1	15.5	25.4	5.9
1960	4.0	6.1	1.9	2.2	3.2	1.2	17.2	27.6	7.0
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues									
1969	7.2	9.2	5.3	7.3	9.4	5.2	6.8	7.6	6.0
1968	7.5	9.2	5.7	7.5	9.3	5.7	7.1	8.5	5.7
1967	7.6	9.4	5.7	7.8	9.6	6.0	6.2	8.4	4.0
1966	7.7	9.2	6.2	7.8	9.5	6.2	6.7	7.1	6.3
1965	7.6	9.3	5.8	7.5	9.3	5.7	7.9	9.2	6.6
1964	7.7	9.0	6.3	7.9	9.3	6.4	6.3	7.1	5.6
1963	7.6	8.8	6.3	7.6	8.9	6.3	7.2	7.9	6.4
1962	7.7	9.1	6.3	7.7	9.1	6.3	7.2	8.5	6.0
1961	7.7	9.1	6.3	7.9	9.3	6.4	6.5	7.9	5.2
1960	7.7	9.6	5.8	7.9	9.7	6.0	6.8	9.4	4.3

Table 5. Death rates for selected causes of death among teenagers 15-19 years of age, by color and sex: United States, 1960-69—Con.

[Rates per 100,000 population in specified group]

Cause of death and year	Total			White			All other		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Suicide									
1969-------------------	5.7	8.6	2.7	5.9	9.0	2.6	4.5	5.8	3.2
1968-------------------	5.1	7.8	2.2	5.3	8.3	2.2	3.5	4.7	2.2
1967-------------------	4.7	7.0	2.4	4.9	7.5	2.2	3.7	3.8	3.5
1966-------------------	4.3	6.5	2.1	4.4	6.7	2.1	3.6	4.8	2.4
1965-------------------	4.0	6.1	1.9	4.1	6.3	1.8	3.8	5.2	2.4
1964-------------------	4.0	6.3	1.7	4.2	6.6	1.7	2.9	4.0	1.8
1963-------------------	4.0	6.0	1.9	4.2	6.3	1.9	2.9	3.7	2.0
1962-------------------	3.7	5.5	2.0	3.9	5.8	2.0	2.8	3.7	1.9
1961-------------------	3.4	5.3	1.5	3.5	5.5	1.6	2.4	3.6	1.3
1960-------------------	3.6	5.6	1.6	3.8	5.9	1.6	2.4	3.4	1.5
Major cardiovascular-renal diseases									
1969-------------------	4.1	4.8	3.3	3.4	4.2	2.6	8.2	8.6	7.8
1968-------------------	3.8	4.3	3.4	3.3	3.7	2.9	7.1	7.5	6.6
1967-------------------	4.8	5.0	4.6	4.0	4.4	3.6	9.7	8.8	10.6
1966-------------------	5.1	5.6	4.6	4.4	4.8	3.9	9.9	10.6	9.3
1965-------------------	5.3	5.7	4.9	4.6	5.0	4.3	9.6	10.5	8.8
1964-------------------	5.7	6.1	5.2	5.0	5.9	4.1	10.4	7.8	12.9
1963-------------------	5.6	5.6	5.6	4.7	5.0	4.5	12.1	10.6	13.5
1962-------------------	5.3	5.7	5.0	4.5	5.1	4.0	10.8	9.2	12.4
1961-------------------	6.4	7.1	5.7	5.6	6.5	4.7	11.9	11.6	12.2
1960-------------------	6.2	6.9	5.6	5.4	6.1	4.7	12.2	12.8	11.7
Complications of pregnancy, childbirth, and the puerperium									
1969-------------------	0.6	...	1.1	0.3	...	0.6	2.3	...	4.6
1968-------------------	0.5	...	1.0	0.3	...	0.6	2.0	...	3.9
1967-------------------	0.7	...	1.5	0.4	...	0.9	2.7	...	5.4
1966-------------------	0.5	...	1.1	0.3	...	0.5	2.2	...	4.4
1965-------------------	0.7	...	1.4	0.4	...	0.7	3.0	...	5.9
1964-------------------	0.7	...	1.4	0.4	...	0.8	2.9	...	5.8
1963-------------------	0.8	...	1.7	0.5	...	1.0	3.3	...	6.6
1962-------------------	0.8	...	1.5	0.4	...	0.8	3.6	...	7.1
1961-------------------	0.8	...	1.6	0.5	...	1.0	3.3	...	6.5
1960-------------------	1.0	...	1.9	0.6	...	1.1	3.8	...	7.6
Influenza and pneumonia									
1969-------------------	2.3	2.5	2.1	2.1	2.3	1.9	3.6	4.1	3.1
1968-------------------	2.6	3.1	2.1	2.3	2.7	1.9	4.3	5.6	3.0
1967-------------------	2.1	2.5	1.7	1.9	2.3	1.5	3.6	4.4	2.8
1966-------------------	2.3	2.6	1.9	2.1	2.5	1.7	3.3	3.5	3.1
1965-------------------	2.1	2.3	1.8	1.9	2.1	1.6	3.4	3.7	3.1
1964-------------------	2.1	2.2	1.9	1.9	2.1	1.6	3.6	3.1	4.0
1963-------------------	2.4	2.7	2.1	2.2	2.4	2.0	3.7	4.3	3.0
1962-------------------	2.4	2.8	2.0	2.2	2.6	1.8	3.7	3.7	3.7
1961-------------------	2.0	2.4	1.7	1.8	2.3	1.3	4.0	3.7	4.2
1960-------------------	2.8	3.0	2.6	2.5	2.7	2.2	5.4	5.3	5.5
Congenital anomalies									
1969-------------------	2.1	2.4	1.8	2.1	2.4	1.7	2.5	2.7	2.3
1968-------------------	2.2	2.5	1.9	2.2	2.5	1.9	2.0	2.5	1.6
1967-------------------	2.3	2.9	1.8	2.3	2.8	1.7	2.6	3.2	2.0
1966-------------------	2.3	2.5	2.2	2.3	2.4	2.1	2.6	2.8	2.4
1965-------------------	2.5	2.9	2.1	2.5	2.9	2.1	2.8	3.2	2.4
1964-------------------	2.6	3.0	2.3	2.7	3.1	2.2	2.5	2.5	2.6
1963-------------------	2.7	3.1	2.3	2.6	3.0	2.1	3.1	2.7	3.4
1962-------------------	2.8	3.3	2.3	2.8	3.4	2.2	3.1	3.1	3.1
1961-------------------	3.2	3.5	2.9	3.2	3.5	2.8	3.2	3.1	3.3
1960-------------------	2.8	3.3	2.4	2.9	3.4	2.5	1.9	2.5	1.4

APPENDIX

The data presented in this report were derived primarily from the official vital statistics of the United States. These statistics are published annually by the National Center for Health Statistics in *Vital Statistics of the United States*. Also included in this report are population data and various other estimates obtained, as indicated in the text, from publications of the U.S. Bureau of the Census.

A complete discussion of the technical aspects of the marriage, divorce, natality, and mortality data appears in the annual vital statistics volumes. Similar technical discussions and explanations accompany the population enumerations and estimates published by the U.S. Bureau of the Census. Selected notes pertaining to the statistics excerpted for inclusion in this report are presented here.

Sources of Data

Vital statistics for the United States (the 50 States and the District of Columbia) are limited to events occurring within the United States during the calendar year, including those occurring to nonresidents of the United States. Events occurring to members of the Armed Forces or other U.S. nationals outside the United States are excluded.

Figures not designated as based on sample data were obtained from a complete microfilm file of records submitted by States and local areas. Birth data were obtained from a 50-percent sample of birth rec-

ords for all years shown except 1967, when a 20- to 50-percent sample was used. Mortality data were obtained from the complete microfilm file. Figures for marriages and divorces are based on data tabulated from probability samples of records selected in the National Center for Health Statistics from copies of marriage and divorce certificates sent in by States participating in the marriage-registration area (MRA) and the divorce-registration area (DRA). During the 1960's both these areas expanded—the MRA from 33 States in 1960 to 39 States and the District of Columbia in 1968-70 (figure I) and the DRA from 18 States in 1960 to 28 States in 1969 and 1970 (figure II).

The sampling rates for marriage and divorce records varied by State from a 5-percent sample to inclusion of all records, depending on the number of events occurring in the State. A sampling rate that would yield at least 2,500 records for marriages and 1,000 records for divorces was designated for each State.

Nationwide marriage figures were obtained for 1960. Marriages in the MRA represented about 62 percent of the national total in 1961, but with added MRA States they represented between 70 and 80 percent of the national total during the 1964-69 period. Divorces in the DRA accounted for only 24 percent of all divorces in 1960, but by 1968 and 1969 they accounted for 54 and 59 percent, respectively. Numbers and percents of marriages for which age of bride is known and numbers and percents of divorces for which age of wife is known appear in table I. They are an indicator of the volume of

Table I. Total number of marriages and number and percent of marriages where age of bride was reported and total number of divorces and number and percent of divorces where age of wife was reported: United States, 1960-69

	Marriages			Divorces		
Year	All marriages	Age reported[1]		All divorces	Age reported[2]	
		Number	Percent		Number	Percent
1969 ------------------------------	2,145,000	1,919,361	89.5	639,000	287,741	45.0
1968 ------------------------------	2,069,000	1,849,902	89.4	584,000	233,798	40.0
1967 ------------------------------	1,927,000	1,718,700	89.2	523,000	120,759	23.1
1966 ------------------------------	1,857,000	1,657,313	89.2	499,000	110,374	22.1
1965 ------------------------------	1,800,000	1,497,946	83.2	479,000	102,645	21.4
1964 ------------------------------	1,725,000	1,222,397	70.9	450,000	94,157	20.9
1963 ------------------------------	1,654,000	1,033,950	62.5	428,000	82,302	19.2
1962 ------------------------------	1,577,000	978,769	62.1	413,000	82,971	20.1
1961 ------------------------------	1,548,000	962,124	62.2	414,000	79,548	19.2
1960 ------------------------------	1,523,000	1,497,077	98.3	393,000	55,690	14.2

[1]For 1960, nationwide data excluding cases with age of bride not stated; for 1961-64, marriage-registration area data; for 1965-69, MRA data combined with data for non-MRA States reporting age.
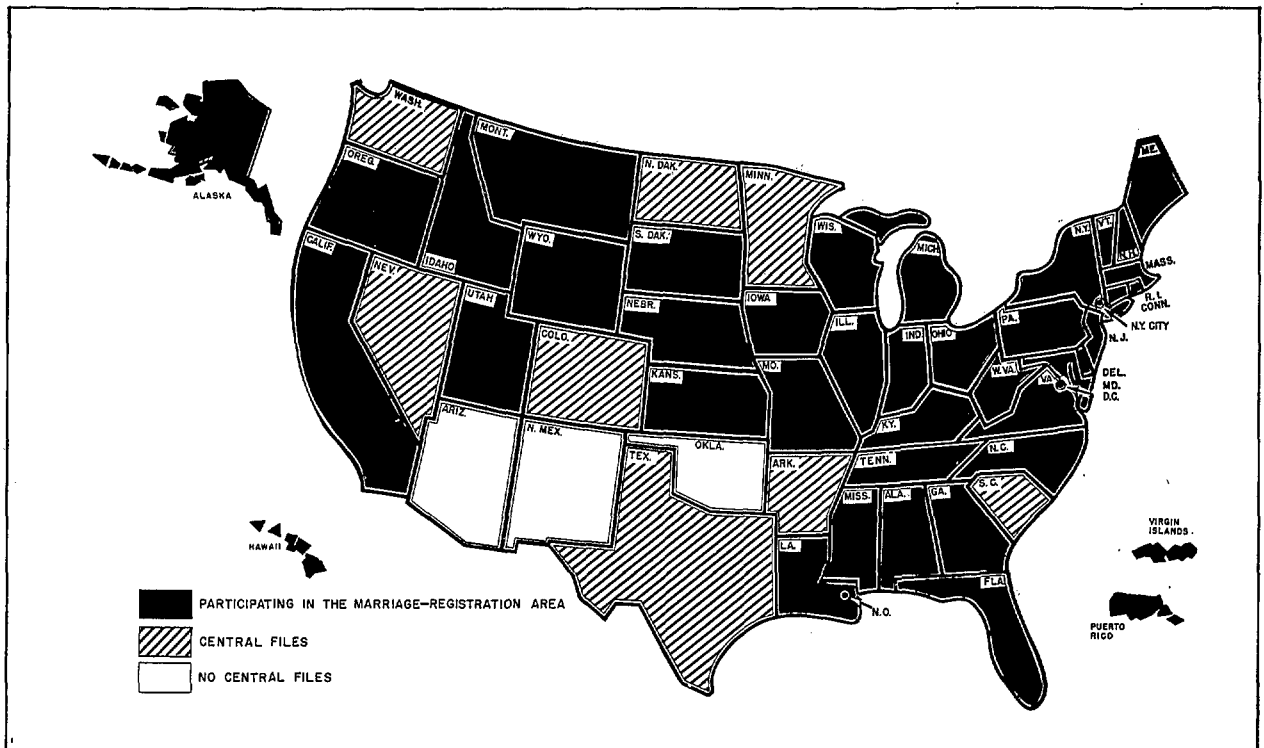[2]Divorce-registration area data excluding cases with age of wife not stated.
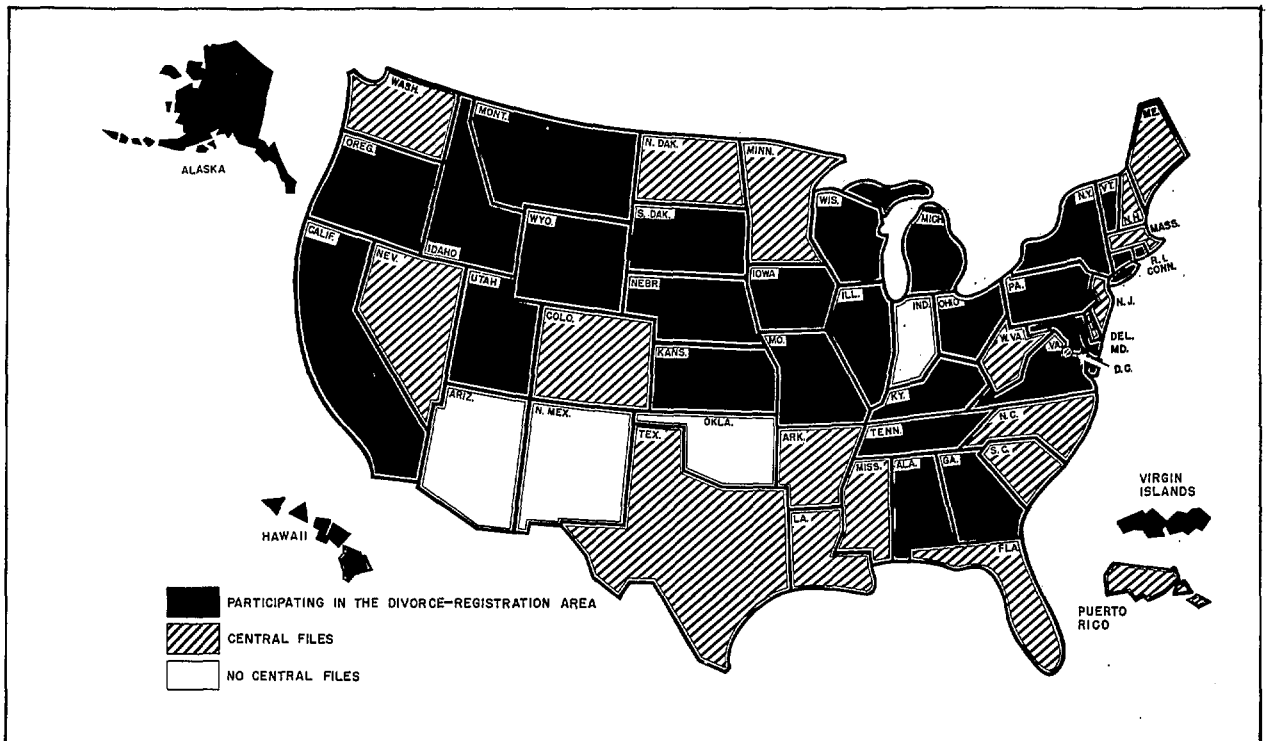
Figure I. Marriage-registration area status, 1968-70.

Figure II. Divorce-registration area status, 1969-70.

cases from which information about teenage marriage and divorce were obtained.

Rate Computations

Rates for census years are based on populations enumerated as of April 1 of that year. All other rates are based on estimates of the population present in the area as of July 1, including Armed Forces stationed in the area but excluding Armed Forces abroad. The population estimates were prepared by the U.S. Bureau of the Census.

Estimating Procedures

National estimates of marriages.—The number of marriages in the United States during 1969 by age and sex were estimated from sample data for the MRA (39 States and the District of Columbia) combined with data from five other States reporting marriages by age (Arkansas, Minnesota, South Carolina, North Dakota, and Texas). It was assumed that brides and grooms marrying in the 6 States where age was not reported (Arizona, Colorado, New Mexico, Nevada, Oklahoma, and Washington) had the same distribution by age as brides and grooms marrying where age at marriage was known. National totals of marriages by age were obtained by applying the percent distribution by age in the reporting area to the U.S. total of marriages. National marriage rates were computed by relating the estimated totals to the unmarried resident population of the U.S. by age and sex.

Similar estimates were made for 1966-68 using data from the same reporting States. (Missouri was not in the MRA until 1968 but was included as a non-MRA State reporting marriages by age for the 1965-67 estimates.) The 1965 estimates were based on data excluding Texas. For 1960, U.S. data by age were obtained from a nationwide sample, but State figures were compiled only for States in the MRA.

Regional estimates of marriages.—Regional estimates of teenage marriages (table 1) were made by computing separate estimates for each nonreporting State and summarizing State totals for each of the four regions. Teenage marriage totals were available for all States in the Northeast and North Central Regions beginning with 1965 data. For the South Region estimates were prepared for Texas in 1965 and for Oklahoma in 1965-69. Estimates for the West were prepared for five States (Arizona, Colorado, Nevada, New Mexico, and Washington) for all years 1965-69.

Estimates of teenage brides and grooms at specified ages.—The uniform group of States for which data are shown in table D are those comprising the MRA in 1961, excluding New York. Because data for New York State excluded New York City until 1965, they are eliminated for all years for the purpose of comparability.

For 1961 and 1962 the number of marriages at ages under 18 and 18-19 are available for the MRA as a whole, but data were not tabulated in such detail for each State. Estimates were made for New York State by assuming the same age distribution of brides and grooms under age 20 in the State as for those in the entire MRA including New York State. The resulting State estimates were subtracted from the MRA totals in each of the two age groups to obtain estimates for the 34 States and the District of Columbia for 1961 and 1962.

National estimates of divorces.—National estimates of divorces by age and sex for 1969 (table Q) were prepared by a procedure similar to that used for national estimates of marriages. Sample data on age at decree and age at marriage, reported by the 28 States in the DRA, were used as the basis for estimates. It was assumed that the age distribution of husbands and wives granted decrees in the reporting States was representative of that in nonreporting States. Nationwide totals were derived by applying the known distribution to the final U.S. total of divorces in 1969. (For 1969 age was known for approximately 75 percent of the divorces in the DRA, or about 45 percent of the 639,000 divorces in the entire United States.)

National divorce rates by age at decree were computed by relating the estimated numbers of divorces for the United States to the married population of the United States by age and sex.

Illegitimate Births

Legitimacy status was reported in 40 States and the District of Columbia in 1968. The following States did not require reporting of this information: California, Connecticut, Georgia, Idaho, Maryland, Massachusetts, Montana, New Mexico, New York, and Vermont. In earlier years fewer States reported. In 1960, the earliest year for which illegitimate live births and ratios are shown in this report, legitimacy status was reported in 34 States and the District of Columbia. In addition to those listed above, the following States did not report legitimacy status in 1960: Arizona, Arkansas, Colorado, Nebraska, New Hampshire, and Oklahoma.

In making annual estimates of the number of illegitimate births occurring in the country as a whole, the States were grouped into nine geographic divisions. The combined ratio of illegitimate births per 1,000 total live births for all reporting States in a single geographic division was then applied to all live births occurring to residents of that division. This estimating procedure was done separately for the two color groups, white and all other. For each year, the sum of these estimates for the nine geographic divisions makes up the estimate for the United States.

In processing the data, no adjustments were made for misstatements of legitimacy status on the birth record or for failure to register illegitimate births because the extent of such reporting problems is unknown. A birth with legitimacy status not stated was considered to be legitimate.

Table II. Standard errors of estimated numbers of events expressed as percentage of area total: marriage-registration area and divorce-registration area, 1969

Registration area	All events	Standard error of estimated number expressed as percentage of area total				
		1 or 99	2 or 98	3 or 97	4 or 96	5 or 95
Marriage-registration area						
Number of marriages-----------	1,660,547	16,605 or 1,643,942	33,211 or 1,627,336	49,816 or 1,610,731	66,422 or 1,594,125	83,027 or 1,577,520
Standard error----------------	...	457	643	783	900	1,001
Divorce-registration area						
Number of divorces------------	378,095	3,781 or 374,314	7,562 or 370,533	11,343 or 366,752	15,124 or 362,971	18,905 or 359,190
Standard error----------------	...	159	223	272	312	347

Registration area	Standard error of estimated number expressed as percentage of area total—Con.					
	7 or 93	10 or 90	15 or 85	20 or 80	25 or 75	50
Marriage-registration area						
Number of marriages-----------	116,238 or 1,544,309	166,055 or 1,494,492	249,082 or 1,411,465	332,109 or 1,328,438	415,137 or 1,245,410	830,274
Standard error----------------	1,172	1,378	1,640	1,837	1,989	2,296
Divorce-registration area						
Number of divorces------------	26,467 or 351,628	37,810 or 340,286	56,714 or 321,381	75,619 or 302,476	94,524 or 283,571	189,048
Standard error----------------	407	478	569	638	690	797

Standard Errors

All statistics estimated from sample surveys are subject to sampling and measurement errors. The standard error, a measure of sampling variability, is the amount which, when added to or subtracted from an estimate, gives an interval that would contain the actual value being estimated in approximately 68 out of 100 similarly selected samples.

The standard errors of some statistics used in this report are shown in tables II through V.

Three types of rates appear in this report, each of which involves a different method for computing the standard error.

1. The standard error of an estimated proportion of a known total number of events can be computed by dividing the standard error for the estimated frequency by the total number of events for the area.

For example, an estimated 32.6 percent (or 540,841) of all brides in the MRA in 1969 were teenagers (table N). The standard error of a frequency equal to 32.6 percent of the MRA total of 1,660,547, interpolated from table II, is 2,082, which yields .001 or 0.1 percent when divided by the total number of MRA marriages. By adding and subtracting 0.1 from 32.6, we obtain the interval 32.7 to 32.5. The chances are about 68 out of 100 that the actual proportion of teenage brides falls within this interval.

2. Proportions with an estimated base and with counts in the numerator also included in the denominator have standard error:

$$S_{x/y} = \frac{\sqrt{y^2 S_x^2 - x^2 S_y^2}}{y^2}$$

Where $S = x/y$ is the standard error of the proportion of interest; x and y are estimated frequencies of specified subgroups of a known total and x is a subgroup of y'; and S_x is the standard error of x and S_y is the standard error of y.

For example, in the MRA an estimated 13.3 percent of all first-married brides aged 15-17 in 1969 were in the color group all other (table H). The standard error of this estimate, where $x = 15,371$, $y = 115,278$, $S_x = 411$, and $S_y = 1,172$ (derived from table II), is .004 or, converted to a percent, .4. Thus the true value of the estimate lies between 13.7 and 12.9.

3. The standard error of a rate when the numerator is not a minor subset of the denominator can be approximated using the following formula:

$$S_{(x/y)} = \sqrt{\frac{S_x^2}{y^2} + \frac{x^2 S_y^2}{y^4}}$$

Where x = the estimated frequency of a particular characteristic of the population,
y = the estimated size of the population at risk,
S_x = standard error of x, and
S_y = standard error of y.

It should be noted that the formula shown above gives the standard error of a proportion. In order to obtain a standard error of a rate per 1,000, $S_{x/y}$ should be multiplied by 1,000. Since the magnitude of a standard error of an estimated rate depends on both the frequency and population on which the rate is computed, two or more identical rates may have different standard errors.

The standard errors of many such rates are given in tables III, IV, and V.

Table III. Standard errors of estimated numbers of marriages and of marriage rates, by sex and age: United States, 1969

[Estimates in table C]

·Age	Standard error			
	Number		Rate	
	Female	Male	Female	Male
All ages --	...	...	...	...
15-19 years -----	2,325	1,767	1.14	0.46
20-24 years -----	2,428	2,511	6.08	3.91
25-34 years -----	1,814	2,163	5.89	6.44
35-44 years -----	1,214	1,355	2.82	4.24
45-54 years -----	992	1,072	1.14	2.52
55-64 years -----	718	812	0.40	1.89
65 years and over ----------	459	677	0.07	0.52

Table IV. Standard errors of teenage marriage rates by specified age of bride and groom and whether or not difference in rate was significant: marriage-registration area, 1969 and 1965

[Rates in tables E and F]

Age	Bride			Groom		
	Standard error		Whether or not difference in rates was significant	Standard error		Whether or not difference in rates was significant
	1969	1965		1969	1965	
Under 15 years -------------------	0.06	0.07	No	...	...	...
All ages 15-19 years ------------	0.53	0.62	Yes	0.26	0.27	Yes
15-17 years ------------------	0.43	0.48	No	0.12	0.11	Yes
15 years ------------------	0.27	0.26	Yes	...	...	...
16 years ------------------	1.01	0.97	No	0.07	0.07	Yes
17 years ------------------	1.54	1.55	No	0.41	0.37	Yes
18-19 years ------------------	2.74	2.98	No	1.17	1.26	Yes
18 years ------------------	3.56	3.68	No	1.40	1.21	Yes
19 years ------------------	5.15	6.84	No	2.47	2.78	No

Table V. Standard errors of estimated numbers of divorces and of divorce rates, by sex and age at decree: United States, 1969

[Estimates in table N]

Age	Standard error			
	Number		Rate	
	Wife	Husband	Wife	Husband
All ages --	...	...	...	...
15-19 years -----	480	188	1.25	1.51
20-24 years -----	1,039	872	0.53	0.76
25-29 years -----	990	999	0.40	0.49
30-34 years -----	830	706	0.22	0.40
35-44 years -----	975	1,041	0.14	0.21
45-54 years -----	732	833	0.11	0.14
55-64 years -----	411	514	0.08	0.09
65 years and over -----------	188	301	0.05	0.06

Standard errors for the number of marriages or divorces in a subgroup were computed by multiplying the standard error for the MRA or DRA frequency for the subgroup by a constant factor ratio, computed as 1.1167 for marriages and 1.6901 for divorces. This factor ratio is 1 plus the total number of events in the United States for which age was not reported to the total number of events for which age was reported. The standard error of the national estimated number of events based on probability samples for a reporting area can be approximated using the following formula:

$$S'_x = \left(1 + \frac{N_2}{N_1}\right) S_x$$

where S'_x is the standard error of the U.S. estimate, $\left(1 + \frac{N_2}{N_1}\right)$ is the constant factor, and S_x is the standard error of the estimated frequency in the reporting area. Thus in computing S'_x of the 1969 U.S. total of teenage brides aged 15-19 (717,000) we simply multiply 2,082 (S_x for teenage brides in the MRA) times 1.1167 and arrive at S'_x = 2,325. This figure, when added to and subtracted from 717,000, places the true value of the estimate between 719,300 and 714,700.

Standard errors for estimated U.S. rates of marriages or divorces by sex and age can be obtained from the formula given in item 2 above. As an illustration, suppose the standard error is to be calculated for the estimated 1969 U.S. marriage rate for teenage women aged 15-19 (87.7). In this formula x is the total number of teenage brides, and S_x is the standard error of x, seen to be 2,325. Y is the U.S. total resident unmarried female population aged 15-19 as of July 1, 1969 (8,171,000) furnished by the U.S. Bureau of the Census, and S_y is the standard error of y. Substituting these values into the appropriate formula and multiplying by 1,000, the result is $S_{x/y}$ = 1.14, and the interval of the true rate is 86.6 to 88.8.

It is possible to test whether two proportions (or two rates converted to proportions) are significantly different by use of the following expression:

$$\frac{P_1 - P_2}{\sqrt{S_{p1}^2 + S_{p2}^2}}$$

If the quotient is greater than 2, the difference is considered statistically significant in this report. Teenage marriage rates at specified ages for the MRA in 1969 and 1965 were tested, as shown in table IV. "Yes" and "No" responses indicate whether changes in such rates during this period were statistically significant.

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