NATIONAL CENTER For HEALTH STATISTICS | Series 21 Number 1

VITAL and HEALTH STATISTICS

DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

Natality Statistics Analysis

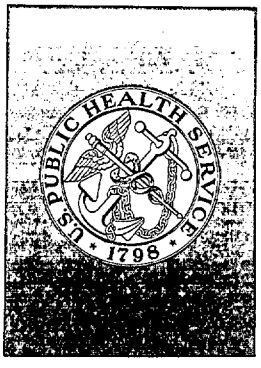
United States · 1962

An analytical study of fertility trends in terms of period and cohort measures. Also, a discussion of characteristics of live births including plurality, seasonal variation, period of gestation, weight at birth, sex ratio, attendant at birth, and legitimacy.

Washington, D.C. October 1964

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Anthony J. Celebrezze
Secretary

Public Health Service
Luther L. Terry
Surgeon General



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NATALITY RATES AND RATIOS, 1962

TOTAL NUMBER OF LIVE BIRTHS—4,167,362

CRUDE BIRTH RATE 22.4
(per 1,000 population)

CRUDE RATE OF NATURAL INCREASE 12.9
(persons per 1,000 population)

INTRINSIC RATE OF NATURAL INCREASE ... 18.8
(per 1,000 female population)

GROSS REPRODUCTION RATE 1,695

NET REPRODUCTION RATE 1,633

TOTAL FERTILITY RATE 3,471.0

GENERAL FERTILITY RATE 112.1
(per 1,000 female population 15-44 years)

CUMULATIVE BIRTH RATE BY AGE OF WOMEN, JANUARY 1, 1963
(per 1,000 females)

15 to 19 years	93
20 to 24 years	957
25 to 29 years	2,141
30 to 34 years	2,714
35 to 39 years	2,809
40 to 44 years	2,739
45 to 49 years	2,402
50 to 54 years	2,283

PREMATURE BIRTHS (under 37 weeks gestation) 6.9
(per 100 live births)

IMMATURE BIRTHS (2,500 grams or less) ... 8.0
(per 100 live births)

MEDIAN WEIGHT AT BIRTH 3,290
(in grams)

HOSPITAL DELIVERIES 97.2
(per 100 live births)

PLURAL DELIVERIES 19.5
(per 1,000 live births)

SEX RATIO 1,048
(males per 1,000 female live births)

ESTIMATED LEGITIMATE FERTILITY RATE 152.1
(per 1,000 married female population 15-44 years)

ESTIMATED ILLEGITIMATE FERTILITY RATE 21.5
(per 1,000 unmarried female population 15-44 years)

ESTIMATED PERCENT COMPLETENESS OF BIRTH REGISTRATION 98.9

NOTES TO TABLES

1. *Alaska and Hawaii.*—All tables showing time series include data for Alaska beginning 1959, Hawaii 1960.

2. *50-percent sample.*—All data for the years 1951-54 and 1956-62 are derived from 50-percent samples of birth records. Statistics for these years were obtained by multiplying the sample figures by 2.

3. *Not stated data.*—Age of mother, live-birth order, birth weight, and period of gestation data which were not stated in frequency tables, *Vital Statistics of the United States, 1962,* Volume I, were distributed in the preparation of rate tables, percent distributions, and indexes for this report.

4. *Race and color not stated.*—In 1962 the State of New Jersey omitted the item "color or race" from its certificate of live birth. Therefore, all tables showing data by color for 1962 for the United States exclude data for residents of New Jersey.

5. *Adjustment for underregistration of births.*—Births were adjusted for underregistration for all years in tables *10 through 19.* In other tables births were adjusted as shown in footnotes.

6. *Population bases.*—Except as noted, birth rates shown in this report for the United States and the individual States are based on populations present in the respective areas. These populations exclude the Armed Forces overseas and persons living abroad but include the Armed Forces stationed in each area. Rates for 1940, 1950, and 1960 are based on the population enumerated as of April 1; for all other years, estimated as of July 1.

In tables *10 through 19* numbers of women were adjusted for underenumeration and misstatements of age in censuses.

NATALITY STATISTICS ANALYSIS

Anders S. Lunde, Louise M. Okada, and Harry M. Rosenberg, *Division of Vital Statistics*

INTRODUCTION

This publication of the Division of Vital Statistics, National Center for Health Statistics, is the first report of Series 21, presenting natality statistics and their analysis and related methodological subjects. This report supplements Volume I of *Vital Statistics of the United States, 1962,* "Natality," which contains general tables and rate tables dealing with birth statistics in the United States, Puerto Rico, and the Virgin Islands.

Included in the introduction are brief statements on the history and development of birth statistics in the United States; the work of the Division of Vital Statistics, National Center for Health Statistics; and the sources of data presented in this publication.

Early Development of Birth Registration[1,2]

Throughout the 17th and 18th centuries various colonies attempted to obtain information on vital events. In 1632 the Grand Assembly of Virginia required ministers to report annually on all christenings, weddings, and burials in their parishes. In 1639 the legislative bodies of the Massachusetts Bay Colony, Connecticut, Plymouth, and other colonies required government officials to record births, deaths, and marriages. Some 50 years later, in an improved registration law, Massachusetts enforced a penalty clause against next of kin for failure to register a birth or a death and authorized town clerks to issue certificates to anyone desiring such a record. In 1795 this State made householders responsible for reporting births and deaths which occurred in their households, and it required institutions to report events occurring in them.

It was not until the 19th century that an increasing interest in vital statistics stimulated the growth of State registration programs. In 1841 Massachusetts passed what has been called the first "modern" State registration law, which was revised in 1842 and 1844. This included provisions for uniform certificates and the establishment of a statewide file of copies of the records. By 1859 eight States had established some form of systematized registration. The registration movement was actively supported by such groups as the American Statistical Association, the American Medical Association, and the American Public Health Association.

The enumeration system which had been used by the U.S. Bureau of the Census to attempt a count of mortality in census years was extended to include births in the censuses of 1880, 1890, and 1900. Actually, no attempt was made to enumerate births; "the number of births was taken as the sum of the infants enumerated in the census of population under 1 year of age and the number of infants born and dying during the census year."[3] According to Wilbur, this method was unsatisfactory, but it gave better results than were available from State registration at the time.

In 1908, in an attempt to determine the feasibility of establishing a permanent birth-registration area, the Bureau of the Census made an exhaustive collection of transcripts of all births registered in the United States by State and local offices. The results indicated that only about one-half of the births that occurred each year were recorded. The collection of transcripts of births

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occurring in eight States, New York City, and the District of Columbia (called the "provisional birth-registration area") was continued in 1909 and 1910. While work connected with the Thirteenth Census caused the transcript collection to be discontinued, it was thought that the work should be resumed for those areas which had practically complete registration and in which the laws pertaining to registration were enforced.

The Model Law

The vital registration laws of many States were diverse and inadequate; the lack of uniformity and enforcement prevented the development of national statistics on vital events. At a meeting in Denver in 1895 the Committee on Vital Statistics of the American Public Health Association first proposed the drafting of a registration law suitable for adoption by States. In Buffalo in 1900 the committee reported that it was undertaking the preparation of a model form of legislation. The so-called Model Law, the Standard Certificate of Death, and the Standard Certificate of Birth resulted by 1915.

In 1902 Congress formed the permanent Bureau of the Census and provided for the collection of statistics on births and deaths annually in registration areas. In the following year, Congress adopted a resolution emphasizing the importance of a uniform system of registration throughout the United States and urged the cooperation of the various States in realizing this goal. Uniform principles concerning the registration of deaths and births were established and a draft of a law for such registration was prepared. The model bill in general provided that State Boards of Health should have authority over registration matters, fixed responsibility of registering births with the attendant at birth, and listed a minimum set of items for inclusion in the State certificates. This model was adopted in draft form by Pennsylvania in 1905 and was submitted to the States in final form in 1907. The Model Law was revised in 1942 and in 1959. Today every State has adopted the principles of the first and subsequent model laws in composing vital statistics legislation. Since the promulgation of the Model Law, the work of the national and State vital statistics offices has been closely interwoven.

The Birth-Registration Area

In 1915 the birth-registration area of the United States was formed with 10 States and the District of Columbia. Most of these States were in the northeast and north-central regions and had fairly well-established registration systems. Thereafter admittance was based on birth-registration tests, it being required that birth registration be 90 percent complete in each State before admission to the area. By 1920, 23 States and the District of Columbia representing 60 percent of the population had been admitted to the birth-registration area, and by 1930, 46 States and the District of Columbia had been admitted representing 95 percent of the population. With the admission of Texas in 1933, the area was complete for the United States.

The organized Territories of Hawaii and Alaska were admitted in 1929 and 1950, respectively. Data from these areas were prepared separately until they became States—Alaska in 1959 and Hawaii in 1960.

The cities of Baltimore, New Orleans, and New York make separate returns to the Division of Vital Statistics and are considered as distinct parts of the birth-registration area. Returns from these cities are combined with returns from their respective States in the national tabulations.

The Virgin Islands of the United States was admitted to the area in 1924 and the Commonwealth of Puerto Rico in 1943. Data received from these places are not included in the totals for the United States but are prepared separately. Birth records are not received from other regions under United States sovereignty or jurisdiction, such as the Canal Zone, Guam, American Samoa, and the Trust Territories.

Formation of the Division of Vital Statistics, National Center for Health Statistics

The Bureau of the Census in 1917 published the first report containing statistics on births in the registration area titled *Birth Statistics for the Registration Area of the United States: 1915.* The Division of Vital Statistics of the Bureau thereafter published statistics on births annually

through 1945. By an executive order, which became effective on July 16, 1946, the Division of Vital Statistics and all of its functions were transferred to the Public Health Service in the Federal Security Agency. The official designation of the division became the National Office of Vital Statistics. In April 1953 the authority for Federal functions in vital statistics was transferred from the Federal Security Agency to the Department of Health, Education, and Welfare.

The National Center for Health Statistics, responsible directly to the Surgeon General of the Public Health Service, was established in August 1960. The National Office of Vital Statistics became the National Vital Statistics Division, one of two divisions of the Center. The rapid growth of its program in gathering, analyzing, and disseminating basic data relevant to the health of the United States and its demographic problems led to a further organization of the Center in October 1963. Under this reorganization the National Vital Statistics Division became one of five major divisions under a designation which it once had in the Bureau of the Census, the Division of Vital Statistics.

The Division, besides preparing and publishing statistics on births, deaths, marriages, and divorces, conducts research and methodological studies in vital statistics areas. It conducts relations with the States in the matter of registration methods and maintains a continuing program to improve the quality and usefulness of vital statistics through technical assistance.

The Standard Certificate of Live Birth

The Standard Certificate of Live Birth, issued by the Division of Vital Statistics, has served for many years as the principal means for gaining uniformity in the content of the documents used to collect information. It has been modified by each State to the extent made necessary by the particular needs of the State or by special provisions of the State Vital Statistics Law. The certificates of most States conform closely in content and format to the standard certificate. Where they do not do so, they provide, with certain exceptions, the basic information required for national statistics.

The first issue of the standard certificate appeared shortly before the formation of the birth-registration area and was in use during the period 1915-17. The certificate has been revised periodically to take into account changes in the focus of information needed and the increasing interest in factors related to health and social conditions. The present standard certificate was revised in 1956 and the next revision is planned for 1966.

Sources and Qualifications of Data

Natality tabulations for 1962, with the exception noted below, are based on information obtained from microfilm copies of the original certificates of live birth. Birth data for the United States are confined to events registered within the United States and include events occurring to nonresident aliens. Births occurring abroad to U.S. citizens are not included. The data for Puerto Rico and the Virgin Islands are confined to events registered in these areas and are treated separately.

The statistical information on the birth records was edited, classified, placed on punchcards, and tabulated in the National Vital Statistics Division. The 1962 birth statistics for California were obtained by a different method. The Bureau of Vital Statistics and Data Processing of the California State Department of Health coded the information on their certificates according to the rules followed by the National Vital Statistics Division. From punchcards prepared for its own use the Bureau reproduced the information required for national tabulations on uniform punchcard forms. The reproduced cards were verified and tabulated with the cards for other areas.

All birth statistics for the United States as a whole by color or race exclude data for residents of New Jersey because this State did not require reporting of the item; the absence of this information for New Jersey affects all birth rates classified by color or race for the total United States. This results from the fact that it was not possible to obtain denominators by color to correspond with the natality data excluding this State; intercensal population estimates by age, color, and sex are not available for individual States. There-

fore, in order to prepare birth rates by color for the United States, estimates were made for the population of the United States by age, color, and sex excluding New Jersey. A more comprehensive explanation of this problem may be found in Section 5, Technical Appendix, Volume I, *Vital Statistics of the United States, 1962.*

The rate tables give data for varying periods—some only for recent years and others back to the earliest years for which data are available. In many cases corresponding rates for earlier years will be found in preceding issues of Volume I of *Vital Statistics of the United States.* Cohort rates for years prior to 1958 will be found in a previous report.[4]

Adjustment of natality statistics for estimated underregistration of live births was discontinued in 1960 where absolute frequencies and *period rates* are shown, for reasons discussed in the Technical Appendix of Volume I. In time-trend tables, data which have been shown on an adjusted basis in previous reports are shown in this report as adjusted through 1959 and on a registered (unadjusted) basis for 1959 and years thereafter. Adjusted figures were used in the computation of all *cohort rates,* as described in the report cited in reference 4. In all tables data adjusted for underregistration are so indicated; otherwise, the tables include data based solely on registered births.

THE DECLINE IN BIRTHS

In 1962 there were 4,167,362 live births registered in the United States, a decrease of 100,964 or 2.4 percent from the number in 1961 (table 1). This was the tenth consecutive year in which births exceeded 4 million; nevertheless, the decline was greater than that which occurred in 1958, when the drop from the peak year of 1957 was only 1.2 percent.

In 1915, when the birth-registration area was established, there were an estimated 2,965,000 live births in the United States. The number of births dropped to 2.7 million in 1919, rose following World War I to over 3 million in 1921, then declined fairly steadily to a low of 2.3 million in 1933, during the depression period. Beginning in 1940 a definite upswing occurred, associated with industrial recovery and the outbreak of World War II; there was a rapid rise to a peak of 3.1 million births in 1943. A 2-year decline, related to overseas troop movements, was followed at the end of the war by a rise in the marriage rate and a "baby boom" which reached a peak of 3.8 million births in 1947. Another leveling off period of 3 years was followed by a steady increase in births until the number exceeded 4 million in 1954.

In the decade 1950-60, mothers gave birth to more babies than in any previous 10-year period in this country, a total of over 40,000,000 live births. This was very unusual, since most of these mothers represented the small cohorts of women born during the depression period, the 1920's and 1930's. In 1957, a peak year in the fertility history of the United States, 4,308,000 births were recorded. Since 1957 there has been a declining trend in the annual number of births.

The declining trend in fertility is reflected in almost all measures of period fertility. The crude birth rate, 25.3 live births per 1,000 population in 1957, dropped to 22.4 in 1962. Both the general fertility rate and the total fertility rate declined by 8 percent during this period. The decline was experienced among both white and nonwhite women bearing children of almost all birth orders from first to fifth.

Changes in cohort fertility do not yet indicate the implications for family formation of the current declines in period fertility rates. The reduction in the number of births to women of all ages may reflect a trend toward a smaller average family size or merely to a temporary postponement of childbearing. It is interesting to note the *reversal* in the declining trend of average completed family size that has taken place since 1960. Women who completed their reproductive period in 1930 averaged 3.6 children each; by 1961 this figure had reached a low of 2.3. But there are signs of a sharp recovery. For example, women aged 30-34 years had already borne over 2.7 children per woman by the end of 1962.

The decline in period fertility is undoubtedly related to the pattern of family formation in the period following World War II. Early marriage, followed by early childbearing, were factors in the high fertility of the 1950's. Median age at first marriage for brides dropped from 21.4 years in 1951 to 20.1 years in 1960 and for grooms from 23.8 years to 23.1 years. There was an increase

Table 1. Live births, birth rates, and fertility rates, by color: United States, 1909-62

(Notes to tables given on page VIII)

Year	Live births			Birth rate[1]			Fertility rate		
	Total	White	Non-white	Total	White	Non-white	Total	White	Non-white
Registered births	Number			Rates per 1,000 population			Rates per 1,000 female population aged 15-44 years		
1962	4,167,362	3,394,068	641,580	22.4	21.4	30.5	112.1	107.5	148.7
1961	4,268,326	3,600,864	667,462	23.3	22.2	31.6	117.2	112.2	153.5
1960	4,257,850	3,600,744	657,106	23.7	22.7	32.1	118.0	113.2	153.6
1959	4,244,796	3,597,430	647,366	24.0	22.9	32.8	118.7	113.8	156.1
Births adjusted for under-registration[2]									
1959	4,295,000	3,622,000	673,000	24.3	23.1	34.1	120.1	114.6	162.3
1958	4,255,000	3,598,000	657,000	24.5	23.3	34.3	120.1	114.8	160.5
1957	4,308,000	3,648,000	660,000	25.3	24.1	35.3	122.7	117.5	162.8
1956	4,218,000	3,573,000	645,000	25.2	24.0	35.4	120.8	115.6	160.5
1955	4,104,000	3,488,000	617,000	25.0	23.8	34.8	118.0	113.3	154.8
1954	4,078,000	3,475,000	603,000	25.3	24.2	34.9	117.6	113.1	152.5
1953	3,965,000	3,389,000	575,000	25.0	24.0	34.1	114.8	110.7	146.8
1952	3,913,000	3,358,000	555,000	25.1	24.1	33.7	113.6	109.9	143.0
1951	3,823,000	3,277,000	546,000	24.9	23.9	33.8	111.3	107.5	141.9
1950	3,632,000	3,108,000	524,000	24.1	23.0	33.3	106.2	102.3	137.3
1949	3,649,000	3,136,000	513,000	24.5	23.6	33.0	107.1	103.6	135.1
1948	3,637,000	3,141,000	495,000	24.9	24.0	32.4	107.3	104.3	131.6
1947	3,817,000	3,347,000	469,000	26.6	26.1	31.2	113.3	111.8	125.9
1946	3,411,000	2,990,000	420,000	24.1	23.6	28.4	101.9	100.4	113.9
1945	2,858,000	2,471,000	388,000	20.4	19.7	26.5	85.9	83.4	106.0
1944	2,939,000	2,545,000	394,000	21.2	20.5	27.4	88.8	86.3	108.5
1943	3,104,000	2,704,000	400,000	22.7	22.1	28.3	94.3	92.3	111.0
1942	2,989,000	2,605,000	384,000	22.2	21.5	27.7	91.5	89.5	107.6
1941	2,703,000	2,330,000	374,000	20.3	19.5	27.3	83.4	80.7	105.4
1940	2,559,000	2,199,000	360,000	19.4	18.6	26.7	79.9	77.1	102.4
1939	2,466,000	2,117,000	349,000	18.8	18.0	26.1	77.6	74.8	100.1
1938	2,496,000	2,148,000	348,000	19.2	18.4	26.3	79.1	76.5	100.5
1937	2,413,000	2,071,000	342,000	18.7	17.9	26.0	77.1	74.4	99.4
1936	2,355,000	2,027,000	328,000	18.4	17.6	25.1	75.8	73.3	95.9
1935	2,377,000	2,042,000	334,000	18.7	17.9	25.8	77.2	74.5	98.4
1934	2,396,000	2,058,000	338,000	19.0	18.1	26.3	78.5	75.8	100.4
1933	2,307,000	1,982,000	325,000	18.4	17.6	25.5	76.3	73.7	97.3
1932	2,440,000	2,099,000	341,000	19.5	18.7	26.9	81.7	79.0	103.0
1931	2,506,000	2,170,000	335,000	20.2	19.5	26.6	84.6	82.4	102.1
1930	2,618,000	2,274,000	344,000	21.3	20.6	27.5	89.2	87.1	105.9
1929	2,582,000	2,244,000	339,000	21.2	20.5	27.3	89.3	87.3	106.1
1928	2,674,000	2,325,000	349,000	22.2	21.5	28.5	93.8	91.7	111.0
1927	2,802,000	2,425,000	377,000	23.5	22.7	31.1	99.8	97.1	121.7
1926	2,839,000	2,441,000	398,000	24.2	23.1	33.4	102.6	99.2	130.3
1925	2,909,000	2,506,000	403,000	25.1	24.1	34.2	106.6	103.3	134.0
1924	2,979,000	2,577,000	401,000	26.1	25.1	34.6	110.9	107.8	135.6
1923	2,910,000	2,531,000	380,000	26.0	25.2	33.2	110.5	108.0	130.5
1922	2,882,000	2,507,000	375,000	26.2	25.4	33.2	111.2	108.8	130.8
1921	3,055,000	2,657,000	398,000	28.1	27.3	35.8	119.8	117.2	140.8
1920	2,950,000	2,566,000	383,000	27.7	26.9	35.0	117.9	115.4	137.5
1919	2,740,000	2,387,000	353,000	26.1	25.3	32.4	111.2	---	---
1918	2,948,000	2,588,000	360,000	28.2	27.6	33.0	119.8	---	---
1917	2,944,000	2,587,000	357,000	28.5	27.9	32.9	121.0	---	---
1916	2,964,000	2,599,000	---	29.1	28.5	---	123.4	121.8	---
1915	2,965,000	2,594,000	---	29.5	28.9	---	125.0	123.2	---
1914	2,966,000	2,588,000	---	29.9	29.3	---	126.6	124.6	---
1913	2,869,000	2,497,000	---	29.5	28.8	---	124.7	122.4	---
1912	2,840,000	2,467,000	---	29.8	29.0	---	125.8	123.3	---
1911	2,809,000	2,435,000	---	29.9	29.1	---	126.3	123.6	---
1910	2,777,000	2,401,000	---	30.1	29.2	---	126.8	123.8	---
1909	2,718,000	2,344,000	---	30.0	29.2	---	126.8	123.6	---

[1]For 1917-19 and 1941-46, based on population including Armed Forces abroad.

[2]Due to rounding to the nearest thousand, figures by color may not add to totals. For 1915-32, figures include adjustments for States not in the registration area; for years prior to 1915, figures are estimates based on the number of registered births in the 10 original registration States for the same period. Estimates for 1909-34 were prepared by P. K. Whelpton. See "Births and Birth Rates in the Entire United States, 1909 to 1948," National Office of Vital Statistics, Vital Statistics—Special Reports, Vol. 33, No. 8, 1950.

in the proportion of younger persons married for the first time. In 1951 in a group of 16 States for which continual records exist, brides under 20 years of age constituted 38.5 percent of all brides and in 1960 almost half (49.0 percent). In these same States, grooms under 20 years of age in 1951 constituted 10.5 percent of all grooms and in 1960, 16.8 percent.

During the 1950's families were formed earlier than in previous years. The median age of mothers having their first child fell from 22.7 years in 1950 to 21.5 years in 1960. The median age of all mothers dropped from 26.1 years in 1950 to 25.5 years in 1960.

Because of their high fertility during the 1950's, many of the women of childbearing age had borne most of their children at the beginning of this decade; by their high fertility and earlier childbearing, they had, in effect, "borrowed" children from the future. There was, in addition, a further factor which would have consequences in terms of the number of children that would be born in the following years. An increasing proportion of couples were having moderate-sized families of two to four children instead of the somewhat smaller families of the 1930's and early 1940's, while the large family of five children or more continued to decline.[5]

Three interrelated factors, then, were at work during the 1950's which portended a decline in the birth rate during the 1960's. First, marriages occurred at younger ages; second, childbearing began earlier on the average than in previous years; and finally, average completed family size was approached sooner among many women. An increase in childbearing during the 1960's, in terms of most measures of period fertility, will occur only if childbearing is continued into older ages by women who already have moderate-sized families.

Despite the anticipated decline in fertility rates in the immediate future, there is a strong likelihood that the annual number of births will begin to increase about 1965 or 1966. This will be associated with the increase in the number of persons reaching marriageable age after 1965, the large cohorts of children born immediately after the Second World War who will place an increasing number of potential parents into the population during the late 1960's and the 1970's.

MEASUREMENT OF FERTILITY:

Period Rates

Birth rates reflecting two different but complementary approaches to the measurement of fertility are presented in this report. The first approach, used more widely, deals with *period rates* of fertility, that is, yearly indexes of the childbearing performance of the population. The second approach, presented later in this report, is based on the concept of female birth cohorts, or groups of women who are born in the same year. *Cohort rates,* as retrospective rather than annual measures of fertility, describe the reproductive history of a group of women up to a specified age.

Period rates, showing the fertility of the population in 1962, are discussed below. The various measures are presented in sequence as the population "at risk" to bear children is successively refined by such factors as age, sex, marital status, and parity. Initially, fertility in the United States is discussed in terms of the most general and the most widely used period rate, the crude birth rate.

The crude birth rate.—The crude birth rate relates the number of births occurring in an area to the total population of that area without regard to age or sex distribution. The crude birth rate for the United States in 1962 was 22.4 live births per 1,000 population, measured on the basis of 4,167,362 live births compared with a population of 185,822,000 as estimated by the Bureau of the Census on July 1, 1962.

The crude birth rate is most commonly used for comparisons between countries of the world because of the simplicity and the universality of its use. Compared with other industrialized countries, the crude birth rate for the United States in 1962 was relatively high; however, in North America the rates were higher for Mexico and Canada (table 2).

The rate for the United States is generally below the rates for the developing countries of Asia, South America, and Africa. Crude rates as high as 47 births per 1,000 population in South America, 50 in Asia, and 56 in Africa have been reported.[6]

Table 2. Birth rates: United States and selected countries, 1962

(Notes to tables given on page VIII)

Country	Rates per 1,000 population
Mexico	44.7
Canada	25.3
United States	22.4
Spain	21.3
Netherlands	20.8
Italy	18.7
Switzerland	18.5
Austria	18.6
West Germany	18.1
England and Wales	18.0
France	17.7
Norway	17.3
Japan	17.0
Belgium	16.8
Sweden	14.2
Hungary	12.9

NOTE: Based on data in United Nations, Population and Vital Statistics Report, Series A, Vol XV. No. 4, New York. United Nations, 1963.

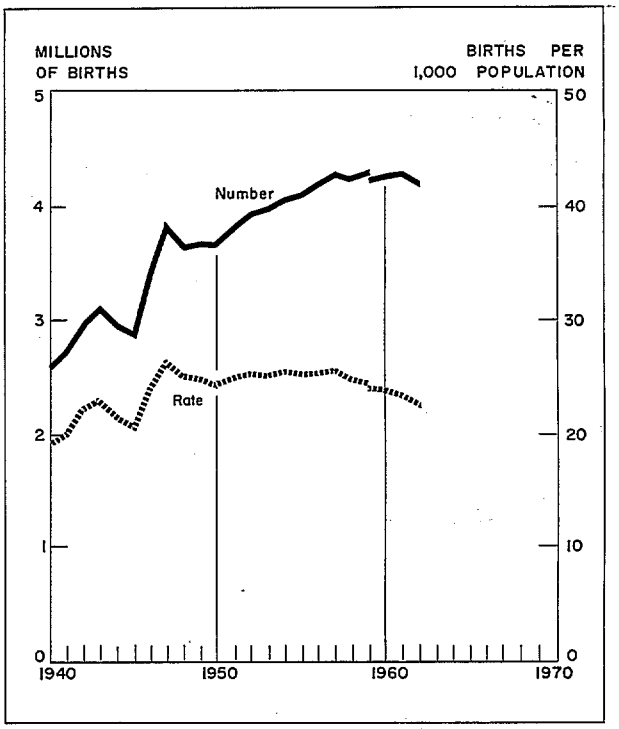

Figure 1. Live births and birth rates, 1940-62.

(Trend lines for 1959-62 based on registered live births; trend lines for 1940-59 based on live births adjusted for underregistration)

The trend of the crude birth rate in the United States showed a decline throughout the 19th century until the mid-1930's. In 1909 the rate was 30.0; in 1933 it had dropped to 18.4. The rate subsequently rose to two peaks—22.7 in 1943 and 26.6 in 1947. During the period 1950-60 the rate fluctuated in a narrow range between 24 and 25 with peaks in 1954 and 1957 of 25.3 births per 1,000 population. After 1957 the crude birth rate, paralleling other measures of period fertility, declined to a low of 22.4 (fig. 1).

The trend of the crude birth rate in other countries is shown in figure 2. No consistent pattern of crude birth rates is apparent in the Western world at present. The declining trend in the United States has been followed most closely by Canada. In some European countries the rates have tended to rise in recent years. The fertility upsurge in England and Wales since 1956 has been explained on the basis of an increase in marriages, earlier marriages, earlier parenthood, and shorter intervals between births. There are indications that married women are completing their families sooner after marriage than in previous years.[7] If this is true, then England and Wales may be experiencing the pattern which was observed in the United States during the early 1950's. Increases in crude birth rates over the past 5 years have taken place in Austria, West Germany, Switzerland, and Italy; more recent increases have also occurred in Denmark, Ireland, Portugal, and Sweden. Definite declines in the rate over the past 5 years have been observed in Hungary and Poland. In these countries, the increased use of legal abortion has been a major factor in fertility control.

The usefulness of the crude birth rate as a measure of fertility is somewhat limited by the fact that it does not take into account the age and sex composition of the population, which may change over the course of several years. Standardization of the crude birth rate and the use of more refined measures of fertility permit a better assessment of changes of fertility over time.

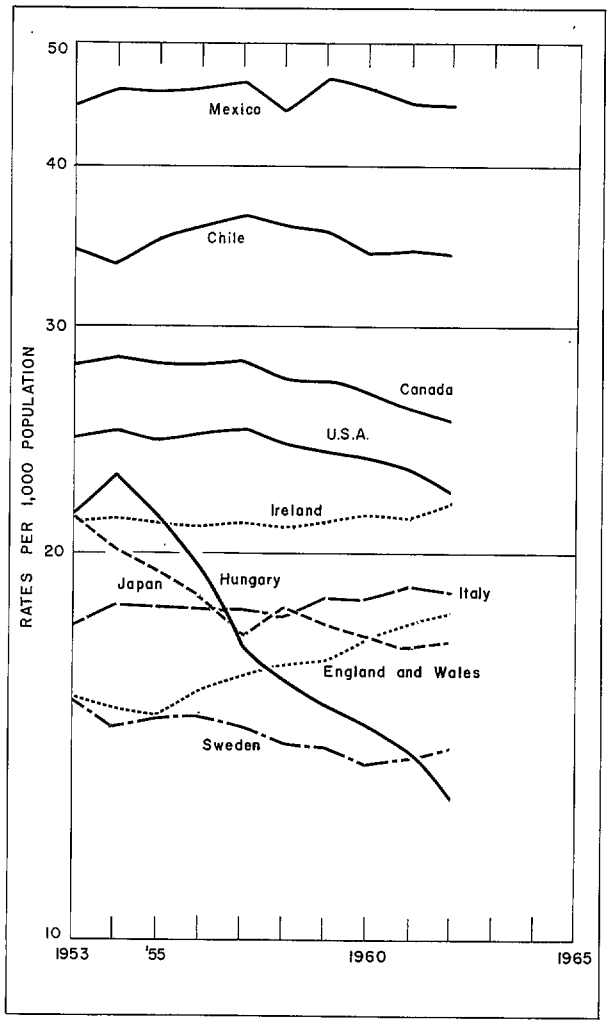

Figure 2. Birth rates for the United States and selected countries, 1953-62.

(Logarithmic scale)

The age-sex-adjusted crude birth rate.—Age-sex-adjusted crude birth rates show what the birth rate would be in a specified year if the age and sex distribution in the population were the same as in the 1940 population, which is used as the "standard" population. The adjusted crude birth rates were computed by "direct standardization," that is, by multiplying the age-specific birth rates (see section on birth rates by age of mother) for females aged 10-49 in a specified year by the number of females in the corresponding age group of the 1940 population. The sum of these products divided by the total 1940 population is the age-sex-adjusted, or standardized, crude birth rate (table 3).

The major value of the standardized figures is that they may be compared over a period of years with the knowledge that the observed differences are not attributable to or obscured by variations in the age and sex composition of the population. Factors such as the low birth rates of the 1930's, wartime casualties, changes in the age-specific mortality rates, and migration have contributed to changes in the age and sex distribution. This is particularly apparent for the period 1950-60, when the standardized rate showed an increase in the fertility of the population of almost 19 percent, while the unadjusted figure showed virtually no change in the rate at which children were being added to the population.

The standardized birth rate shows that had the age-sex composition of the population remained constant from 1940 to 1962, the crude birth rate would have risen from 19.4 per 1,000 population to 29.7, an increase of 53 percent during this period compared with an increase in the unstandardized rate of 15 percent from 1940 to 1962.

Table 3. Age-sex-adjusted and unadjusted birth rates: United States, 1940, 1950, and 1960-62

(Notes to tables given on page VIII)

Year	Birth rate	
	Age-sex-adjusted[1]	Unadjusted
	Rates per 1,000 population	
1962	29.7	22.4
1961	31.0	23.3
1960	31.2	23.7
1950[2]	26.3	24.1
1940[2]	19.4	19.4

[1] Computed by the direct method using as the standard population the age distribution of the female population aged 10-49 years as enumerated in 1940 and the total enumerated population of the United States for that year.

[2] Births adjusted for underregistration.

The general fertility rate.—It is useful, in the measurement of fertility, to relate live births to the population "at risk" to bear children, that is to women in the childbearing ages (15-44 years) rather than to the total population which includes males and females, the young as well as the elderly. The general fertility rate represents the total number of live births per 1,000 female population aged 15-44 years (table 1). In 1962 this rate, computed on the basis of registered live births, was 112.1 compared with 117.2 for the previous year and 118.0 for 1960. In 1950 the rate was 106.2, and during the 1930's it was as low as 75.8 live births per 1,000 women aged 15-44 years. This measure illustrates more clearly than the crude birth rate the sharp fluctuations in annual fertility that have occurred since 1940 (see section Fertility by Color).

Birth rates by age of mother.—In table 4 birth rates by age of mother, or age-specific birth rates, relate the number of births to mothers of a given age to the female population of that age. These rates are associated with various factors that affect fertility, such as age at marriage, biological

Table 4. Birth rates by age of mother: United States, 1940-62

(Notes to tables given on page VIII)

Year	Total fertility rate[1]	Age of mother							
		10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years[2]
Registered births	Rates per 1,000 female population								
1962	3,471.0	0.8	81.3	243.8	191.3	108.7	52.6	14.8	0.9
1961	3,627.6	0.9	88.0	253.6	197.8	113.3	55.6	15.6	0.9
1960	3,653.6	0.8	89.1	258.1	197.4	112.7	56.2	15.5	0.9
1959	3,670.2	0.9	89.4	257.8	198.5	114.1	57.2	15.3	1.0
Births adjusted for under-registration									
1959	3,712.9	0.9	90.7	260.4	200.4	115.4	58.2	15.6	1.0
1958	3,703.3	0.9	91.5	258.9	198.8	115.7	58.3	15.6	1.0
1957	3,767.4	1.0	96.0	261.0	200.4	117.5	60.5	16.0	1.1
1956	3,688.5	1.0	94.1	254.3	195.4	116.0	60.1	15.9	1.1
1955	3,578.6	1.0	89.6	242.8	190.8	115.5	59.4	15.7	1.1
1954	3,541.5	1.0	89.8	237.4	188.5	116.1	58.7	15.8	1.1
1953	3,424.5	0.9	87.5	225.9	183.9	112.9	57.2	15.5	1.1
1952	3,357.4	0.9	85.4	219.1	180.5	113.0	56.1	15.3	1.2
1951	3,268.0	1.0	86.9	212.6	174.3	108.3	54.1	15.3	1.2
1950	3,090.5	1.0	81.6	196.6	166.1	103.7	52.9	15.1	1.2
1949	3,110.1	1.0	83.4	200.1	165.4	102.1	53.5	15.3	1.3
1948	3,108.6	1.0	81.8	200.3	163.4	103.7	54.5	15.7	1.3
1947	3,273.5	0.9	79.3	209.7	176.0	111.9	58.9	16.6	1.4
1946	2,942.7	0.7	59.3	181.8	161.2	108.9	58.7	16.5	1.5
1945	2,491.2	0.8	51.1	138.9	132.2	100.2	56.9	16.6	1.6
1944	2,567.6	0.8	54.3	151.8	136.5	98.1	54.6	16.1	1.4
1943	2,718.3	0.8	61.7	164.0	147.8	99.5	52.8	15.7	1.5
1942	2,628.2	0.7	61.1	165.1	142.7	91.8	47.9	14.7	1.6
1941	2,399.1	0.7	56.9	145.4	128.7	85.3	46.1	15.0	1.7
1940	2,301.3	0.7	54.1	135.6	122.8	83.4	46.3	15.6	1.9

[1]Rates computed by summing rates by age of mother for each 5-year age group and multiplying the result by 5.

[2]Rates computed by relating births to mothers aged 45 years and over to female population aged 45-49 years.

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processes, and the timing of births within the mother's reproductive years. Age-specific rates show that fertility rises rapidly to a maximum between the onset of puberty and ages 20-24, and then declines slowly to the end of the reproductive span, at about 50 years of age.

Among all women in 1962, as in previous years, the most fertile 5-year-age group was 20-24 years. About one out of every four women in these ages bore a child sometime during the year. For women aged 25-29 years, about one out of five gave birth. The concentration of births to young women is illustrated by the fact that almost 3 out of 4 maternities occurred to women under age 30 and about 9 out of 10 occurred to women under 35. For older women, maternities are lower partly because of lower fecundity (biological childbearing potential); for younger women, lower fertility is associated with a small proportion married. While all women aged 15-19 years ranked fourth in age-specific fertility, this age group ranked as the most fertile when marital status was taken into consideration. In 1962 almost half of the married women in this age group and about a third of those aged 20-24 years gave birth during the year. Shown below is the rank order of all women and married women by age-specific fertility in the United States for 1962.

	All women	*Married women*
15-19 years	4	1
20-24 years	1	2
25-29 years	2	3
30-34 years	3	4
35-39 years	5	5
40-44 years	6	6

During the past 20 years there has been an irregular upward movement in the rates for all women under age 35, with a major interruption in 1945 during the Second World War (fig. 3). The increase over the two decades was largest at the younger ages and successively smaller for the older age groups. For example, the rate for women aged 20-24 years in 1962 is about 80 percent greater than for women in these ages in 1940. At ages 35-39 years the rates in 1962 still exceed those for 1940 by almost 14 percent. For women aged 40-44 years there has been a decline of 5 percent during this period, consistent with the sharper declines that occurred among these women between 1920 and 1940.

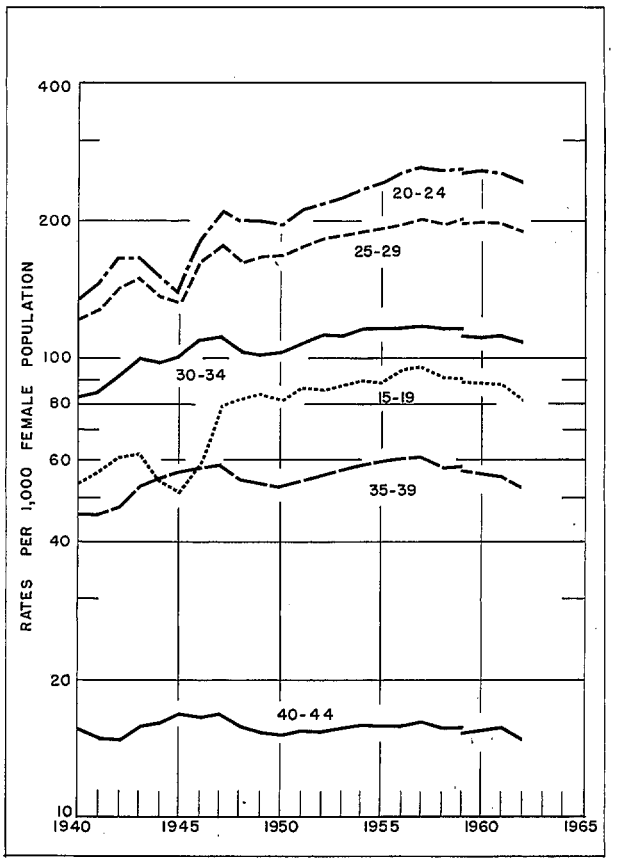

Figure 3. Birth rates by age of mother, 1940-62.

(Trend lines for 1959-62 based on registered live births; trend lines for 1940-59 on live births adjusted for underregistration. Logarithmic scale)

Since 1957 there has been a sustained decline in age-specific fertility among women in almost every age ranging, for example, from over 15 percent for those aged 15-19 to 7 percent for women aged 40-44 years in 1962. Despite these declines, birth rates among women who bear most of the children annually remain far above 1940 levels.

Birth rates by age of father.—In the United States the traditional reproductive age begins at a later period for males than for females. Among males 15-19 years of age, there were 21 births per 1,000 in 1962 compared with 81 births per 1,000 females in the same age group. Toward the end of the reproductive age, however, the rate for males was much higher than for females. Among males aged 40-44 years, the rate was 40 per 1,000 compared with that of only 15 for females in the same age group. As would be expected, the highest rates occur at a somewhat older age for males (25-29 years) than for females (20-24 years).

With the movement toward younger age at childbearing between 1940 and the present, marked changes in the fertility pattern by age of father have occurred. Males aged 25-29 years have been the most fertile group for each year that data are available, but a change has occurred in the age group ranking second. In 1940 this position was held by the 30-34 year olds, whose rate was 113 compared with that of 91 among males 20-24 years old. By 1950 the rates for the two groups were equal (142). Early in the 1950's the positions of the two groups were reversed; in 1960 the rate for the younger group was 202 compared with 154 for males 30-34 years of age.

The percent change between 1950 and 1962 in age-specific birth rates showed that rates moved up for each group through 30-34 years and that the greatest increases occurred at the younger ages.

The percent change in birth rates by age of father for 1950-62 is as follows:

Age of father	*Percent change*
15-19 years	+47.9
20-24 years	+37.7
25-29 years	+22.0
30-34 years	+6.1
35-39 years	-6.0
40-44 years	-11.3
45-49 years	-23.5
50-54 years	-25.3

The total fertility rate.—Age-specific birth rates are summarized in table 4 in a measure called the *total fertility rate.* This rate represents essentially the same population as the general fertility rate (females in the childbearing ages), but the total fertility rate, as an unweighted average, takes into account the distribution of annual births among women of different ages; it therefore remains unaffected from year to year by changes in the age composition of the women aged 15-44 years when most of the childbearing occurs.

Because fertility varies with the age of women, population changes within the childbearing ages can influence summary measures of fertility such as the general fertility rate in much the same way as changes in the population distribution outside the childbearing ages among children and the older population can affect the crude birth rate. Whereas the general fertility rate excludes only the effects of changes in the ratio of women of reproductive age to the total population, the total fertility rate is independent of the age distribution within the reproductive period of life. An indication of the effects of changes in age composition of the population upon the trends of fertility measures is shown in figure 4, where the crude birth rate, the general fertility rate, and the total fertility rate are compared. These rates, expressed in terms of indexes (1940 = 100.0), are shown for the period 1940-62.

The trend of the three rates was very similar during the period from 1940 through 1948, indicating that the general rise in the birth rates during this period was not caused by a redistribution in the age distribution of women within the childbearing population or by a change in the relation of the childbearing population to the total population. After 1948 the crude birth rate fell far below the other rates, an indication of the diminishing size of the female population aged 15-44 years, the small cohorts of women who were born during the 1930's when birth rates were very low. At the same time, the increase in the Nation's fertility after 1950 was more pronounced in the total fertility rate than in the general fertility rate, a consequence of the redistribution of women within the childbearing ages. By 1957 the general fertility rate had risen 54 percent above the prewar level, while the total fertility rate had risen 64 percent.

The decline in the birth rates since 1957, particularly between 1961 and 1962, is not due to any redistribution of population since the percentage decline for all indices is about 15 percent. However, the relation of present levels of fertility

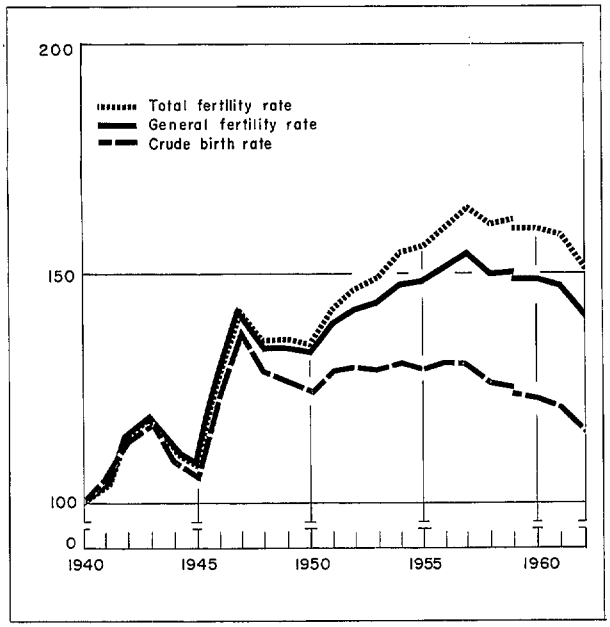

Figure 4. Indexes of the birth rate, the fertility rate, and the total fertility rate, 1940-62.

(1940 = 100)

to the 1947 peak are affected strongly by changes in the age distribution since that time. In 1962 the crude birth rate was 16 percent below the figure for 1947. Yet if the ratio of the female childbearing population to the total population had not changed, the decrease would have been only 2 percent. And if there had not been an unfavorable shift of women within the childbearing ages, the crude birth rate in 1962 would be about 9 percent above that of 1947.

Period replacement rates.—The *gross reproduction rate* is a measure of annual fertility which, like the total fertility rate, is standardized for the detailed age composition of the female population (table 5). It is derived by summing the birth rates by age of mother, restricted to female births only, yielding values that are about half as large as the total fertility rate. It is widely used as a summary measure of age-specific rates and as a replacement rate. In the latter case it is interpreted as the number of daughters that a hypothetical cohort of women entering the childbearing period together would have during their lives if (a) they were subject to a given schedule of age-specific fertility and if (b) none of the cohort were to die before the completion of the childbearing period. (By the same token, the total fertility rate can be interpreted as the total number of children, males and females, that this hypothetical cohort of women would bear passing through the childbearing ages.) Thus, a cohort of 1,000 women would bear 1,695 daughters in their lifetime if they experienced the age-specific birth rates for 1962 and if no deaths occurred before the end of the reproductive span.

The *net reproduction rate* differs from the gross reproduction rate by taking into account the mortality conditions during the period. A net re-

Table 5. Intrinsic rates, crude rates, and reproduction rates: United States, 1950 and 1960-62

(Notes to tables given on page VIII)

Year	Intrinsic rate			Crude rate			Reproduction rate	
	Natural increase	Birth	Death	Natural increase	Birth	Death	Gross	Net
	Rates per 1,000 female population			Rates per 1,000 population				
1962	18.8	25.8	7.0	12.9	22.4	9.5	1,695	1,633
1961	20.5	27.1	6.6	14.0	23.3	9.3	1,770	1,704
1960[1]	20.8	27.4	6.6	14.2	23.7	9.5	1,783	1,715
1950	13.7	22.6	8.9	14.5	24.1	9.6	1,505	1,435

[1]Births adjusted for underregistration.

production rate of 1,000 means that under the mortality and fertility schedules obtaining during a specified calendar year, a hypothetical cohort of 1,000 newly born girls would bear just enough daughters to replace themselves. Under this interpretation, 1,000 female infants subject to the fertility and mortality conditions in 1962 would have 1,633 daughters.

At one time the net reproduction rate was widely used, not as a summary measure of fertility during a calendar year but as an index of the actual replacement rate of the population where, for example, a figure below 1,000 indicated that the population ultimately would not replace itself. In this sense the measure has been discredited because it does not take into account variable patterns of childspacing and other factors which are important in societies where family planning is effective. Where short-term changes in the timing of births occur, fluctuations in the period reproduction rates can be deceptively large.[8] Replacement rates for actual cohorts of women are discussed in the section Replacement Rates For Cohorts of Women.

Intrinsic vital rates represent the annual births, deaths, and rates of natural increase in a hypothetical stable population that would result from the indefinite continuance of the age-specific birth and death rates in a particular calendar year, assuming no migration. Whereas the net reproduction rate is interpreted as the population replacement rate per generation, the intrinsic rate of natural increase shows the corresponding rate per year that would result ultimately from a continuation of the same schedule of fertility and mortality over a period of years.

A comparison of crude and intrinsic rates for 1962 shows that, other things being equal, the population distribution in that year was unfavorable to all crude rates, inflating the death rate from 7.0 to 9.5 per 1,000 population and deflating the crude birth rate and the crude rate of natural increase by 3.4 and 5.9, respectively. In other words, implicit in continuing age-specific fertility and mortality schedules of 1962 is a population with a stable age distribution favorable to a lower crude death rate, a higher birth rate, and a higher rate of annual growth than in the actual population of 1962.

Intrinsic rates, as measures of reproductivity of the population, are subject to the same limitations as the gross and net reproduction rates. For this reason, intrinsic measures are not measures of actual replacement but rather important theoretical tools for analysis of relations between vital rates and the age structure of the population.

Numbers of births and birth rates by live-birth order.— Small decreases in the number of live births of almost all birth orders contributed to the overall decline in the number of births between 1961 and 1962. The only increases occurred among eighth and subsequent births. Over the years there has been a gradual shift in the composition of births by live-birth order. About half of all births were first and second children in 1962

Table 6. Percent distribution of live births, by live-birth order: United States, 1950 and 1960-62

(Notes to tables given on page VIII)

Year	Live-birth order							
	Total births	First	Second	Third	Fourth	Fifth	Sixth and seventh	Eighth and over
	Percent distribution							
1962	100.0	26.8	24.1	18.8	12.3	7.3	6.7	3.9
1961	100.0	26.5	24.2	19.1	12.4	7.2	6.7	3.8
1960	100.0	26.4	24.8	19.3	12.4	7.0	6.4	3.7
1950[1]	100.0	31.4	30.2	17.4	8.6	4.6	4.5	3.4

[1]Births adjusted for underregistration.

compared with over 60 percent in 1950 (table 6). Births of fourth and higher orders now represent 30 percent of the total compared with about 21 percent a decade ago.

Birth rates by live-birth order relate the number of births of a particular order, for example first births, to the total female population aged 15-44 years. The trends of these rates resemble closely those for the ages at which large numbers of such births occur. Thus the changes for first and second births in figure 5 are like those for ages 15-19 and 20-24 years in figure 4, and the trend for the highest birth orders resembles most nearly that of women aged 40-44 years.

The trend of the birth rate by live-birth order is characterized by a progressive spread of fluctuations from one birth order to another, that is, by a change in the lower birth orders to be reflected a year or so later in the higher orders. For example, the low point reached by first births during the midthirties was reached by the second and higher orders at progressively later dates. For fifth births a recovery in the birth rate was not apparent until 1943. The rate for first births attained a peak of 46.7 in 1947, dropped to 33.3 in 1953, and has remained on a relative plateau since then. Second births followed a similar trend with a lag of about a year, and smaller fluctuations after World War II. For fourth and higher birth orders the trend since 1950 has been one of gradual increase. In 1960, the rate for fifth, sixth, and seventh births was about 40 percent higher than in 1950 (table 7). For first and second births, the rate

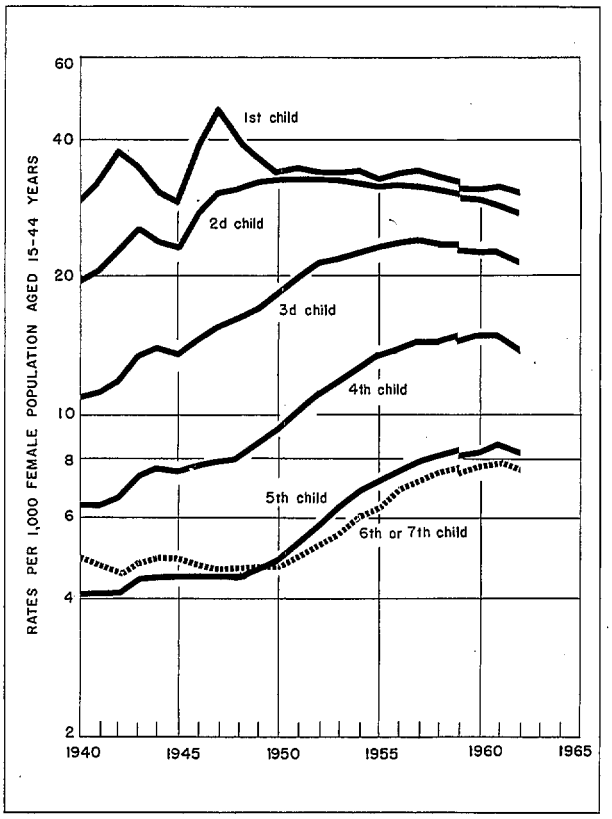

Figure 5. Birth rates by live-birth order, 1940-62.

(Trend lines for 1959-61 based on registered live births; trend lines for 1940-59 based on live births adjusted for underregistration. Logarithmic scale)

Table 7. Birth rate indexes, by live-birth order for women aged 15-44 years: United States, 1950, 1957, and 1960-62

(Notes to tables given on page VIII)

Year	Live-birth order							
	Total births	First	Second	Third	Fourth	Fifth	Sixth and seventh	Eighth and over
	Index: 1960 = 100.0							
1962	95.0	96.8	92.5	92.5	94.5	98.8	98.7	102.3
1961	99.3	100.0	97.3	98.2	100.0	102.4	102.6	104.7
1960	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1957[1]	104.0	108.0	108.2	104.8	98.6	95.2	93.4	97.7
1950[1]	90.0	107.1	109.9	80.7	63.0	57.8	61.8	83.7

[1] Births adjusted for underregistration.

had declined slightly. Between 1961 and 1962 the rates for all birth orders declined. Even the highly stable rate for eighth births and over dropped by over 2 percent during this period.

Conclusions drawn from birth rates by live-birth order must be used with caution because the base populations, or denominators, used in computing these rates include all women aged 15-44 years. They are not specific as to age and therefore include women among whom the probability of having a child of a specified order is very low.

Birth rates by age of mother and live-birth order.—Birth rates by age of mother by live-birth order may be compared with corresponding figures for earlier years to assess the effect of the changing age composition of the female population on the rates of specified birth orders. For example, the rate for first births, taking all groups together, was about 3 percent lower in 1962 than in 1960; but the rate among women aged 20-24 years having first children decreased by 5 percent, and that of women aged 25-29 years decreased by almost 7 percent (table 8). A similar situation applies to second births where the decline between 1960 and 1962 for women of all ages amounted to 7.5 percent, while the age group 35-39 declined

Table 8. Birth rates, by first and second live-birth order and age of mother: United States, 1960 and 1962

(Notes to tables given on page VIII)

Live-birth order and age of mother	1962	1960	Percent change
	Rates per 1,000 female population		
First birth			
15-44 years[1]	30.1	31.1	-3.2
15-19 years	56.0	61.4	-8.8
20-24 years	83.5	87.9	-5.0
25-29 years	24.8	26.6	-6.8
30-34 years	7.5	8.6	-12.8
35-39 years	2.8	3.2	-12.5
40-44 years	0.7	0.8	-12.5
Second birth			
15-44 years[1]	27.0	29.2	-7.5
15-19 years	19.6	21.6	-9.3
20-24 years	81.5	87.9	-7.3
25-29 years	44.9	48.8	-8.0
30-34 years	15.4	17.5	-12.0
35-39 years	5.3	6.3	-15.9
40-44 years	1.2	1.3	-7.7

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

Table 9. Birth rates by age of mother and live-birth order: United States, 1962

(Notes to tables given on page VIII)

Live-birth order	Total fertility rate[1]	Age of mother							
		10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years[2]
	Rates per 1,000 female population								
Total	3,471.0	0.8	81.3	243.8	191.3	108.7	52.6	14.8	0.9
First birth	880.3	0.8	56.0	83.5	24.8	7.5	2.8	0.7	0.0
Second birth	839.4	0.0	19.6	81.5	44.9	15.4	5.3	1.2	0.1
Third birth	671.9	0.0	4.6	47.1	48.7	23.2	8.8	1.9	0.1
Fourth birth	441.9	0.0	0.8	20.4	33.9	21.5	9.4	2.3	0.1
Fifth birth	261.3	-	0.1	7.7	19.3	15.3	7.8	2.0	0.1
Sixth and seventh birth	239.0	-	0.0	3.3	15.6	16.3	9.6	2.9	0.2
Eighth birth and over	136.1	-	0.0	0.3	4.2	9.6	8.9	3.9	0.3

[1]Rates computed by summing rates by age of mother for each 5-year age group and multiplying the result by 5.

[2]Rates computed by relating births to mothers aged 45 years and over to female population aged 45-49 years.

almost 16 percent. These rates are also useful for expressing the "relative risk" of bearing children of a certain parity. For example, within the age group 20-24 years, the relative risk of bearing a fourth child in 1962 (20.4) was about half that of bearing a third child (47.1) (table 9).

Age-parity specific birth rates.—Age-parity specific birth rates or birth probabilities are shown in table 10 (see page 54) by single years from the beginning of 1940 to January 1, 1963. These rates are expressed in terms of the number of women actually "at risk" to give birth to children of a given order. Thus, only women who have never borne a child are at risk to bear a first child, those who have borne a first child are at risk to bear a second, and so forth. "Parity" refers to the number of previous children born alive to a women. A woman who has had one child is a one-parity woman.

The advantages of these period rates over other measures have long been recognized, but it was not until "cohort fertility tables" were developed that rates specific for order of birth and parity of women could be computed for intercensal as well as census years (see section Cohort Rates). Because age-parity specific birth rates are expressed in terms of specific groups at risk, the rates are often referred to as "birth probabilities." Thus, if 1,000 women aged 25-29 with two children at the beginning of the year (two-parity women) had a third child during the year, there would be a total of 1,000 third children and the "birth probability" would be 1,000 births per 1,000 women, or unity.

Schedules of age-parity specific rates show, for example, that in 1962 the chances that a woman with three children would have another baby were greater on the average than for a woman with two children. Furthermore this probability continued to increase (up to a point) with each successive birth. According to data in table 10 chances were 175 out of 1,000 that two-parity women aged 25-29 years at the beginning of 1962 would have a third child during the year. For the women in this age group with three children the probability was about the same; for the relatively small number of women in these ages with five children, the chances of having an additional child during the year were almost one in four.

Age-parity specific birth rates are especially useful for measuring the changes in fertility from one year to another and for analyzing their relation to changes in conditions influencing annual fertility, because they take into account the previous childbearing experience of the women of each reproductive age. In figure 6 the response of younger females of low parity to the Second World War and its aftermath is brought out very clearly. Generally, the four panels show an increase in birth probabilities for women of all ages since 1940, with the youngest women experiencing the greatest changes. For example, one-parity women aged 20-24 had an almost one out of three chance of bearing an additional child in 1962; their chance in 1940 was about one out of five. For three-parity women (fig. 6) the outstanding characteristic of the trend line is its stability for women of all ages. Among three-parity women aged 35-39 years, the rate changed from 40 to 46 per 1,000 women during the period 1940-62. The decline in fertility since 1960 that is apparent in most indexes of fertility is also reflected in age-parity specific rates; the levels of these rates, however, are still substantially above those for most of the postwar period.

Projections of live births and birth rates.—The future course of fertility in the United States will depend upon a number of factors including future migration, mortality, marriage, and childbearing patterns as well as the age and sex composition of the future population. While the future level of childbearing of the population cannot be predicted in the strict sense of the word, projections of fertility can be made, based upon explicit assumptions about the future level of factors cited above. Whether these projections will in fact approach the actual level of future fertility depends upon how closely the assumed economic and demographic factors are realized by the actual population. There is no known way in which to predict this in advance of the actual situation.

The Bureau of the Census has prepared a new series of fertility projections,[9] the first major revision of such projections since 1958. The new series takes into account the 1960 census data on the age and sex composition of the population and for the first time utilizes projections of the cumulative fertility of birth cohorts of women (see section Cohort Rates).

Four series of projections have been prepared, differing only with respect to the assump-

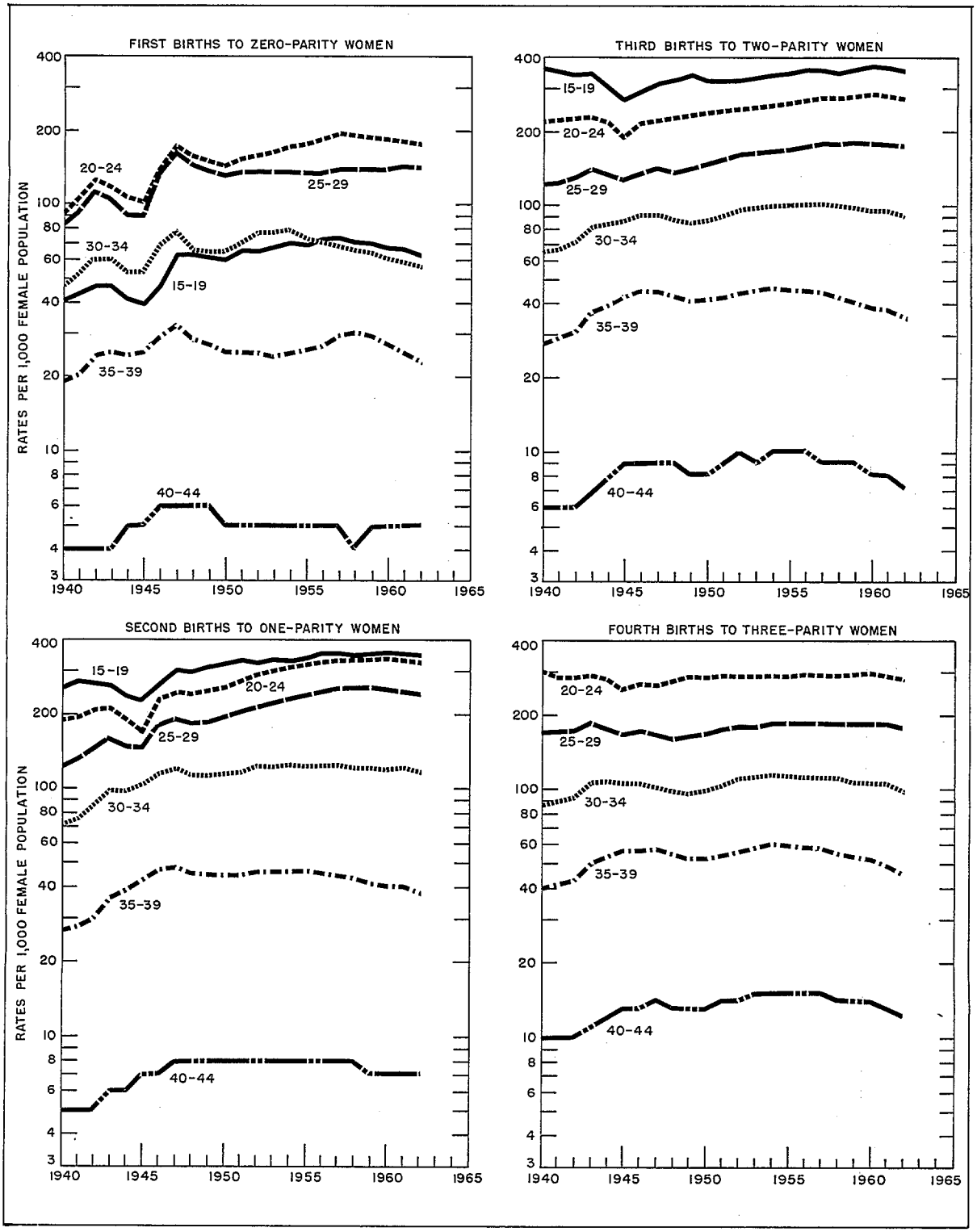

Figure 6. Birth probabilities by parity and exact age of mother, 1940-63.

(Births adjusted for underregistration and numbers of women adjusted for underenumeration and misstatements of age in censuses. Logarithmic scale)

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tions about the number of children that will be born to cohorts of women at completion of their childbearing periods. Series A is based upon the assumption that the average number of children born per 1,000 women when they reach menopause will gradually move toward 3,350. Series B assumes that this figure will approach 3,100; Series C, 2,775; and Series D, the lowest series, is based upon a projected cumulative birth rate of 2,450 children per 1,000 women who reach age 50.

The projections are based upon the explicit assumption that there will be no disastrous war, widespread epidemic, or serious economic depression.

On the basis of the Bureau of the Census assumptions for Series A, the general fertility rate would approach a high level by the mid-1970's of almost 129 live births per 1,000 females aged 15-44 years (fig. 7). A figure of about 120, similar to the 1957 peak in the fertility rate, would be reached under the fertility assumptions of Series B. Series C and D show a gradual decline in the number of children born as related to the size of the female childbearing population, with the general fertility approaching levels of 100 and 90, respectively, by the end of the projection period.

The annual number of live births would increase steadily from the 1962 figure to about 4.6 million in 1965 and to almost 7 million by 1985 under the projection schedule of Series A. Series B shows a more gradual increase reaching a maximum of about 6.3 million by 1985. Series C and D both show only modest increases by the mid-1980's, 5.5 million and 5 million births, respectively.

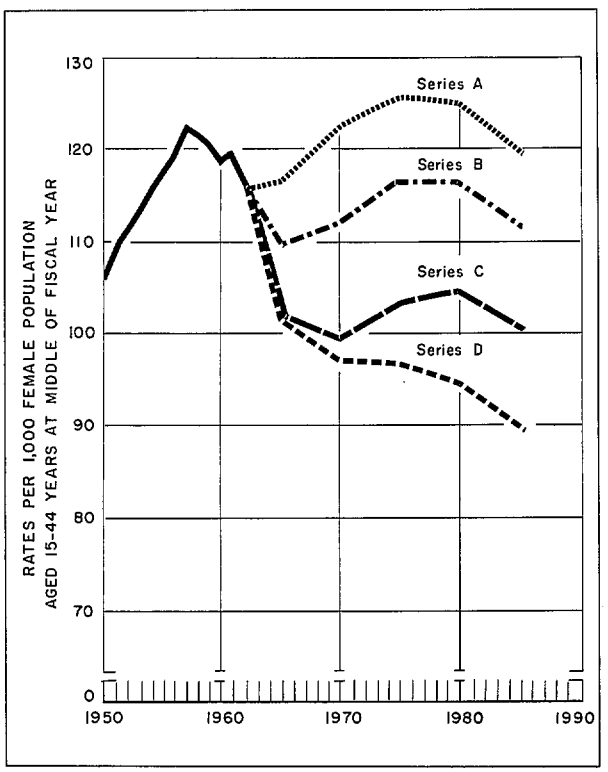

Figure 7. Fertility rates, actual and projected, 1950-85.

(Based on live births adjusted for underregistration)

Cohort Rates

Cohort fertility rates, retrospective rather than annual measures of fertility, describe the reproductive history of a group of women up to a specified age. Cohort rates in this report are similar in both concept and magnitude to the cumulative rates computed from census data. They are derived, essentially, by summing birth rates by age of mother for actual cohorts of women; in comparison, period gross and net reproduction rates represent the fertility of hypothetical cohorts of women who are assumed to live from birth to death under the schedules of age-specific fertility and mortality in a given calendar year.

The cohort approach to fertility measurement may be compared with a similar approach in the measurement of mortality, the "generation" or cohort life table. The generation life table provides a "longitudinal" perspective in that it follows the mortality experience of a particular cohort, all persons born in the year 1900 for example, from the moment of birth through consecutive ages in successive calendar years. The "current" life table, by contrast, can be characterized as a cross-sectional summarization of the mortality experience of a hypothetical cohort which is assumed to be subject to the age-specific mortality rates observed for an actual population during a given calendar year. All period measures of fertility shown above in the section on Period Rates refer to the current year; only the cumulative

birth rates that follow describe the actual fertility experience of cohorts of women as they pass through the childbearing ages.

The cumulative rates in this report, based on the work of P. K. Whelpton, supplement the figures shown elsewhere.[4] Together, these two sources of cohort data provide an uninterrupted schedule of cumulative fertility through completion of childbearing by age 50 for birth cohorts of American women from 1876 through 1913 and schedules of uncompleted cumulative fertility for the birth cohorts of 1914 through 1948.

Detailed discussions of the assumptions underlying the cohort approach and of the methods used to derive the rates are presented in the publication cited in footnote 9.

Annual central birth rates.—Tables 11 and 12 (see pages 56 and 57) show annual central birth rates by age of mother and live-birth order for groups of women by single years of age as well as by 5-year-age groups. The rates for 5-year-age groups are similar in both concept and magnitude to the rates shown in table 9. The systematic differences between figures in the two tables for 1962 are due to minor adjustments in the annual central birth rates for underregistration of births, underenumeration of women in the censuses, and cohort size differences. A discussion of these adjustments appears on pages 12 and 13 of the report cited in footnote 9.

An interesting and useful feature of tables 11 and 12 is the reference in the first column to the year of birth of the women bearing children during the year in question. For example, in table 11 those women aged 20-24 years in 1962 were born in the years 1938-42 and hereinafter are referred to as the cohorts of 1938-42. In table 12, women aged 20 in 1962 are described as the birth cohort of 1942.

The trend of the central birth rates by age of mother and live-birth order is discussed in the section Period Rates.

Cumulative birth rates.—The cumulative birth rates in table 13 (see page 61) are derived by adding the annual central birth rates in table 12 of this report and those in tables of the special report on this subject for specified cohorts. For example, adding the annual central birth rates for the cohort of 1936 at age 14 in 1950, age 15 in 1951, and so on up to age 26 in 1962 gives the cumulative birth rate for this cohort of women up to January 1, 1963, at which time the average age of these women is about 27. The figures in table 14 (see page 62) are simple averages of the rates for single cohorts shown in table 13.

A precise evaluation of the accuracy of the cumulative rates is not possible, but tests which have been made indicate that rates for all births are probably within a small percent of the true values. Rates for all births probably are slightly more accurate than those for births by order because positive errors for certain orders may be offset by negative errors for others.[10]

Cumulative birth rates form the basis of the cohort approach, which provides an accurate and convenient way of measuring the extent to which the women of a given generation are replacing themselves and contributing to population growth.

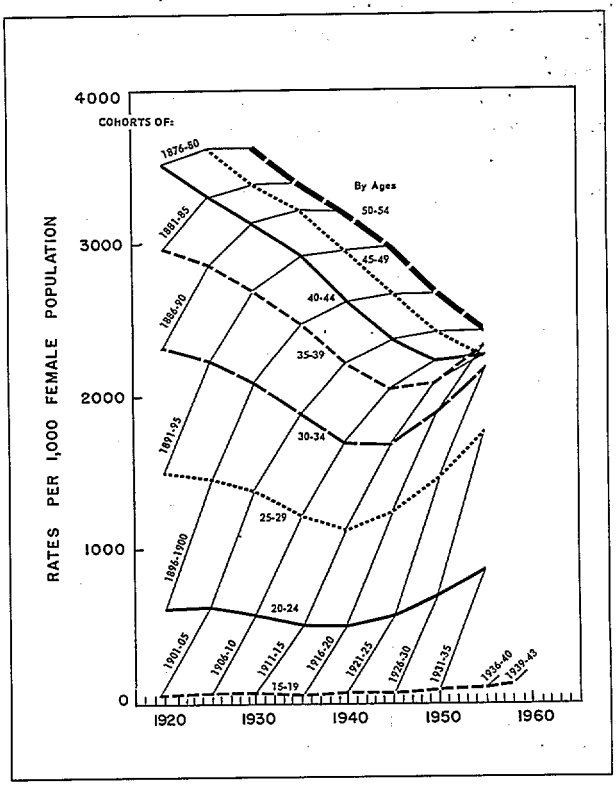

Figure 8. Cumulative birth rates for all births for selected groups of cohorts of all women, by exact age of mother, 1920-63.

(Births adjusted for underregistration and numbers of women adjusted for underenumeration and misstatements of age in censuses)

Size of completed families.—Figure 8 shows the rate at which groups of women cumulated children by specified ages in the years 1920 through 1962. One of the most important trends shown is the large decline in completed family size, that is, the cumulative number of children born per 1,000 women who reached ages 50-54 years (heavy line). The group of women born in the years 1876-80 (designated as the cohorts of 1876-80) completed childbearing in 1930, when their average age was 50-54 years. These women had borne 3,636 children, or averaged about 3.6 children each. By 1963 this figure had declined to about 2.3 children per women for the cohorts of 1909-13. In other words, there has been a drop of about 36 percent in the average size of the completed family over a period of 33 years. Information regarding cohorts of women before 1876 is incomplete, but it has been estimated that there was an average of about eight births per woman who reached middle age during the late colonial period.[11]

An examination of the cumulative fertility of birth cohorts by *live-birth order,* that is, by the number of first, second, and third births and births of higher orders to women by the time they reached the indicated ages, shows clearly that the great decline in average family size (completed fertility by ages 50-54) for the past 33 years has been due almost entirely to the diminishing number of women having large families rather than to a decline in the proportion of women who marry or of couples who remain childless or have only one child (table 15). There were 827 first children born per 1,000 women in the cohorts 1876-80; this figure declined by only 5 percent to 785 for the most recent cohorts (1909-13) reaching the end of the childbearing period at the beginning of 1963. For second births the reduction was larger from 675 to 573, or 15 percent; while at birth orders eighth and higher, there was a decline of over 70 percent during this period.

Table 15 shows in terms of the cumulative birth rate the extent to which the dwindling number of large families has contributed to the shrinkage in average completed family size from 3.6 in 1930 (or 3,636 births per 1,000 women by age 50) to 2.3 children in 1963. Of the decline in the cumulative birth rate for all orders during this period, 11 percent can be accounted for in the reduction in the rate for first and second children from 1,502 to 1,358, 30 percent because there were fewer third or fourth children, and 59 percent because of the reduction in families of five children or more.

Table 15. Cumulative birth rates, by live-birth order, for all women, by exact ages 50-54 years, in selected groups of cohorts from 1876-80 to 1909-13: United States, 1930-63

(Notes to tables given on page VIII)

Cohorts	January 1 of each year	Live-birth order								
		Total births	1st	2d	3d	4th	5th	6th	7th	8th and over
		Rates per 1,000 female population aged 50-54 years								
1909-13	1963	2,283	785	573	346	208	127	83	54	107
1908-12	1962	2,273	781	566	343	207	128	84	55	109
1907-11	1961	2,269	778	560	340	208	130	85	57	112
1906-10	1960	2,273	777	556	339	209	132	87	58	115
1901-05	1955	2,421	789	567	362	234	153	105	70	141
1896-1900	1950	2,675	800	601	410	278	187	132	91	177
1891-95	1945	2,963	815	639	460	325	225	161	114	225
1886-90	1940	3,209	814	651	495	368	265	193	138	285
1881-85	1935	3,391	815	660	511	393	295	223	161	332
1876-80	1930	3,636	827	675	538	424	328	255	189	402

NOTE: Based on data in table 13.

A look at the cumulative fertility of cohorts who have not yet reached menopause indicates a reversal in the declining proportion of women having births of low orders and an apparent continuation in the decrease in the cumulative birth rate for women having five children or more. A low of 754 in the cumulative first birth rate set by the cohorts of 1906-10 by ages 35-39 years was surpassed by the cohorts of 1916-20 when they were aged 30-34 years (fig. 9). For women aged 30-34 years by the beginning of 1963 the cumulative first birth rate was 878 births per 1,000 women (see table 14). The low in the cumulative rate for second births was set by the cohorts of 1905-09 (554), while the nadirs for third and fourth births were experienced by the cohorts of 1906-10 and 1908-12, respectively.

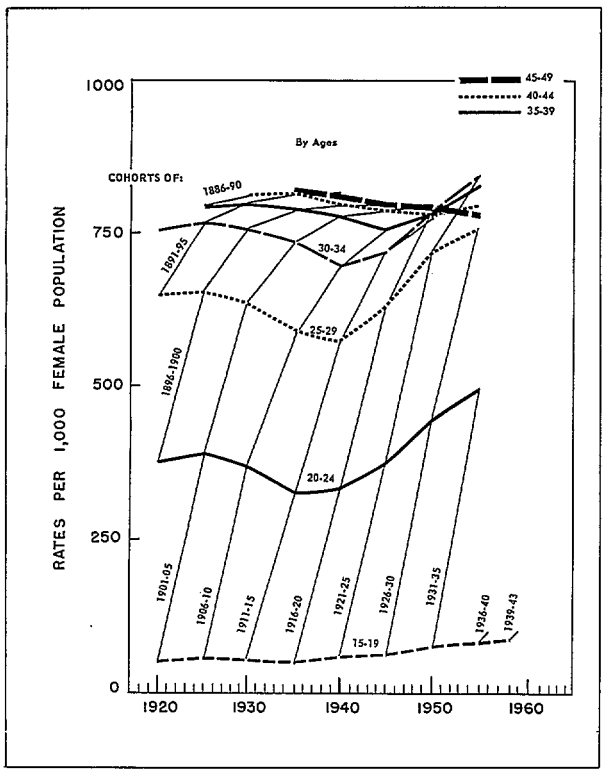

Figure 9. Cumulative birth rates for first births for selected groups of cohorts of all women, by exact age of mother, 1920-63.

(Births adjusted for underregistration and numbers of women adjusted for underenumeration and misstatements of age in censuses)

That a reversal in the downward trend of average completed family size is taking place is clear from figure 8. While the cumulated number of births to cohorts of women who have *completed* childbearing (dashed line) has declined, the cumulative fertility for younger groups of women has shown marked increases in recent years. This means that by the time these younger women have reached ages 50-54 years, their average size of family will be considerably higher than the 2.3 children for the cohorts of 1909-13 in 1963. For example, the fertility of women in the cohorts of 1911-15 at ages 35-39 (in 1950) was surpassed by the cumulative birth rate of women of 1921-25 at ages 30-34 years (in 1955). Fertility among the younger cohort at ages 30-34 years was already over 25 percent greater than that of the older cohort at the same ages. Because only 10 to 15 percent of all babies are born to women after ages 35-39, it is likely that the completed fertility of the 1921-25 cohort will exceed that of many of the preceding groups.

Increases in the marriage rate have contributed to the recent changes in the trends of cumulative fertility. Statistics based on registration data, however, do not permit a precise evaluation of these effects at this time.

Changes in the distribution of women by number of children borne.—Table 16 shows the parity distribution of the female population for cohorts of women as of a specified calendar year. The word "parity" here refers to the number of live children borne by a women as of a particular time. Two-parity women, for example, are those who at the beginning of the specified year already have two children and who are therefore "at risk" to have a third child during the year. The parity distributions are shown as proportions of the total female population in the specified age groups; they are similar in meaning to those based on census counts of the number of children ever born. The figures in table 16 (see page 66) are derived directly from the cumulative birth rates shown in table 14 and represent the size differences between cumulative rates for births of successive orders. Because of their derivation, this section will not lead to any new conclusions about the trend of future fertility or to new interpretations of past trends. It does permit analysis of cumulative childbearing from another perspective and therefore is a useful supplement to the discussion on cumulative birth rate.

Figure 10 shows the percentage distribution of the female population by parity at ages 20-24 years for various cohorts. It describes the impressive shift of women at ages 20-24 from the childless to the one- or two-child category in recent years. For the cohorts of 1896-1900 to 1906-1910 the proportion of women who had not borne a child by ages 20-24 years was fairly stable at about 62 percent. It rose to more than 67 percent for the next two groups of cohorts shown and dropped steadily to 46 percent for the cohorts 1936-40 in 1960. Since then it has risen again by about 2 percent. The general decline in this figure is attributed to the fact that more women are marrying and starting families at younger ages.

The proportion of women at ages 20-24 years of first parity declined from about 22 percent for the cohorts of 1896-1900 (by 1920) to just under 20 percent by 1935. The figure rose to a peak of 26.5 percent for the cohorts of 1926-30 and declined by about 2 percent since then (1950). In recent years the relative numbers of women aged 20-24 having second and third children have risen sharply; for example, the proportion of two-parity women has almost doubled since 1945, from 9.6 to 17.2 percent.

In comparison with figure 10, figure 11 shows women at the other end of the childbearing period, 40-44 years, at ages when family formation is virtually complete. Among successive cohorts of women reaching these ages there have been sig-

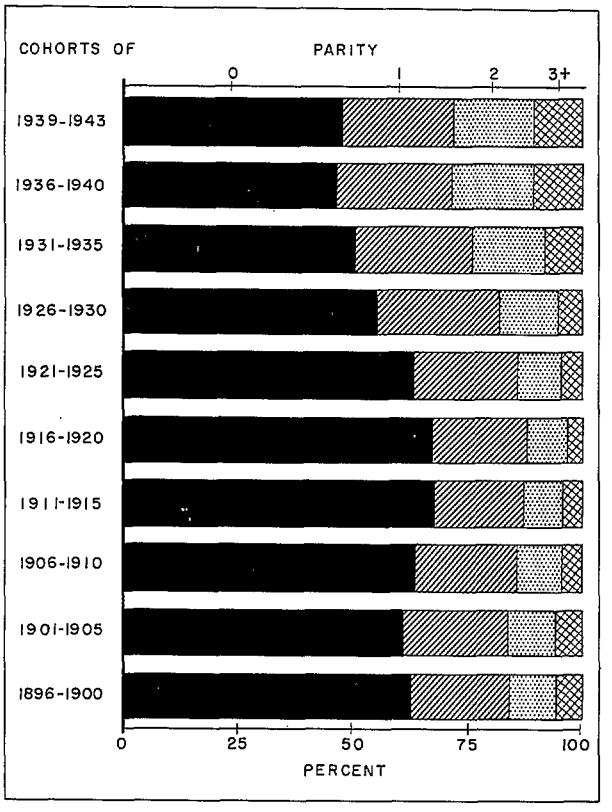

Figure 10. Percent distribution of all women, by parity, by exact ages 20-24 years for selected groups of cohorts.

(Births adjusted for underregistration and numbers of women adjusted for underenumeration and misstatements of age in censuses)

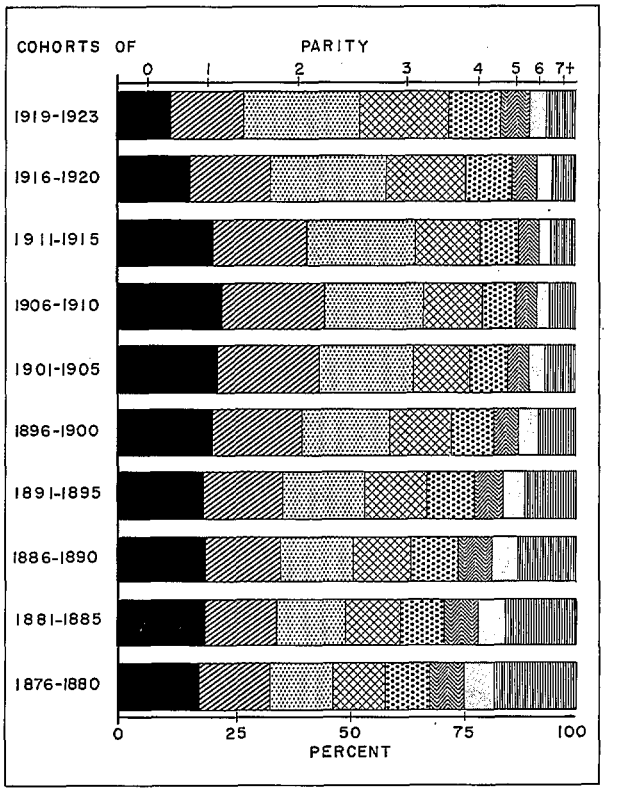

Figure 11. Percent distribution of all women, by parity, by exact ages 40-44 years for selected groups of cohorts.

(Based on births adjusted for underregistration and numbers of women adjusted for underenumeration and misstatements of age in censuses)

nificant shifts from higher to lower parities which perforce accompanied the much larger reduction in cumulative birth rate for higher than for lower birth orders. Reductions by over one-half have occurred in the proportion of women with six children or more from the cohorts of 1876-80 to those of 1919-23. There has been little change in the relative numbers of women with four children (about 8 to 12 percent), but for all lower birth orders there have been marked increases, with the greatest among two-parity women. For these women the percentage at ages 40-44 years has almost doubled since 1920, from 13.9 for the cohorts 1876-80 to 25.8 for those of 1919-23.

The recent increases in the cumulative birth rate for first births indicate that there will be less *childlessness* among the younger cohorts of women than among those who have already reached the end of the childbearing period. The percent childlessness rose from a low of about 18 percent for the cohorts of 1876-80 at ages 40-44 years to a high of 23 percent for the cohorts of 1906-10 by 1950. During the past 13 years the figure declined to 12, and it is possible that among the younger cohorts this percent may drop to 10 percent or less.

In summary, parity distributions, as well as cumulative birth rates, point to a smaller prevalence of childlessness in the general population, to a decline in the proportion of families with six children or more, and to an increasing concentration of families with two, three, or four children.

Median age of women at birth of children for cohorts of women at completion of childbearing.— In the United States, the median age of childbearing, or median length of a generation, has tended to range between 26 and 27 years for all women (table 17). For the group of cohorts who completed childbearing at the beginning of 1963, half their children were born by age 27.0 years, an increase of about 0.6 years over those women who reached ages 50-54 years by 1960. For the cohorts of 1891-95 the age was 26.8 years, and for earlier cohorts (1880-90) it is estimated that the average age of childbearing was about 27.8 years. This figure is an estimate based on the median age of mothers at birth of all children for all women born between 1880 and 1889. The figure for all women is a weighted average of median ages for white and nonwhite women, derived from sample survey data.[12] The median age of childbearing is related both to the cumulative birth rate at the completion of childbearing and to the timing of births, that is, whether women in a particular cohort tend to have children at an earlier or later age. Thus, the relatively high median ages for the cohorts 1891-95 and 1909-13 are associated with different average completed family sizes, 2.96 and 2.28 children, respectively. The high age for the latter group of cohorts is associated with a relative postponement of childbearing, while the former is related to a larger average number of children per family. The upward trend in the median age of mothers who have

Table 17. Median age of childbearing, by live-birth order, for all women in selected groups of cohorts from 1896-1900 to 1909-13: United States, 1950-63

(Notes to tables given on page VIII)

Cohorts	January 1 of each year	Live-birth order								
		Total births	1st	2d	3d	4th	5th	6th	7th	8th and over
		Median age of childbearing in years								
1909-13----	1963	26.98	22.91	26.25	28.34	29.62	30.88	32.19	33.51	36.58
1908-12----	1962	26.78	22.71	25.97	28.01	29.36	30.71	32.09	33.49	36.59
1907-11----	1961	26.57	22.51	25.67	27.69	29.09	30.52	31.99	33.48	36.62
1906-10----	1960	26.34	22.33	25.38	27.38	28.87	30.36	31.88	33.43	36.64
1901-05----	1955	25.79	22.00	24.56	26.47	28.21	29.91	31.56	33.23	36.68
1896-1900--	1950	26.24	22.17	24.73	26.69	28.32	29.98	31.62	33.21	36.62

NOTE: Based on data in table 14.

completed childbearing reflects largely the effects of the economic depression of the 1930's and the trend toward a smaller completed family size. Associated with the recent reversal in the trend to smaller completed family size, evident since 1961, and to the high cumulative birth rates at younger ages is a probable decline in the median age at which women give birth to their first and other children. Thus, if about 89 percent of the women in the cohorts of 1926-30 give birth to a first child, the median age at which they bear this child will be about 21.8 years, or about 1 year earlier on the average than the cohorts of 1909-13.

Reproduction rates for cohorts of women.— The gross and net reproduction rates described earlier in this report refer to *hypothetical* cohorts of women who are assumed to pass through the childbearing period subject to the age-specific fertility and mortality rates of a particular calendar year (see discussion of period replacement rates on page 12). The gross and net reproduction rates for actual cohorts in comparison can be computed directly from the cumulative birth rates for actual cohorts of women living over a period of years. The difference between the cohort figures and those based upon the assumed experience of a calendar year are similar theoretically to the relation between the current life table and the generation life table.

The gross reproduction rate for an actual cohort of women represents the number of daughters a cohort of 1,000 female infants beginning life together would have during the course of their lives if none of the cohort were to die before the end of the childbearing period, about age 50. The net reproduction rate includes a factor for the mortality of the 1,000 female infants who would not survive through the reproduction period of life. For replacement in the next generation a group of female infants must produce an equal number of daughters in their lifetime; hence, a net reproduction rate of 1,000 indicates that a generation of females has exactly replaced itself.

For the cohorts of women born between 1876 and 1890, the net reproduction rates were well above the figure required for replacement (table 18). The cohorts of 1891-95 barely produced enough daughters to replace themselves; and all the later cohorts completing fertility before the end of 1962 fell below the 1,000 mark. The most

Table 18. Estimated reproduction rates of all women in selected groups of cohorts from 1876-80 to 1909-13: United States

(Notes to tables given on page VIII)

Cohorts	Reproduction rates	
	Gross	Net
1909-13----------	1,109	899
1906-10----------	1,104	882
1901-05----------	1,176	917
1896-1900----------	1,300	994
1891-95----------	1,440	1,090
1886-90----------	1,559	1,162
1881-85----------	1,648	1,216
1876-80----------	1,767	1,284

NOTE: Based on data in table 13.

recent group of women to complete the childbearing period, the cohorts of 1909-13, had not produced enough daughters to replace their generation, but it is clear that many of the younger cohorts are contributing substantially to population growth, with actual net reproduction rates well above 1,000.

In terms of cumulative birth rates the younger cohorts of women do not need to produce as many daughters to replace themselves as did the older groups because of the improvement of mortality conditions in the United States over the past hundred years. The number of offspring necessary for replacement of a generation of 1,000 girls born in the period 1876-80 was about 2,800. Only 30 years later the figure had dropped by 200. The cohorts of 1909-13 produced 2,283 live births per 1,000 females by the time they completed childbearing, a number about 10 percent below the required number for replacement, 2,540 per 1,000 women. However, several of the younger cohorts, even before they reached the end of the childbearing period, had surpassed this number, and will thus have a cohort reproduction rate in excess of 1,000. For example in 1963, when the cohorts of 1919-23 were 40-44 years of age, the cumulative birth rate was over 2,700, and the cohorts of 1924-28 had exceeded this figure by the time their average age was 35-39 years. It seems certain that almost all of the cohorts from 1918 through 1935 will have had more than enough children to replace themselves. The cumulative fertility

experience of younger cohorts is still too incomplete to determine their replacement.

With continuing improvement in mortality conditions, the children required for the reproduction of a generation will continue to diminish. At present levels of mortality, the figure is about 2,100, almost 16 percent below the figure required by the group of female infants born 50 years ago.

Reproduction rates for actual cohorts have been compared with those of hypothetical cohorts. The net reproduction rate for the cohorts of 1876-80 is similar in magnitude to the *period rate* for 1905-10, 1,284 compared with 1,336. The rates for the cohorts 1901-05 and 1906-10, 917 and 882, respectively, are a little smaller than the period figure for 1935-40 (978).[13]

Projections of cumulative birth rates.—Projections of cumulative birth rates serve as the basis for the four series of population projections prepared recently by the Bureau of the Census.[9] Series A assumes that cumulative birth rate by ages 50-54 will gradually move toward 3,350; Series B, 3,100; Series C, 2,775; and Series D, 2,450 births per 1,000 women. These levels of completed fertility will be experienced by women born after 1951 who will not reach the end of their reproductive lives until about the year 2000. Series A shows a gradual increase in the average number of children per woman from about 2.3 (cohorts of 1911-15) in 1965 to a maximum of about 3.5 during the period 1985-95, and then a gradual decline to the ultimate figure of 3.35 for this series (table 19 and fig. 12). In series B the number increases from 2.3 to about 3.4 in 1990 and then declines gradually to the assumed target figure of 3.1, which is not reached until after the year 2000. Cohorts

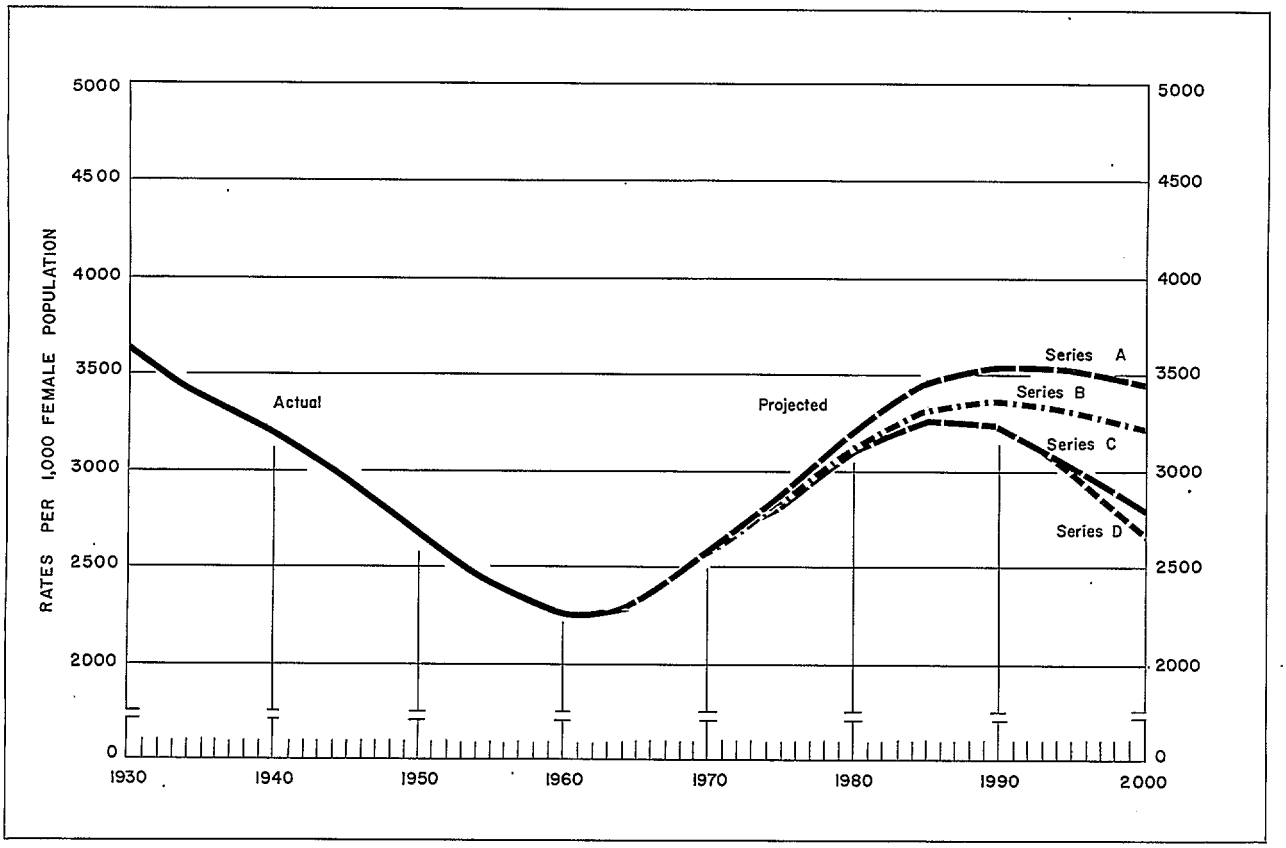

Figure 12. Cumulative birth rates, actual and projected, for all women, by exact ages 50-54 years, in groups of cohorts, 1930-2000.

(Births adjusted for underregistration and numbers of women adjusted for underenumeration and misstatements of age in censuses)

Table 19. Projected cumulative birth rates for all women, by exact ages 50-54 years in selected groups of cohorts from 1911-15 to 1946-50: United States, 1965-2000

(Notes to tables given on page VIII)

Cohorts	January 1 of each year	Series A	Series B	Series C	Series D
		Rates per 1,000 female population			
1946-50--	2000	3,442	3,211	2,803	2,666
1941-45--	1995	3,510	3,314	3,008	3,005
1936-40--	1990	3,532	3,374	3,238	3,238
1931-35--	1985	3,477	3,346	3,275	3,275
1926-30--	1980	3,220	3,134	3,103	3,103
1921-25--	1975	2,872	2,868	2,857	2,857
1916-20--	1970	2,551	2,551	2,551	2,551
1911-15--	1965	2,316	2,316	2,316	2,316

NOTE: Based on data in the U.S. Bureau of the Census, "Projections of the Population of the United States, by Age and Sex, 1964-85," Current Population Reports, Series P-25, No. 286, July 1964. These figures are comparable with those in table 13.

of women bearing children under the assumed conditions of Series C and D both reach a maximum average family of 3.3 children per woman in 1985 (cohorts of 1931-35); cumulative birth rates in later years decrease rapidly to the ultimate levels assigned for the series—2.775 for Series C and 2.450 for Series D.

NATALITY STATISTICS BY SELECTED CHARACTERISTICS

Various characteristics of liveborn infants of especial interest from the health and genetic point of view are discussed in this section. Statistics are shown for the proportion of births that occurred in hospitals, the distributions of birth weight and period of gestation among live births, the sex ratio at birth, the number of plural births, and the frequency of births by month of occurrence.

Attendant at Birth

In 1962, 97 births out of every 100 were delivered in hospitals or other institutions compared with 88 per 100 in 1950 and 56 in 1940. This striking increase is believed to be at least partly responsible for the substantial declines in infant and maternal mortality that also took place during these years. The trend in hospital obstetrical care is characterized by a fairly rapid rise through the midforties and a more gradual increase since then (fig. 13).

The proportion of white births delivered in hospitals is now close to 100 percent, and this has been accomplished over a relatively short span of years. As recently as 1940 only three out of five white births occurred in hospitals. However, during the war years considerable progress was made, and by 1948 the proportion had risen to 90 percent. It has continued to increase and since 1959 has remained at 99 percent.

With a relatively low rate of hospital utilization for the nonwhite group, the potential for improvement was much greater. In 1940 only 27 percent of the nonwhite deliveries occurred in hospitals. By 1957 the percentage had tripled, increasing to 81 percent. By 1962 the proportion of nonwhite deliveries in hospitals was 87 percent.

Births in hospitals have been accompanied by a marked decrease in births delivered by nonphysicians. Ninety percent of the nonwhite births were medically attended in 1962 compared with

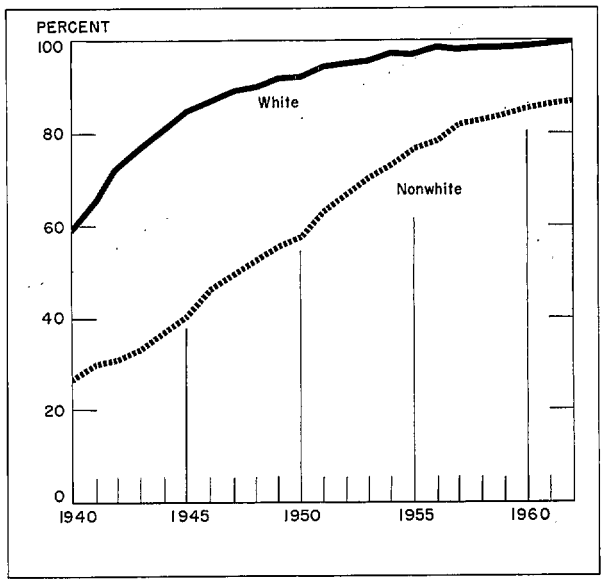

Figure 13. Percent of live births occurring in hospitals, by color, 1940-62.

Table 20. Percent distribution of nonwhite live births and urban and rural areas by attendant: United States, 1940, 1950, 1960, and 1962

(Notes to tables given on page VIII)

Area and year	Attendant		
	Physician in hospital	Physician not in hospital	Midwife, other and not specified
Urban	Percent distribution		
1962	93.9	2.0	4.1
1960	92.9	2.6	4.5
1950	78.2	10.4	11.5
1940	51.4	29.4	19.2
Rural			
1962	70.9	4.2	24.9
1960	67.0	5.5	27.5
1950	30.0	19.7	50.2
1940	8.6	20.2	71.1

only 72 percent in 1950 and 51 percent in 1940. For the white group the proportion of births attended by physicians has been nearly 100 percent for a number of years.

The nonwhite infants born without medical attendants (10 percent of the total nonwhite births) are found mainly in the rural areas. The figures in table 20 show that although a rapid rate of decline occurred between 1940 and 1962, one in four nonwhite births in rural areas was still nonmedically attended.

Furthermore, the rural areas where midwifery is prominent are confined mainly to the States in the South. The percents of midwife deliveries for nonwhite live births for selected Southern States in 1962 are:

	Percent
Alabama	38.7
Arkansas	28.4
Florida	13.4
Georgia	23.0
Mississippi	42.6
North Carolina	13.8
South Carolina	25.9
Virginia	14.9

For some States, nonwhite babies attended by midwives were not limited to births among rural residents. In Mississippi and Alabama, the two States where the highest percent of nonwhite deliveries are attended by midwives, 23 percent and 26 percent, respectively, of these births were to urban residents.

The only area outside the South where the proportion of midwife deliveries appears to be sizable among the nonwhite population is in the State of Alaska, where 13 percent of the nonwhite births in 1962 were delivered by midwives (and 8.4 percent were delivered by attendants other than midwives or physicians or by attendants not specified).

Plural Births

The first report on plural births for the birth-registration area appeared in the 1917 volume of *Birth Statistics,* prepared by the Bureau of the Census. This was the third annual report on births; figures on multiple births for the years 1915-17 were included in the volume. From the first year of collection of data, a system was established whereby certificates on plural deliveries were checked out as completely as possible. In the case of twins born alive, for example, both certificates

were paired. Where one member of a set was missing, a copy of the live-birth certificate was sent to the State of origin with the request that it be matched with a certificate of fetal death. This procedure was later changed so that live birth and fetal death certificates were matched in the National Office of Vital Statistics.

In 1959 the process of matching certificates of plural births was discontinued and the tabulations indicated only the number of live births in plural deliveries. Without the matching procedure neither the actual number of twins and other multiparous births nor the number of those born alive or born dead in sets could be determined. As a result, detailed information on plural births in the United States has not been available since 1958. In the discussion below, frequencies and ratios refer to live births in plural deliveries only.

Of the 4,167,362 live births in 1962, 4,086,056 were from single deliveries and 81,306, or 2.0 percent, were plural births. Most of these, 80,180, or 98.6 percent, were live births in twin deliveries, and the remaining 1,126 births were in triplet or other plural deliveries. Plural birth frequencies by white and nonwhite mothers for the Nation as a whole in 1962 cannot be compared with earlier years because data for New Jersey by color or race were not available.

The ratios of plural births per 1,000 live births by color for the United States for 1958-62 indicate a continuing decline as shown below:

	Total	*White*	*Nonwhite*
1962	19.5	[1]18.5	[1]25.0
1961	20.2	19.0	26.6
1960	20.4	19.3	26.3
1959	20.6	19.5	27.0
1958	20.6	19.5	27.0

[1]Ratios by color exclude New Jersey.

Among the States, the ratio ranged from a low of 14.0 in Wyoming to a high of 22.2 in Mississippi and New Hampshire. The geographic variations in the ratio are partly due to differences in the racial composition of the population. Orientals have the lowest twinning rate, the white race the next lowest, and Negroes the highest.

The median weight for births from plural deliveries (2,420 grams) is 880 grams less than for births from single deliveries. This size difference is due to the generally earlier termination of pregnancies involving multiple births and the less favorable nutritional environment of plural births during the gestation period. The differences in birth weight between single live births and births in plural deliveries for 1962 are shown in table 21.

As can be observed, the proportion of immature babies in plural deliveries is much greater than in deliveries consisting of a single child. More than half, 55.1 percent, fall into the immature category, that is, 2,500 grams or less, compared with only 7.1 percent in the case of single live births.

The relative frequency of multiple births increases with age of mother up to ages 35-39 years. The chances of plural births are almost 2½ times as great at ages 35-39 than at 15-19 years. This situation holds for both the white and nonwhite groups, except that differences by age among the nonwhites are even greater. Plural birth ratios by age of mother and color for the

Table 21. Percent distribution of single and plural live births, by birth weight: United States, 1962

(Notes to tables given on page VIII)

Birth weight in grams	Live births	
	Single	Plural
	Percent distribution	
Total	100.0	100.0
2,500 or less	7.1	55.1
1,000 or less	0.5	4.8
1,001-1,500	0.5	5.7
1,501-2,000	1.2	14.7
2,001-2,500	4.8	29.9
2,501-3,000	19.0	28.6
3,001-3,500	38.7	13.6
3,501-4,000	26.6	2.5
4,001-4,500	7.2	0.2
4,501-5,000	1.3	0.0
5,001 or more	0.2	0.0

United States for 1962 are as follows:

	Total	*White*	*Nonwhite*
15-44 years -----	19.5	[1]18.5	[1]25.1
15-19 years -------	12.1	11.2	15.2
20-24 years -------	16.4	15.4	21.7
25-29 years -------	20.9	19.7	28.2
30-34 years -------	25.8	24.5	34.1
35-39 years -------	29.2	27.6	38.2
40-44 years -------	23.2	22.8	26.5

[1]Ratios by color exclude New Jersey.

Because of the considerable possibility of sampling error in the case of rare events, details on quadruplet and quintuplet births in 1962 were not prepared.

Trend in the Sex Ratio at Birth

The discovery of the regular male surplus in live births was made by John Graunt (1662), the Englishman who was among the first to make statistical use of vital records. This phenomenon has since raised many questions of a biological or sociological nature.

The sex ratio for live births declined from 1,050 males per 1,000 females in 1961 to 1,048 in 1962. This ratio for the nonwhite births moved up a little—from 1,023 in 1961 to 1,024 in 1962, while the ratio for white births dropped from 1,055 to 1,052. There has been a decline in the sex ratio of white births from a high of 1,063 in 1946 to 1,052 in 1962. In contrast, the rates for nonwhite births fluctuated somewhat erratically between 1,011 and 1,028 during the same time span.

Variations in the sex ratio at birth have been noted among births to mothers in different age groups and to births of different orders (see table 22). A higher sex ratio has been associated with younger parents and/or lower birth orders.

The sex ratio of live white births by age of mother or live-birth order (shown for selected years above) indicates that in general the sex ratio dropped with an increase in birth order or age of mother. This relationship, however, usually did not hold true for a crossclassification of any single birth order with any 5-year age-of-mother group.

Table 22. Males per 1,000 females for white live births, by age of mother and live-birth order: United States, 1946, 1950, 1960, and 1962

(Notes to tables given on page VIII)

Age of mother and live-birth order	1962	1960	1950	1946
Age of mother	Males per 1,000 females			
15-19 years--	1,059	1,061	1,067	1,058
20-24 years--	1,054	1,057	1,059	1,063
25-29 years--	1,049	1,054	1,062	1,061
30-34 years--	1,050	1,052	1,055	1,055
35-39 years--	1,050	1,043	1,045	1,047
40-44 years--	1,047	1,046	1,043	1,044
Live-birth order				
First birth--	1,059	1,062	1,068	1,069
Second birth-	1,053	1,053	1,061	1,060
Third birth--	1,051	1,053	1,051	1,052
Fourth birth-	1,049	1,052	1,044	1,052
Fifth birth--	1,045	1,049	1,046	1,035
Sixth birth and over----	1,038	1,045	1,040	1,041

Birth Weight

A great majority of the children born in 1962 (92 percent) weighed more than 2,500 grams. Births of the remaining 8.0 percent (2,500 grams or less) were immature according to the birth weight criterion. Although this group constitutes a small portion of total births, it poses a special health problem since a large number of neonatal deaths (infants dying within 28 days of birth) are those of immature babies.

The peak concentration of births was between 3,001 and 3,500 grams. Nearly two-fifths of the births in 1962 were at these weights. The median weight for all children was 3,290 grams.

Nonwhite babies weighed 180 grams less at birth on the average than white babies. The percent of nonwhite infants weighing 2,500 grams or less was 13.1 compared with 7.0 for white infants. At the other end of the weight scale (4,501 grams

or more) the proportions for the white and nonwhite groups were 1.6 and 1.2 percent.

Trend in birth-weight distribution.—National birth-weight statistics became available in 1950 when an item on birth weight was added to the live-birth certificate for virtually all States. The proportion of total liveborn infants of immature weights has gradually increased since that time. This rise in the relative number of immature births is practically all due to the changing weight among nonwhite births. As seen below, the percent change in immaturity in the United States for the years 1950-62 among white infants over the years has been fairly stable, moving from 7.2 percent in 1950 to a low of 6.8 and rising again to 7.0 in 1962; among the nonwhite births this proportion has risen from 10.4 in 1950 to 13.1 in 1962. (Data for Massachusetts and Connecticut for 1950-55 and for Massachusetts for 1956 are excluded.)

	Total	*White*	*Nonwhite*
1962	8.0	7.0	13.1
1961	7.8	6.9	13.0
1960	7.7	6.8	12.8
1959	7.7	6.8	12.9
1958	7.7	6.8	12.9
1957	7.6	6.8	12.5
1956	7.6	6.8	12.1
1955	7.7	6.9	11.8
1954	7.5	6.9	11.4
1953	7.7	7.1	11.4
1952	7.7	7.1	11.2
1951	7.6	7.1	10.8
1950	7.6	7.2	10.4

The increase in the percent immature among total live births from 7.6 to 8.0 between 1950 and 1962 appears to be small; however, if the percent immature in 1962 had been 7.6 rather than 8.0 this would represent about 17,000 fewer immature births than actually occurred. Since the neonatal death rate is high among these infants of low weights, the relative increase in immature births has implications for neonatal mortality.

The increasing immaturity among the nonwhite births was related to the gradual shift in the birth-weight distribution toward the lighter intervals. The median birth weight presented below by color shows a drop since 1950. This measure remained practically unchanged among white births during the same period. Most of the characteristics by which birth weight has been tabulated over the years indicate that the average weight of the nonwhite newborn babies has been decreasing.

	White	*Nonwhite*
1962	3,320	3,140
1960	3,340	3,150
1957	3,330	3,170
1955	3,330	3,190
1950	3,320	3,250

Birth weight by age of mother.—Two important factors affecting birth weight which varies between white and nonwhite births in various geographic areas and over time are age of mother and birth order of live births. The relationship between immaturity and age of mother is curvilinear, with highest immaturity among births to younger and older mothers and the lowest among mothers aged 25-29 years of age. Thus a change in the timing of births and in the family-size pattern might affect the relative number of immature births. Since 1950, for example, there has been a movement toward earlier age at marriage and childbearing. Also, the birth order composition of live births has changed; the proportion of first and second births to total births is smaller at the present time.

Between 1950 and 1962 the changes in the proportion of immature white infants by age of mother were small and inconsistent, while for nonwhite infants there has been an overall rise in immaturity for each age-of-mother group (table 23).

Variations in the incidence of immaturity with age of mother are also related to differences in birth order composition within a specified age group. A higher incidence of immaturity occurs among births of high orders to young mothers as well as among births of low orders to older mothers. Birth weights are more favorable among births where the age of mother is highly correlated with birth order. The relatively low immaturity among nonwhite infants to mothers aged 40-44 years shown in table 23, for example, is due to the very high percentage of births of high orders in this age group. During the period 1950-62 between 75 and 79 percent of the nonwhite live births to mothers 40-44 years old have been of

fifth or higher birth orders compared with about 47 to 54 percent for white mothers of the same age.

Changes in the composition of live births by age of mother and live-birth order over the past decade probably had only a minor effect on the increasing proportion of immature births because of compensating factors which took place simultaneously. In some cases, for example, younger age at childbearing would probably have resulted in an increased proportion of immature babies. An increase in births of higher orders to mothers over 25 years of age might have resulted in a decrease in the proportion of immature births.

Birth weight by geographic area.—The rise in immaturity among nonwhite births between 1950 and 1962 occurred in almost all the States. The change was greatest in the South where the incidence of immaturity was very low in 1950. The percent of nonwhite infants born at low weights has also increased in the other geographic regions where the relative number of immature births was already at a high level in 1950. The proportion of white immature births by State was more stable during this period.

There are certain uniformities in geographic variations of birth weight which have been observed over the years. Among white infants, births in the Mountain States (8.4 percent in 1962) have consistently had the highest incidence of immaturity. The area of low immaturity among white births has been the West North Central States (6.2 percent in 1962).

The highest proportion of immature nonwhite births were usually observed in the Middle Atlantic States; the percent immature was as high as 15.3 in 1962. The areas with relatively few immature births are the Mountain (11.2 percent in 1962) and Pacific (11.0 percent in 1962) Divisions where a large percentage of nonwhite babies are of races other than Negro.

The birth-weight distribution tabulated for Indian live births in 1962 showed that the birth weight of Indians was similar to that of white live births and contrasted with the lower average birth weight of the nonwhite births (table 24).

According to the 1950 data the birth weight of infants to rural residents was heavier on the average than that of infants to urban residents as shown below, and a smaller number of immature babies were born to rural residents (table 25).

	Total	*White*	*Nonwhite*
Urban	3,290	3,300	3,190
Rural	3,380	3,370	3,410

Table 23. Immature live births, as percent of total live births in each group, by age of mother and color: United States

(Notes to tables given on page VIII)

Age of mother and color	1962	1960	1957	1955	1950[1]
White	Percent of total live births in each group				
15-19 years	8.3	8.3	8.2	8.3	8.0
20-24 years	6.7	6.5	6.5	6.8	6.9
25-29 years	6.4	6.2	6.3	6.5	6.5
30-34 years	7.1	6.7	6.7	6.7	7.0
35-39 years	7.7	7.3	7.3	7.5	7.5
40-44 years	7.9	7.8	7.8	8.0	7.5
Nonwhite					
15-19 years	16.0	15.9	15.2	14.6	12.0
20-24 years	12.8	12.6	12.4	11.7	9.6
25-29 years	11.6	11.5	11.5	10.8	8.4
30-34 years	12.2	11.9	11.1	10.7	8.8
35-39 years	12.7	11.8	11.5	10.6	9.0
40-44 years	11.6	11.0	9.9	10.9	8.9

[1]Data are for births which occurred during the first 3 months and exclude Massachusetts.

Table 24. Percent distribution of live births, by birth weight and specified race: United States, 1962

(Notes to tables given on page VIII)

Birth weight	White	Nonwhite	Indian[1]
	Percent distribution		
Total	100.0	100.0	100.0
2,500 grams or less	7.0	13.1	7.9
2,501-3,000 grams	17.9	25.7	18.6
3,001-3,500 grams	38.3	37.2	37.8
3,501-4,000 grams	27.6	18.5	26.4
4,001 grams or more	9.2	5.6	9.3

[1]Includes Aleuts and Eskimos.

This urban-rural difference in birth weight has persisted to the present. The percent of immature live births for urban and rural areas by color for selected years is presented in table 25. The 1950 definitions of urban and rural areas differ from those for 1960.[14,15]

Table 25. Immature live births, as percent of total live births in each group, by color: United States and urban and rural areas, 1950, 1953, 1955, 1960-62

(Notes to tables given on page VIII)

Year	White		Nonwhite	
	Urban	Rural	Urban	Rural
	Percent of total live births in each group			
1962	7.2	6.7	13.9	11.3
1961	7.1	6.5	13.9	11.0
1960	7.0	6.5	13.7	10.8
1955	7.1	6.4	12.7	9.7
1953	7.2	6.5	12.3	9.5
1950[1]	7.3	6.5	11.2	7.8

[1]Data are for births which occurred during the first 3 months and exclude Massachusetts.

The urban-rural differential in birth weight is not confined to any geographic region but is found generally in all the States among both white and nonwhite births. Since immaturity is higher among urban births, it follows that the proportion of immature births for an area is related to the proportion of urban or rural births in an area. The high proportion of immaturity found among the nonwhite births in the Middle Atlantic States (15.3 percent in 1962) is related to the fact that almost 95 percent of nonwhite births in this division were to urban residents.

The proportion of urban births among the white population of the United States remained about 61 percent between 1950 and 1962. Among the nonwhite population the proportion of urban births increased from 58 to 70 percent during the same period. Furthermore, the proportion of white births to residents of the large metropolitan centers (places with populations of 250,000 or more) actually decreased a little between 1950 and 1961 (the last year for which data by population size place were tabulated), while there was an increase in the percent of births among nonwhite residents in these large urban centers—from about 29 to 40 percent of the total nonwhite births. When immaturity for births to residents of the various population-size places is compared, it is seen that immaturity increased generally with increase in size of place of residence (table 26).

The increasing urban migration among nonwhite persons to the larger urban centers of the

United States had an unfavorable effect on birth weight since the incidence of immaturity in these large metropolitan centers is exceptionally high among nonwhite infants. It is difficult, however, to delineate the factors which could account for the differential birth weight between urban and rural births.

Other factors related to birth weight.—Two other factors can be mentioned which may have a bearing on the rise in immaturity among the nonwhite live births. The first of these is the effect of different child-spacing intervals on birth weight. Indirect evidence of the relationship between child spacing and birth weight is the large number of immature births of relatively high orders among young mothers.

Second, there is a large difference in immaturity between legitimate and illegitimate births; increases of immaturity may be associated with the considerable increase in the illegitimacy ratio (illegitimate live births per 1,000 total live births) for both white and nonwhite births. Between 1950 and 1962 the ratio for white births increased from 18 to 28, and for nonwhite births, from 180 to 230. The percents of legitimate and illegitimate immature live births by color for 1955 are as follows:

	White	*Nonwhite*
Legitimate	6.6	11.0
Illegitimate	11.2	13.7

Period of Gestation

Data on length of gestation corroborate birth weight data in differentiating levels of physical development at birth. For purposes of classification, an infant born at gestation of less than 37 weeks is referred to as "premature," and an infant weighing 2,500 grams or less is referred to as "immature."

Both gestation period and birth weight must be considered in evaluating the maturity of newborn infants because of the wide range in the duration of gestation within a specific weight interval as well as the variation in weight within a gestation interval.

Although data on gestation for most States have been available since 1950, trend comparisons are unreliable because of variations in reporting. In 1950 the percent of premature infants was at a high level due to the heaping of gestations at 36 weeks. This reporting bias resulted from the conversion of gestations of 9 months to 36 weeks Since 1950 the proportion of infants with reported gestations of 36 weeks has decreased considerably.

	White	*Nonwhite*
1962	2.7	5.0
1960	2.9	5.2
1958	3.2	5.7
1956	3.6	6.7
1951	5.9	10.0
1950	7.0	11.5

Table 26. Immature live births, as percent of total live births in each group, by color and size of place: United States, 1960 and 1961

(Notes to tables given on page VIII)

Size of place	1961		1960	
	White	Nonwhite	White	Nonwhite
	Percent of total live births in each group			
250,000 or more	7.6	14.3	7.5	14.3
100,000-250,000	7.3	13.8	7.2	13.2
50,000-100,000	7.1	14.0	6.9	13.5
25,000-50,000	6.7	13.1	6.7	13.5
10,000-25,000	6.6	13.1	6.6	12.8
2,500-10,000	6.8	12.1	6.6	11.9
Under 2,500	6.5	11.0	6.5	10.8

At the same time, the 36-week-gestation category increasingly included more immature infants. In 1950 only 14 percent of the infants at 36-week gestations were immature; by 1962 this proportion had risen to 34 percent. Since the majority of premature infants fall into the 36-week category, the decrease in this gestation age is closely related to the decrease in the proportion of premature births since 1950 as shown below.

	White	*Nonwhite*
1962	6.1	11.3
1960	6.3	11.5
1958	6.5	11.8
1956	6.7	11.9
1951	9.0	14.4
1950	10.3	15.8

Another serious deficiency in the gestation data, however, is the substantial overstatement at 40 weeks. This bias probably results from the fact that the gestation period is not carefully observed, so the newborn infant of normal size or development is assumed to have a "normal" gestation period of 40 weeks. Such errors in reporting are reduced in areas where the gestation data are derived from the item on the live-birth

Table 28. Premature live births, as percent of total live births, by color: United States and selected areas, 1962

(Notes to tables given on page VIII)

Area	White	Nonwhite
	Percent of total live births	
United States	6.1	11.3
California	8.4	15.2
Baltimore City	10.3	25.3
District of Columbia	11.5	19.9
New York City	9.5	19.5

NOTE: By place of residence for California and the District of Columbia and by place of occurrence for Baltimore City and New York City.

Table 27. Percent distribution of live births, by period of gestation and color: United States and selected areas, 1962

(Notes to tables given on page VIII)

Color and area	Period of gestation								
	Total	Under 28 weeks	28-31 weeks	32-35 weeks	36 weeks	37-39 weeks	40 weeks	41-42 weeks	43 weeks and over
White	Percent distribution								
United States	100.0	0.5	0.7	2.1	2.7	16.5	68.0	8.0	1.4
California	100.0	0.7	0.8	3.9	3.0	38.5	25.0	22.4	5.7
Baltimore City	100.0	0.8	1.2	4.9	3.5	39.1	22.9	22.2	5.4
District of Columbia	100.0	0.9	1.5	5.1	3.9	34.7	26.1	21.2	6.6
New York City	100.0	0.5	1.1	4.5	3.3	40.4	23.9	21.0	5.2
Nonwhite									
United States	100.0	1.2	1.6	3.6	5.0	15.3	68.1	4.2	1.1
California	100.0	1.5	1.7	7.5	4.5	43.1	20.2	15.9	5.7
Baltimore City	100.0	3.1	4.1	12.6	5.6	41.6	16.0	13.0	4.0
District of Columbia	100.0	2.2	2.7	9.6	5.4	40.5	18.8	15.0	5.7
New York City	100.0	2.2	2.7	9.4	5.2	41.2	18.4	15.5	5.4

NOTE: By place of residence for California and the District of Columbia and by place of occurrence for Baltimore City and New York City.

certificate requesting the date of the last normal menstrual period (hereafter called LMP data). Areas using this wording of the item are California, Baltimore City, District of Columbia, and New York City.

A comparison of the percent distribution of live births in 1962 by length of gestation for the United States and the areas where LMP data are available suggests the magnitude of the distortion in the conventional gestation data (table 27). These

Table 29. Immature live births, as percent of total live births in each group, by color and period of gestation: United States

(Notes to tables given on page VIII)

Period of gestation	White		Nonwhite	
	United States	California	United States	California
	Percent of total live births in each group			
20-27 weeks	96.6	89.8	94.4	85.6
28-31 weeks	90.9	80.3	87.9	70.8
32-35 weeks	68.3	46.5	64.6	43.4
36 weeks	33.4	21.3	34.2	23.1
37-39 weeks	9.3	5.1	13.6	7.2
40 weeks	2.6	1.8	6.2	3.4
41-42 weeks	1.5	1.5	4.1	2.9
43 weeks and over	2.1	2.1	5.0	3.7

NOTE: By place of residence.

Table 30. Percent distribution of live births, by sex, color, and period of gestation: California and New York City, 1962

(Notes to tables given on page VIII)

Area and period of gestation	White		Negro	
	Male	Female	Male	Female
California	Percent distribution			
Total	100.0	100.0	100.0	100.0
Under 37 weeks	8.8	8.0	17.6	15.9
37-39 weeks	39.9	37.2	42.1	42.2
40 weeks and over	51.4	54.8	40.2	41.9
New York City				
Total	100.0	100.0	100.0	100.0
Under 37 weeks	9.7	9.2	20.6	19.1
37-39 weeks	41.6	39.2	41.7	40.6
40 weeks and over	48.7	51.6	37.6	40.4

NOTE: By place of residence for California and by place of occurrence for New York City.

figures show a much higher incidence of prematurity in LMP data. Further, there is a much wider discrepancy in prematurity between white and nonwhite infants in the LMP data (table 28).

By birth weight.—When the period of gestation is crossclassified by birth weight, immaturity in LMP data is greatly below immaturity in conventional gestation data based on length of pregnancy in completed weeks. This leads one to believe that the reporting of the conventional gestation data is greatly influenced by the size and weight of the infant. The figures in table 29 indicate that immaturity is lower by a wide margin in the LMP data (California, for example) for practically each gestation interval.

At the same time, when prematurity is examined for birth-weight intervals, the difference in the incidence of prematurity is not large between LMP and regular gestation data in the lighter-weight intervals. In the optimum-weight intervals, however, about twice as many premature births are found in the LMP data.

By sex of child.—Although male infants weigh more at birth on the average than female infants, the gestation period for male infants averaged somewhat less. LMP data indicate that the slight sex differential in length of gestation is consistent among the geographic areas and for the various races. Table 30 presents the percent distribution of live births by period of gestation and sex for California and New York City.

Seasonality of Births

Figure 14 shows crude birth rates by month unadjusted and adjusted for seasonal variation for the past decade. The comparison between the adjusted and unadjusted rates shows that most of the monthly fluctuations in the crude birth rates are due to a fairly consistent seasonal pattern. The removal of the seasonal pattern, using an adaptation of the standard ratio to moving average method,[16] facilitates observations of any trend movement in measures of fertility. The residual

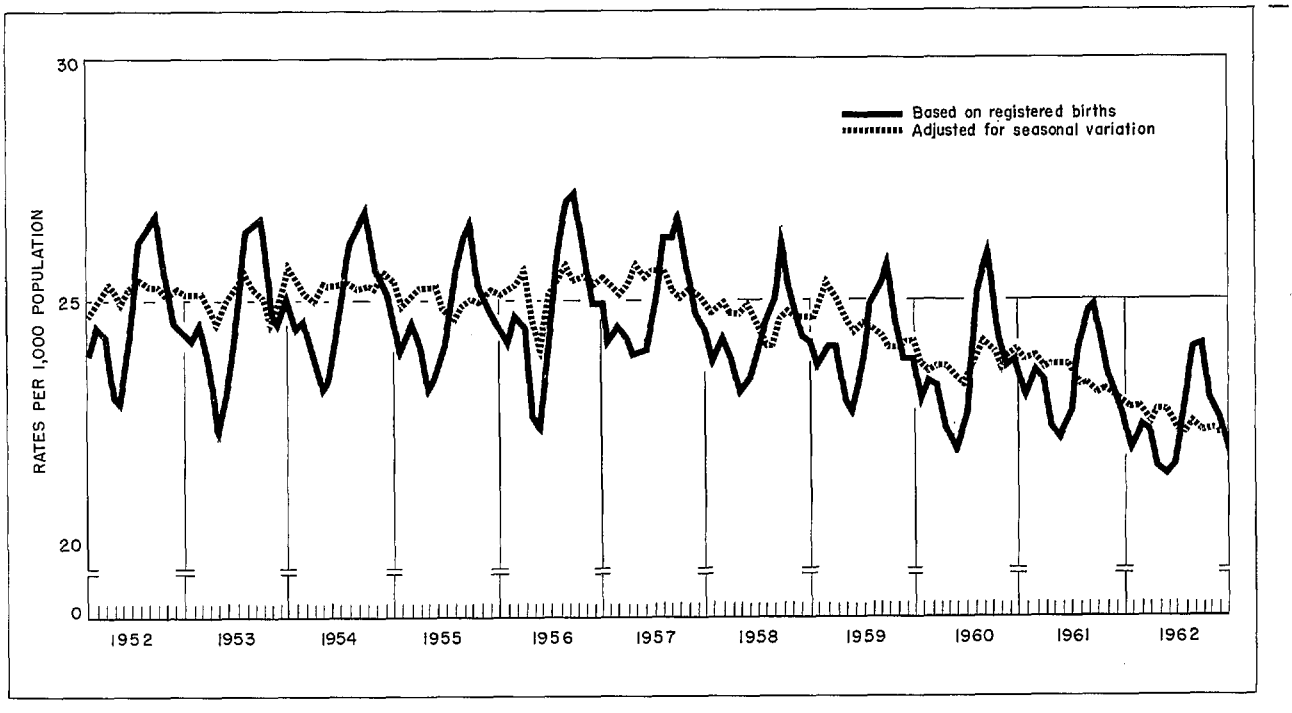

Figure 14. Birth rates, unadjusted and adjusted for seasonal variation, 1952-62.

(Rates on an annual basis per 1,000 estimated population for specified month)

movements in the trend represent random variation as well as the fertility response to underlying nonseasonal changes in specific factors.

The following discussion of seasonal variations in live births is made in terms of monthly indexes standardized to a monthly average of 100. The use of monthly indexes rather than seasonal indexes introduces little error for comparative purposes.

The existence of a seasonal pattern in births and birth rates by month in the United States has long been recognized. Over the years the basic shape of the plotted seasonal bimodal curve remains the same in spite of minor shifts in the intensity and months of the high and low periods.

A comparison of the trend in seasonal birth patterns over the past few decades can be made in figure 15, with the 1939 monthly indexes representing prewar (World War II) patterns, the 1950 indexes representing the characteristic pattern of the early 1950's, and 1962 representing the current pattern.

In the 1930's the minor peak in February and March was more prominent than in recent years and the deepest trough occurred at the end of the year. In the monthly pattern following World War II (early 1950's) there was a great accentuation of the spring trough, a rise in the major peak in August and September, and a diminishing of the minor February peak and December trough.

As in previous years, in 1962 there was a major peak in August and September, a minor peak in February and March, and troughs in January and May. The deep and sharp April trough of the early 1950's now appears to be smoothing out. Instead, the deepest part of the trough occurs in May, while the April births have risen and June births decreased.

Seasonal pattern by color.—The peak month of birth is September for the white group and August for the nonwhite, and the major trough for both groups coincides in May. The secondary dip for white births occurs in January compared with a secondary low in November among nonwhite births.

The seasonal pattern among nonwhite births showed greater magnitudes in the major peak and trough. The major peak was 10 percent higher than average compared with 7 percent for white births; the trough in May deviated as much as 10 percent

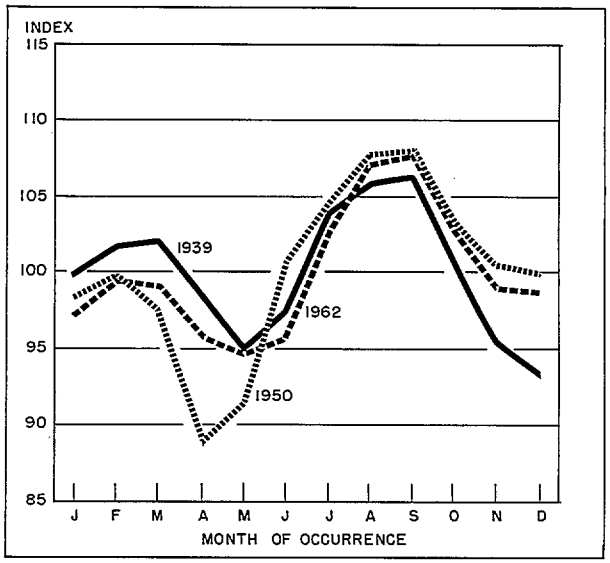

Figure 15. Monthly indexes of live births, 1939, 1950, and 1962.
(Ratio of monthly daily average to that of the calendar year taken as 100)

from the monthly average for nonwhite births compared with 4 percent for white births.

Since 1950 the spring trough decreased in amplitude for both white and nonwhite births, but changes in the major peak were slight. In 1950 the April-May trough for white births was 11 percent below average and for nonwhite births, 15 percent.

Geographic variations.—Since the seasonality of births varies among different geographic regions, it is interesting to note the contributions of each region to the total pattern for the country as a whole. In figure 16 the variations in seasonal patterns by color for the four regions for 1962 can be observed.

Geographic area rather than race seems to be the more important factor in determining the seasonality of births. The pattern of births between the two color groups usually has more similarity within a geographic division than the pattern for a particular color group among different geographic divisions. An exception is found in the Northeast Region. In these States, the nonwhite pattern resembles more closely the pattern of the South than the pattern for the white births in the area.

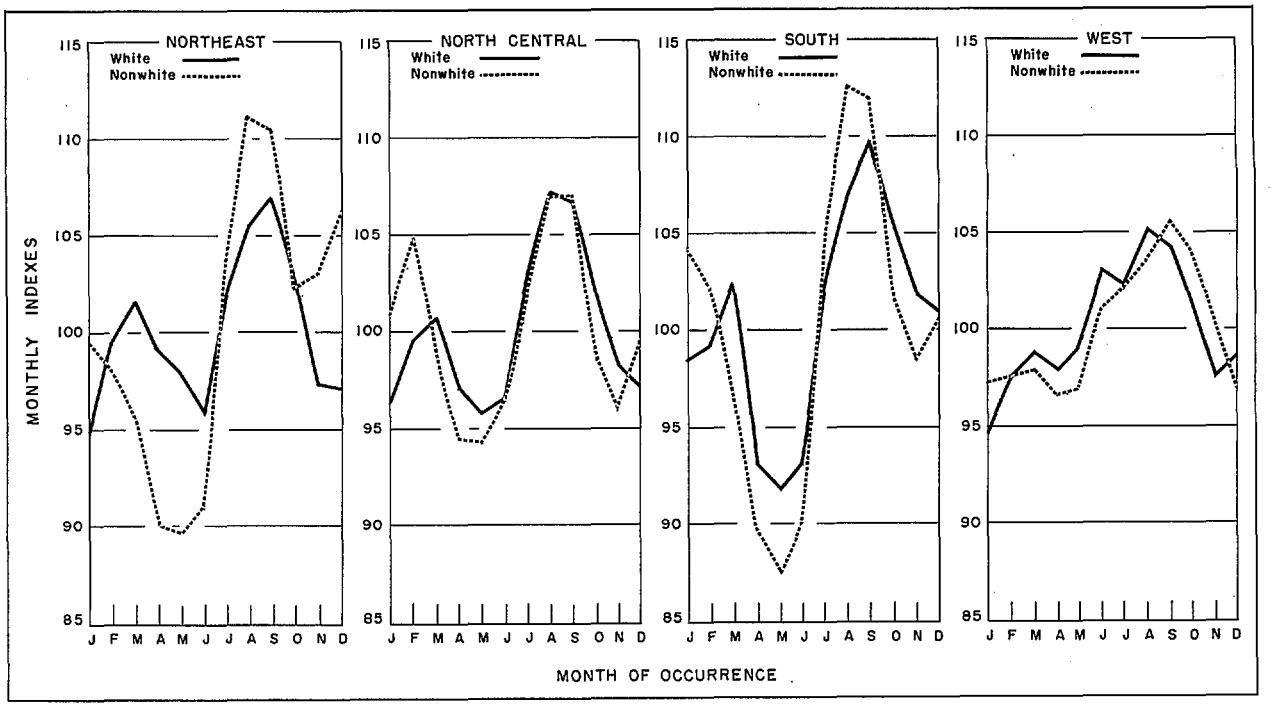

Figure 16. Monthly indexes of live births, by color and geographic region, 1962.

(Ratio of monthly daily average to that of the calendar year taken as 100)

In 1950 the seasonal pattern of births by color within a geographic area was more homogeneous than at present. In the South the patterns for the two groups were identical in 1950.

Variations by age of mother and live-birth order.—There was a similarity in the seasonal pattern of births among each of the 5-year age-of-mother groups. The monthly indexes, however, were higher for older mothers during the winter months, while the indexes for younger mothers were slightly higher from April through September (table 31).

When age was held constant for birth order, there were also slight variations in the monthly

Table 31. Ratio of quarterly births, by age of mother to average quarterly births: United States, 1962

(Notes to tables given on page VIII)

Age of mother	1st quarter	2d quarter	3d quarter	4th quarter
	Ratio: quarterly average = 100.0			
15-19 years	98.8	96.6	107.4	97.3
20-24 years	96.8	96.0	106.8	100.4
25-29 years	99.0	95.2	105.1	100.7
30-34 years	99.8	94.8	104.2	101.2
35-39 years	101.5	93.2	104.8	100.5
40-44 years	102.7	92.3	103.4	101.6

indexes. For example, among first births to women 20-24 years old, the January trough was deeper than the spring trough, while for births of third or higher orders the spring trough was deeper with practically no dip in December or January.

It is interesting to speculate on whether shifts in the composition of births by age of mother and live-birth order resulted in minor changes in seasonal birth pattern over time.

Seasonal patterns in other countries.—The pattern of births by month for other countries affords a contrast with the seasonal pattern of births in the United States. The amplitude and timing of the annual birth curve varies considerably from country to country.

For England and Wales the peak month of births occurred in March with a minor peak in September and the annual low point usually in November. In Japan the sharp peak month of births was January with a comparatively small peak in September and the low month in June (fig. 17).

The deviations from the average monthly index are much greater for Japan; in 1961 the January peak was 19 percent above average and the low in June was 12 percent below. In England and Wales the high and low months deviated 9 percent and 6 percent, respectively, from the average (1962); in the United States comparable figures were 8 percent above and 5 percent below average.

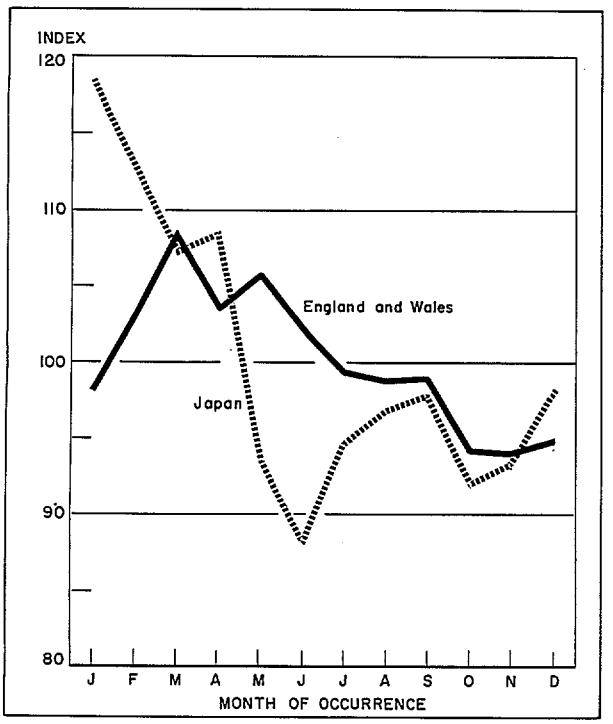

Figure 17. Monthly indexes of live births: England and Wales, 1962, and Japan, 1961.

(Ratio of monthly daily average to that of the calendar year taken as 100)

BIRTHS BY COLOR, RACE, RESIDENCE, AND LEGITIMACY

The following discussion deals with the differential fertility between the white and nonwhite population in the United States in terms of the various measures of fertility introduced earlier in this report. This is followed by an analysis of the fertility of specified races for 1960, made on the basis of population characteristics of nonwhite races released by the Bureau of Census.[17] Fertility by State and geographic division is discussed in terms of birth frequencies and crude birth rates for 1962. Additional geographic analysis is presented showing urban and rural and metropolitan and nonmetropolitan differentials in fertility. The topic illegitimacy in the United States concludes this section.

Fertility by Color

Fertility rates for the white and nonwhite populations of the United States have followed, generally, parallel paths since the Second World War (fig. 18). Since 1950 the *general fertility rate* for white females has increased by about 5 percent, from 102.3 to 107.5 live births per 1,000 females aged 15-44 years, compared with an increase of slightly more than 8 percent, from 137.3 to 148.7, for the nonwhite women in these ages. Since 1960 both white and nonwhite women have experienced declines in fertility of 5 percent and 3 percent, respectively.

The difference in fertility between white and nonwhite women is manifest for every age group, with the most striking differences for the youngest and oldest 5-year age groups (table 32). Fertility

is almost 10 times higher for nonwhite mothers aged 10-14 years, and about 2 times higher for those aged 45-49 years. The least difference between the two groups occurs among women aged 25-29 years, where the nonwhite *age-specific fertility rate* is about 16 percent higher than the rate for white women. About one out of every five women in these ages bore a child in 1962.

Among white mothers, births of lower orders (first, second, and third) accounted for 72 percent

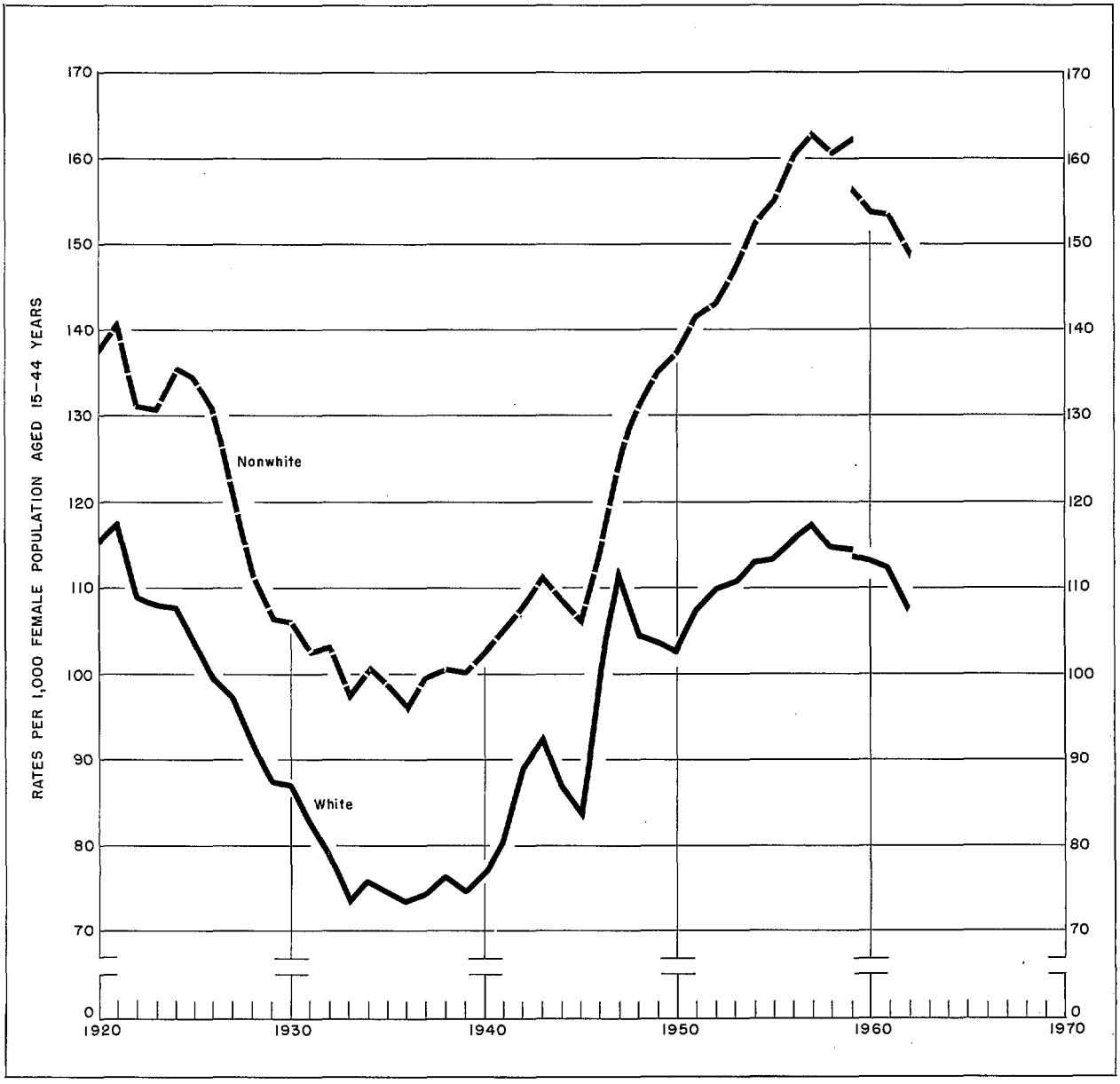

Figure 18. Fertility rates by color, 1920-62.

Table 32. Birth rates, by age of mother, color, and live-birth order: United States, 1962

(Notes to tables given on page VIII)

Color and live-birth order	Total fertility rates[1]	Age of mother							
		10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years[2]
	Rates per 1,000 female population								
White	3,345.4	0.4	73.2	238.0	187.4	105.0	50.2	14.1	0.8
First birth	877.0	0.4	52.7	86.0	25.4	7.5	2.8	0.7	0.0
Second birth	842.4	0.0	16.8	82.7	46.8	15.7	5.3	1.2	0.1
Third birth	669.7	0.0	3.3	44.9	50.6	24.1	9.1	2.0	0.1
Fourth birth	428.0	-	0.4	17.2	33.7	22.1	9.7	2.4	0.1
Fifth birth	239.4	-	0.1	5.4	17.4	15.1	7.8	2.0	0.1
Sixth and seventh birth	197.7	-	0.0	1.7	11.5	14.3	9.1	2.8	0.2
Eighth birth and over	90.3	-	0.0	0.1	2.1	6.1	6.5	3.1	0.3
Nonwhite	4,391.7	3.9	144.6	285.7	216.8	132.2	72.0	21.7	1.5
First birth	891.5	3.7	83.7	63.4	18.2	6.3	2.4	0.6	0.0
Second birth	803.1	0.2	41.5	73.3	28.9	11.2	4.6	0.9	0.0
Third birth	682.2	0.0	14.8	64.7	34.6	14.6	6.4	1.3	0.1
Fourth birth	545.4	0.0	3.7	43.9	36.3	16.3	7.1	1.7	0.1
Fifth birth	425.6	-	0.7	24.4	33.9	16.7	7.5	1.8	0.1
Sixth and seventh birth	550.3	-	0.1	14.5	45.4	31.6	14.6	3.7	0.2
Eighth birth and over	492.4	-	0.0	1.6	19.4	35.6	29.3	11.6	1.0

[1]Rates are computed by summing rates by age of mother for each 5-year age group and multiplying the results by 5.
[2]Rates are computed by relating births to mothers aged 45 years and over to female population aged 45-49 years.

Table 33. Median age of mother, by live-birth order and color: United States, 1962

(Notes to tables given on page VIII)

Color	Live-birth order							
	Total	First	Second	Third	Fourth	Fifth	Sixth and seventh	Eighth and over
	Median age of mother in years							
White	25.2	21.6	23.8	26.8	28.9	30.7	32.6	35.9
Nonwhite	24.6	19.5	22.2	23.9	25.7	27.5	29.5	33.9

NOTE: Medians computed from distributions of live births by 5-year age groups of mothers.

of the white births in 1962, while only 56 percent of the births to nonwhite mothers in 1962 were of these orders. Among nonwhite women fifth and higher birth orders totaled almost a third of all nonwhite births; this is twice the proportion for white women. In other words nonwhite women are bearing proportionately more children in the higher birth-order groups than white women.

The age of the mother at the birth of her children was also lower on the average for nonwhite than for white women in 1962 (table 33). There has been, however, a trend toward a convergence in the *median age of childbearing* for the two groups. The difference in the median age of white and nonwhite mothers at first births was 3.1 years in 1950 compared with 2.1 in 1962, a reduction of a full year; for second births the difference diminished by 1.7 years during this period; for third births by 1 year; and for fourth and higher birth orders, the difference in median age of childbearing between white and nonwhite women had decreased by 1.6 years.

The sharp drop in the fertility of the population between 1961 and 1962 can be seen clearly in terms of the *total fertility rate*, which declined by over 3 percent for both white and nonwhite women (table 34). As an index of comparative fertility, this rate shows that if no deaths occurred among 1,000 women subject to the nonwhite age-specific fertility schedule, each would bear 4.4 children; under the schedule of the white population, they would bear about 3.3 children per woman (table 32).

A comparison of the *net reproduction rate* with the *gross reproduction rate* affords an indication of the relative loss in fertility sustained by the childbearing population of women through mortality. In 1962 the gross and net reproduction rates for the white females were 1,630 and 1,577 and for the nonwhite, 2,170 and 2,033, respectively.[18] The fact that the difference between these two rates is greater for the nonwhite women than for the white is an indication of the greater age-specific mortality sustained by the nonwhite female population. For hypothetical cohorts of women subject to the age-specific fertility and mortality conditions of 1962, the relative loss in fertility would be almost twice as great for the nonwhite as for the white—6.3 percent for the nonwhite women and 3.3 percent for the white.

Table 34. Indexes of the total fertility rate, by color: United States, 1950 and 1960-62

(Notes to tables given on page VIII)

Color	Year			
	1962	1961	1960	1950[1]
	Index 1960 = 100.0			
White	94.7	99.1	100.0	84.3
Nonwhite	97.1	100.2	100.0	86.9

[1]Births adjusted for underregistration.

Fertility by Specified Race for 1960

A wide range of crude birth rates by specified race were published in *Vital Statistics of the United States 1960,* but these rates were difficult to compare owing partly to the differing age and sex compositions of the populations under consideration. Detailed information on the population composition from the 1960 census permitted standardization of the crude birth rates and general fertility rates by race for 1960 (table 35). Standardization permits comparisons of the rates undistorted by differences in age composition among the racial groups.

The rates by specified race are standardized by the "indirect method," using age-specific fertility rates for the total population as the standard. Since over 80 percent of all births in 1960 were to white mothers, the fertility of the white population closely approximates that of the total in 1960. In fact, standardization has little effect on the fertility of the white population, increasing the crude birth rate from 22.7 to 22.9 live births per 1,000 population and increasing the general fertility rate from 113.2 to 113.9 live births per 1,000 females aged 15-44 years.

The fertility of the nonwhite population is most heavily influenced by the rate of childbearing in the Negro population, which in 1960 contributed over 90 percent of the 657,106 births to this group. Standardization of rates for the Negro population did not diminish the similarity of its fertility to that of the total nonwhite population. Fertility in

Table 35. Age-adjusted and unadjusted birth rates and fertility rates, by specified race: United States, 1960

(Notes to tables given on page VIII)

Race	Age-adjusted[1]		Unadjusted	
	Birth rate	Fertility rate	Birth rate	Fertility rate
	Rates per 1,000 population	Rates per 1,000 women aged 15-44 years	Rates per 1,000 population	Rates per 1,000 women aged 15-44 years
Total	23.7	118.0	23.7	118.0
White	22.9	113.9	22.7	113.2
Nonwhite	29.6	147.4	32.1	153.6
Negro	29.8	148.3	31.9	153.5
Indian	37.6	187.4	40.3	207.3
Japanese	19.8	98.7	28.0	101.6
Chinese	23.9	118.9	24.6	127.3

[1]Standardized by the indirect method, using age-specific fertility rates for the total population, 1960, as the standard.

the nonwhite group was highest among the American Indians, with a standardized fertility rate of 187.4 births per 1,000 females aged 15-44 years, over 26 percent higher than the fertility of Negro women, who ranked second. Fertility of the Chinese women ranked third, differing very little from that of the total population, regardless of race. The fertility rate for the Japanese population was the lowest recorded for any racial group in the United States, with rates about half as high as those for the American Indian and over 13 percent below the rates for the white population.

Fertility by States and Geographic Divisions

Between 1961 and 1962, the crude birth rate declined in all States but two, Arkansas and Nevada. The rate for Arkansas rose from 22.7 live births per 1,000 population to 23.0 and that for Nevada from 25.5 to 25.8. In the same period the number of births declined in all States except nine.

In each of 12 States representing large population concentrations, over 100,000 babies were born during 1962 (table 36). The total number of births for these States was 2,414,800 or almost 60 percent of all the births in the United States. These States in order of decreasing number of births are California, New York, Texas, Illinois, Pennsylvania, Ohio, Michigan, New Jersey, Florida, Massachusetts, North Carolina, and Indiana. By way of contrast, only eight States totaled over 100,000 births in 1950. The States in order of increasing number of births are New York, California, Pennsylvania, Texas, Illinois, Ohio, Michigan, and North Carolina. The change in the relative standing of these States is associated with migration and shifts in population composition during this 13-year period.

In terms of the crude birth rates, the highest were in Alaska (31.1), New Mexico (28.6), Utah (27.1), Louisiana (26.5), and Mississippi (26.2) and the lowest in Oregon (19.8), Pennsylvania (19.9), New York (20.4), West Virginia (21.0), and Oklahoma (21.0).

Table 36. Live births and birth rates: United States, each division and State, 1962

(Notes to tables given on page VIII)

Division and State	Live births	Rates per 1,000 population	Division and State	Live births	Rates per 1,000 population
UNITED STATES	4,167,362	22.4	Geographic Division—Con.		
Geographic Division			South Atlantic		
New England	232,292	21.8	Delaware	11,370	24.2
Middle Atlantic	712,218	20.3	Maryland	76,102	23.8
East North Central	834,462	22.5	District of Columbia	20,082	25.6
West North Central	355,530	22.7	Virginia	96,530	23.1
South Atlantic	623,594	23.0	West Virginia	37,274	21.0
East South Central	288,206	23.4	North Carolina	109,672	23.2
West South Central	427,870	24.1	South Carolina	58,144	23.9
Mountain	186,850	24.9	Georgia	99,196	24.2
Pacific	506,340	22.2	Florida	115,224	21.1
New England			East South Central		
Maine	22,936	23.0	Kentucky	69,826	22.7
New Hampshire	14,034	22.2	Tennessee	80,974	22.3
Vermont	9,240	23.7	Alabama	78,514	23.4
Massachusetts	112,168	21.7	Mississippi	58,892	26.2
Rhode Island	18,372	21.2	West South Central		
Connecticut	55,542	21.4	Arkansas	41,976	23.0
Middle Atlantic			Louisiana	88,100	26.5
New York	354,152	20.4	Oklahoma	51,294	21.0
New Jersey	131,714	21.1	Texas	246,500	24.4
Pennsylvania	226,352	19.9	Mountain		
East North Central			Montana	16,864	23.8
Ohio	217,664	21.6	Idaho	16,398	23.5
Indiana	108,648	23.0	Wyoming	8,022	22.0
Illinois	230,878	22.8	Colorado	43,642	22.9
Michigan	182,948	22.9	New Mexico	29,222	28.6
Wisconsin	94,324	23.1	Arizona	37,864	25.1
West North Central			Utah	26,198	27.1
Minnesota	84,770	24.4	Nevada	8,640	25.8
Iowa	60,990	22.0	Pacific		
Missouri	94,228	21.7	Washington	64,824	21.6
North Dakota	15,786	24.6	Oregon	36,996	19.8
South Dakota	17,172	23.8	California	378,880	22.3
Nebraska	33,950	22.9	Alaska	7,652	31.1
Kansas	48,634	21.9	Hawaii	17,988	26.0

NOTE: By place of residence.

While differences in rates among the States are still sizable, they are diminishing. In 1940, the coefficient of variation with regard to State rates was 20.7 percent compared with 9.3 percent for 1962. (The coefficient of variation is the ratio of the standard deviation for the series to the arithmetic mean for the same series expressed as a percent.) This change has resulted, in part, from the marked increases since 1940 in areas with low rates.

For geographic divisions, birth rates were generally lowest in the Middle Atlantic Division and highest in the Mountain Division. There was, however, considerable variation among States within divisions.

Metropolitan and Nonmetropolitan and Urban and Rural Areas

Most births in the United States today are to residents of metropolitan areas. In 1962 there were 2,659,444 births (64 percent of the total) to residents of metropolitan counties, those counties which are included in standard metropolitan statistical areas (metropolitan State economic areas for New England). About the same proportion of white and nonwhite births occurred in these areas; approximately two-thirds of both white and nonwhite births were to residents of metropolitan areas.

A total of 2,610,032 live births, or 63 percent, were to residents of areas classified by the Division of Vital Statistics as urban in 1962. The vital statistics definition differed from that used by the Bureau of the Census in the 1960 Census of Population.[19] The difference in the percent distribution of the population of the United States in 1960 according to the definitions used by the Division of Vital Statistics (DVS) and the Bureau of the Census is as follows:

	Census	*DVS*
Total	100.0	100.0
Urban	69.9	61.1
Rural	30.1	38.9

Illegitimate Births

Qualifications of the data.—The data on illegitimacy for the United States as a whole are based on information on live birth records in those States that require reporting of this item. In 1962, 34 States and the District of Columbia were included in the reporting area. Among the reporting States, New Jersey did not require reporting by color, so all references to illegitimate births by color exclude data for this State.

Estimates of the number of illegitimate births for the nonreporting States are computed on the basis of geographic divisions. The method used assumes that the ratio of illegitimate births to live births is the same for all the States in the same division of the United States. This method is least satisfactory for those divisions in which few States report legitimacy on the birth record.

The legitimacy item on State certificates and on the Standard Certificate of Live Birth is included in a confidential portion of the certificate, and the principle of confidentiality is enjoined upon those few who have access to the document. The States and the National Vital Statistics Division refer to the item for statistical purposes only and the figures produced by the Division constitute the only source of national data on illegitimacy. Without these figures the approximate dimension of illegitimacy would not be known.

The figures on illegitimacy may be called into question because of several factors such as misstatements on birth certificates to conceal illegitimacy and the extent of nonregistration of illegitimate births. The figures on the whole, however, may be taken as a representative minimum, and the actual number of illegitimate births may be said to exceed the stated figures for any year.

The number of illegitimate births.—There were an estimated 245,100 illegitimate live births in the United States in 1962, representing an increase of 4,900 births, or 2 percent, over the figure for 1961. Between 1960 and 1961 there was an increase of 7 percent, with 15,900 more illegitimate births in 1961. The illegitimate live births in 1962 represented 6 percent of all births compared with 5 percent in 1960, 4 percent in

1950, and somewhat less than 4 percent in 1940. While the total number of live births in the country continued to decline, the number of reported illegitimate births continued to increase (table 37).

This increase in the number of illegitimate births continues a trend that has been apparent since the first reporting of illegitimacy in the birth-registration area in 1917. In that year 20 out of every thousand liveborn babies were born out of wedlock. In 1950 the figure was 40; 1960, 53; and in 1962, 59.

The annual number of illegitimate births increased from an estimated 89,500 in 1940 to over 224,000 20 years later. A considerable rise in the frequency of illegitimate births occurred during World War II and postwar years. In the decade 1941-50 the total number of reported illegitimate births was 1,174,500; in the following decade, 1951-60, there were an estimated 1,866,300 illegitimate live births, an increase of almost 59 percent. The significance of the growth of illegitimacy may be gauged by the fact that since the end of World War II, or between 1946 and 1962, the annual number of illegitimate births doubled, increasing by 96 percent.

The illegitimacy rate.—The illegitimacy rate is the number of illegitimate births per 1,000 unmarried women 15-44 years of age. In 1940 this rate was 7.1; by 1950 it had doubled and by 1960 tripled (table 37). In 1962 the rate was 21.5 illegitimate births per 1,000 unmarried women of reproductive age. Changes in this rate may be accounted for in terms of two principal factors: the size of the unmarried female population of reproductive age and the number of births out of wedlock. Between 1961 and 1962 an increase in the number of unmarried females in the population aged 15-44 years, particularly in the younger ages, drove the illegitimacy rate down despite an increase in the number of illegitimate births. The rapid growth of the young unmarried female population is the result of the large number of births during and immediately after the Second World War; for example, girls aged 15 and 19 in 1962 were born in 1947 and 1943, respectively, 2 peak years for births in this country.

Table 37. Estimated illegitimate live births, illegitimacy rates and ratios: United States, 1940-62

(Notes to tables given on page VIII)

Year	Illegitimate live births	Illegitimacy rate	Illegitimacy ratio
	Number	Rates per 1,000 unmarried female population aged 15-44 years	Ratios per 1,000 total live births
1962-----	245.1	21.5	58.8
1961-----	240.2	22.6	56.3
1960-----	224.3	21.8	52.7
1959-----	220.6	22.1	52.0
1958-----	208.7	21.0	49.6
1957-----	201.7	20.9	47.4
1956-----	193.5	20.2	46.5
1955-----	183.3	19.3	45.3
1954-----	176.6	18.3	44.0
1953-----	160.8	17.0	41.2
1952-----	150.3	15.6	39.1
1951-----	146.5	15.1	39.1
1950-----	141.6	14.1	39.8
1949-----	133.2	13.3	37.4
1948-----	129.7	12.5	36.7
1947-----	131.9	12.1	35.7
1946-----	125.2	10.9	38.1
1945-----	117.4	10.1	42.9
1944-----	105.2	9.0	37.6
1943-----	98.1	8.3	33.4
1942-----	96.5	8.0	34.3
1941-----	95.7	7.8	38.1
1940-----	89.5	7.1	37.9

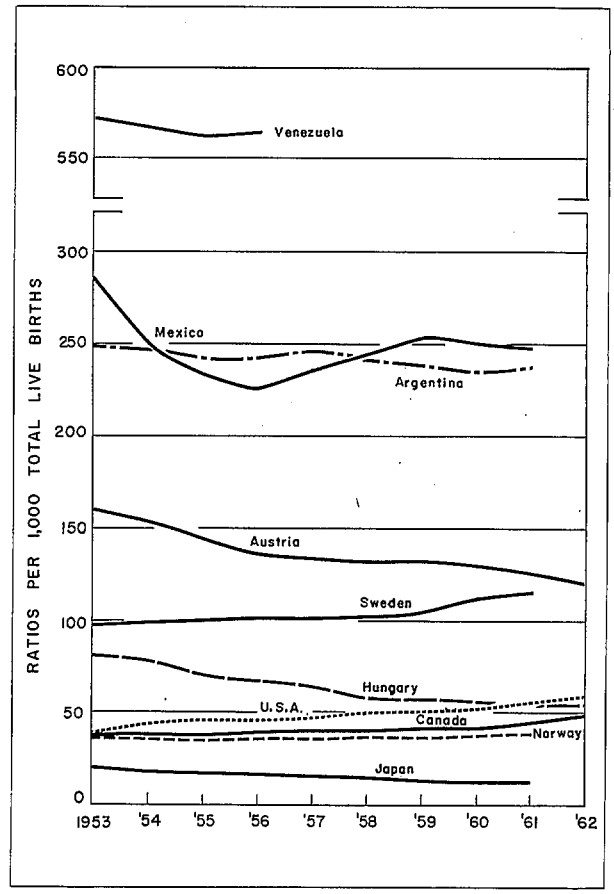

Figure 19. Illegitimacy ratios for selected countries, 1953-62.

The illegitimacy ratio.—The illegitimacy ratio, the number of illegitimate live births per 1,000 total live births, has risen steadily since the early 1950's in the United States (table 37). After the high of 42.9 in 1945, the ratio declined for 2 years, then rose to over 40 in 1953, 50 in 1959, and to 58.8 illegitimate live births per 1,000 total births in 1962.

The illegitimacy ratio is useful for international comparisons particularly where the data on births may be more accurate than the data on population by age and sex. Illegitimacy ratios for the United States and selected countries for the years 1953-62 are shown in figure 19. For the United States illegitimacy ratios are below those of many European countries and all Latin American countries.

Illegitimacy by age of mother.—In 1962, 41 percent of the mothers having illegitimate children were 19 years of age or younger, and almost three-fourths were under 25 years of age.

In terms of 5-year age-of-mother groups, most illegitimate births were to mothers aged 15-19 years, with the next highest number born to mothers aged 20-24 years. An estimated 99,500 illegitimate babies, 40.6 percent of the total, were born to mothers under 20 years of age in 1962.

Over the period 1952-62 the illegitimacy rates for women 25-29 years of age doubled (table 38). There was an impressive increase for those aged 30 years and over. The general trend of increasing age-specific illegitimacy rates reversed between 1961 and 1962, with decreases among the youngest

Table 38. Estimated illegitimacy rates, by age of mother: United States, 1940-62

(Notes to tables given on page VIII)

Year	Age of mother						
	15-44 years[1]	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years[2]
	Rates per 1,000 unmarried female population						
1962-----	21.5	14.9	41.8	46.4	27.0	13.5	3.4
1961-----	22.6	16.0	41.2	44.8	28.9	15.1	3.8
1960-----	21.8	15.7	40.3	42.0	27.5	13.9	3.6
1959-----	22.1	---	---	---	---	---	---
1958-----	21.0	15.4	37.3	37.8	27.6	13.2	3.2
1957-----	20.9	15.6	36.5	37.6	26.1	12.7	3.3
1956-----	20.2	15.7	36.3	36.0	25.3	10.2	2.6
1955-----	19.3	15.0	33.7	32.1	22.2	10.7	2.7
1954-----	18.3	14.6	30.0	32.0	19.2	10.3	2.5
1953-----	17.0	13.8	28.5	27.6	17.9	8.9	2.4
1952-----	15.6	13.3	25.6	23.1	15.9	8.0	1.8
1951-----	15.1	13.1	23.2	24.4	14.0	7.8	2.3
1950-----	14.1	12.6	21.3	19.9	13.3	7.2	2.0
1949-----	13.3	12.0	21.0	18.0	11.5	6.9	1.9
1948-----	12.5	11.4	19.8	16.4	10.0	5.8	1.6
1947-----	12.1	11.0	18.9	15.7	9.2	5.6	1.8
1946-----	10.9	9.5	17.3	15.6	7.3	4.4	1.8
1945-----	10.1	9.5	15.3	12.1	7.1	4.1	1.6
1944-----	9.0	8.8	13.1	10.1	7.0	4.0	1.3
1943-----	8.3	8.4	11.4	8.8	6.7	3.8	1.3
1942-----	8.0	8.2	11.0	8.4	6.3	3.8	1.2
1941-----	7.8	8.0	10.5	7.8	6.0	3.7	1.4
1940-----	7.1	7.4	9.5	7.2	5.1	3.4	1.2

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

[2]Rates computed by relating births to mothers aged 40 years and over to unmarried female population aged 40-44 years.

Table 39. Indexes of the illegitimacy rate by age of mother: United States, 1952 and 1960-62

(Notes to tables given on page VIII)

Age of mother	1952	1960	1961	1962
	Index: 1960 = 100.0			
Total-15-44 years----	71.6	100.0	103.7	98.6
15-19 years----------	85.4	100.0	101.9	94.9
20-24 years----------	63.5	100.0	102.2	103.7
25-29 years----------	55.0	100.0	106.7	110.5
30-34 years----------	57.8	100.0	105.1	98.2
35-39 years----------	57.6	100.0	108.6	97.1
40-44 years----------	50.0	100.0	105.6	94.4

and oldest age groups (table 39). There were slight increases among women aged 20-29 years.

A question frequently asked is: Is the proportion of teenage unwed mothers increasing? Figure 20 shows the percentage distribution of unwed mothers by age. There was an abrupt decline in the proportion of teenage mothers following World War II. In 1948 the proportion of teenage unwed mothers was 42.8 percent. This proportion declined to 39.7 percent in 1955, after which there was a 6-year increase to 41.0 percent in 1961. In 1962 the proportion dropped to 40.6 percent. The percentage changes have been small and the slight upward trend since 1955 has not continued. It is possible that the proportion of illegitimate births to teenage mothers may increase in the next few years. One of the factors in such a development would be the increase in the proportion of teenagers in the total population.

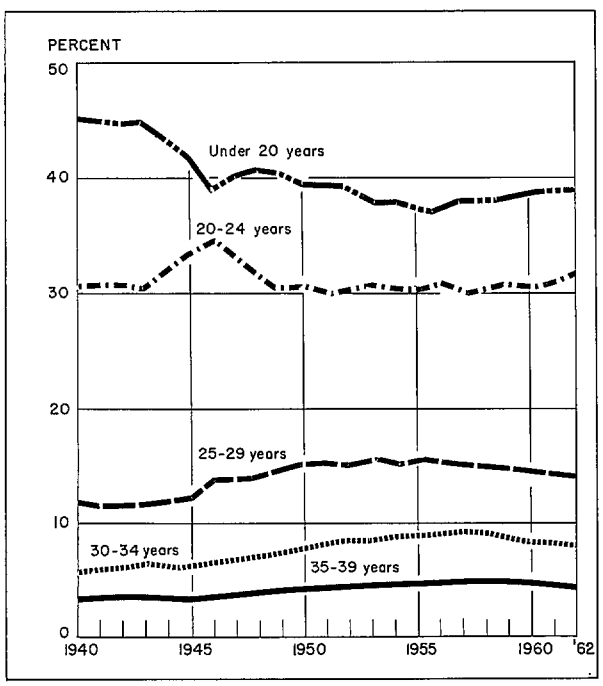

Figure 20. Percent distribution of unwed mothers, by age, 1940-62.

The proportion of mothers aged 20-24 years has increased since 1957, when 30 percent were of this age; in 1962 the proportion was 31.5 percent. The proportion of mothers for ages 25-29 has declined since 1955 and for ages 30-34 since 1958. It has been relatively stable for ages 35-39 since 1949.

Illegitimate births by color.— The increase in the number of illegitimate births has been substantial for both the white and nonwhite populations since 1940 (fig. 21). Between 1940 and 1962 white illegitimate births increased from 40,300 to 93,500, or 132 percent, while nonwhite illegitimate births increased by 200 percent from 49,200 to 147,500. The small decrease in the number of nonwhite illegitimate births between 1961 and 1962 is due to the absence of data by color for New Jersey rather than to any absolute decrease in the incidence of illegitimacy. Because of this problem, no valid comparisons can be made between frequencies of births by color between 1962 and prior years.

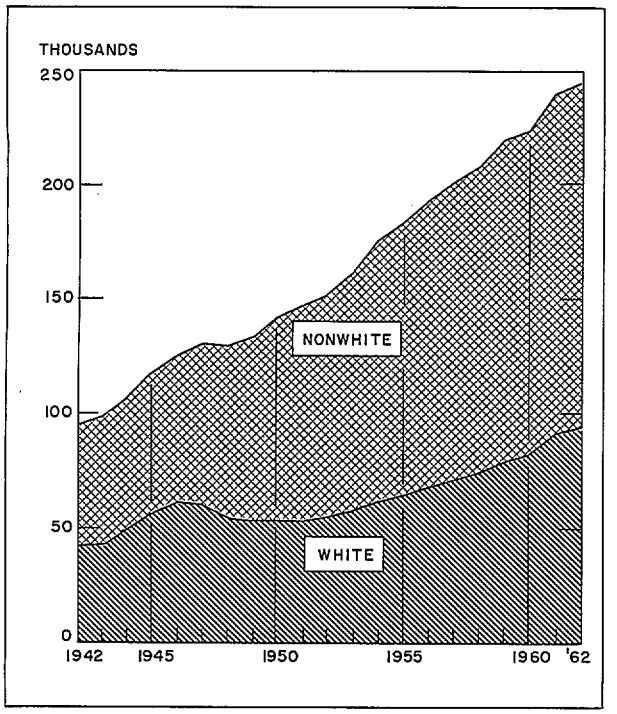

Figure 21. Estimated illegitimate live births by color, 1942-62.

(Data by color do not include New Jersey for 1962 because that State did not require reporting of this item)

A more accurate indication of the annual change in illegitimacy by color is shown by the illegitimacy ratio, which expresses the number of illegitimate births in every 1,000 live births (table 40). The trend of the white and nonwhite ratios was similar to that of the total population. The nonwhite figure reached a high point in 1945 (179.3) and following the war declined to a low of 164.7 in 1948. Thereafter the nonwhite ratio steadily increased. In 1952 the total illegitimacy ratio was 39.1; by 1962 it rose to 58.8. The rise was paralleled by both white and nonwhite groups. The estimated illegitimacy ratio for the white group in 1952 was 16.3; in 1962 it was 27.5. The corresponding ratio for the nonwhite group rose from 183.4 in 1952 to 229.9 in 1962.

Almost half of all births out of wedlock in 1962 were first births, those for white unwed mothers constituting 63 percent of all white births; for nonwhite mothers first births represented about 40 percent of all nonwhite illegitimate births (table 41). Nonwhite mothers had proportionally more illegitimate births of second and higher orders than did white mothers. While over three-fourths of the white births were first and second children, the figure was about 59 percent for the nonwhite.

Illegitimate births by State by color.—In 1962, 34 States and the District of Columbia reported the legitimacy status of live births. The ratios of illegitimate births per 1,000 total live births were highest for the District of Columbia (217.8), Mississippi (143.8), and South Carolina (123.5). For the white births the highest ratios were reported for the District of Columbia (69.9), West Virginia (56.6), Hawaii (37.4), and Oregon (35.3) and the lowest for Mississippi (14.5), Utah (16.0), Alabama (16.5), and Alaska (17.1). For the nonwhite births the highest ratios were reported for Delaware (326.6), Tennessee (316.4), West Virginia (304.5), and Missouri (291.2) and the lowest for Utah (53.5), Hawaii (66.0), and Maine (87.6).[20]

Adequate comparisons between States in terms of illegitimacy ratios cannot properly be made for several reasons. These include the lack of uniformity in the definition of legitimacy, differences in birth registration completeness between illegitimate and legitimate births, and differences in the marital status and age composition of the population.

Table 40. Estimated illegitimate live births and illegitimacy ratios, by color: United States, 1940-62

(Notes to tables given on page VIII)

Year	White	Nonwhite	White	Nonwhite
	Illegitimate live births in thousands		Ratios per 1,000 total live births	
1962	93.5	147.5	27.5	229.9
1961	91.1	149.1	25.3	223.4
1960	82.5	141.8	22.9	215.8
1959	79.6	141.1	22.1	218.0
1958	74.6	134.1	20.9	212.3
1957	70.8	130.9	19.6	206.7
1956	67.5	126.0	19.0	204.0
1955	64.2	119.2	18.6	202.4
1954	62.7	113.9	18.2	198.5
1953	56.6	104.2	16.9	191.1
1952	54.1	96.2	16.3	183.4
1951	52.6	93.9	16.3	182.8
1950	53.5	88.1	17.5	179.6
1949	53.5	79.7	17.3	167.5
1948	54.8	74.9	17.8	164.7
1947	60.5	71.5	18.5	168.0
1946	61.4	63.8	21.1	170.1
1945	56.4	60.9	23.6	179.3
1944	49.6	55.6	20.2	163.4
1943	42.8	55.4	16.5	162.8
1942	42.0	54.5	16.9	169.2
1941	41.9	53.8	19.0	174.5
1940	40.3	49.2	19.5	168.3

Table 41. Percent distribution of live births, by live-birth order, color, and legitimacy status: United States and 35 reporting States, 1962

(Notes to tables given on page VIII)

Color and legitimacy status	Live-birth order								
	Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
White	Percent distribution								
Total	100.0	27.2	24.6	19.3	12.6	7.2	3.9	2.2	3.0
Legitimate	100.0	26.2	24.9	19.6	12.8	7.3	4.0	2.2	3.0
Illegitimate	100.0	62.6	15.5	8.2	5.2	3.2	2.1	1.2	1.7
Nonwhite									
Total	100.0	21.6	18.1	15.1	12.0	9.4	7.2	5.2	11.4
Legitimate	100.0	15.8	17.8	16.1	13.2	10.4	7.9	5.8	13.0
Illegitimate	100.0	39.6	18.9	11.8	8.3	6.4	4.9	3.4	6.4

BIRTHS IN PUERTO RICO AND THE VIRGIN ISLANDS

In 1962, 76,596 live births were registered in Puerto Rico and 1,375 in the Virgin Islands. For Puerto Rico the figure represented a slight increase over the number for 1961 but was almost 10,000 less than the figure for 1950. For the Virgin Islands, in contrast, the number of live births in 1962 was the highest on record. Live births and birth rates for Puerto Rico and the Virgin Islands for selected years are as follows:

	Puerto Rico		*Virgin Islands*	
	Number	*Rate*	*Number*	*Rate*
1962--------	76,596	31.2	1,375	38.5
1961--------	75,418	31.3	1,193	33.8
1960--------	76,314	32.5	1,180	36.8
1955--------	77,830	34.6	913	33.1
1950--------	86,038	38.9	894	33.5
1945--------	86,680	41.9	984	37.4

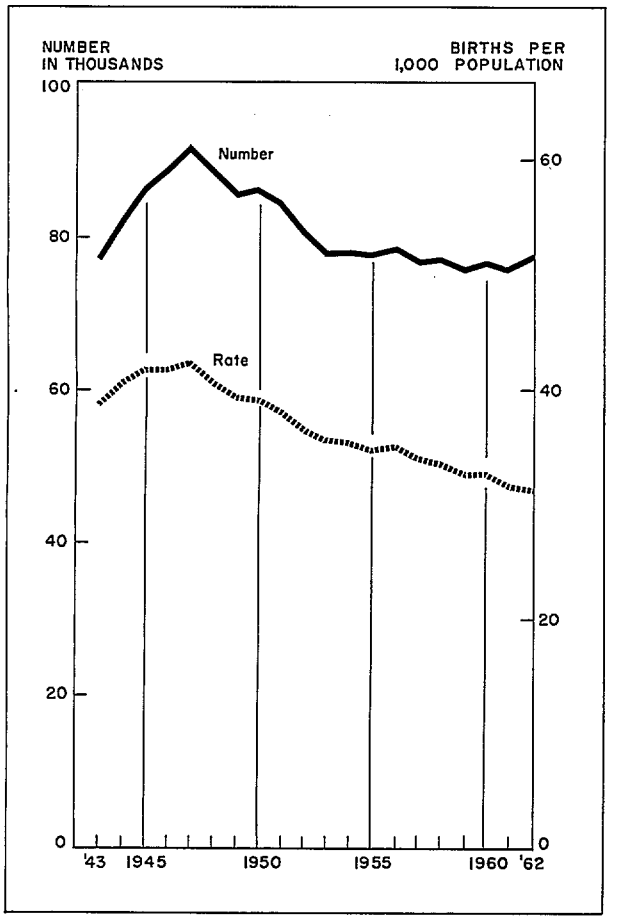

Figure 22. Live births and birth rates, Puerto Rico, 1943-62.

The crude birth rate for Puerto Rico has shown a steady decline since 1947 when the rate was 42.2 live births per 1,000 population (fig. 22). Emigration was a major factor in the decline; most people leaving Puerto Rico were of reproductive age. In 1962 the rate dropped by over 25 percent to 31.2. During this period the rate for the Virgin Islands fluctuated sharply between about 32 and 38 births per 1,000 population, reflecting probably the effects of migration on the small population of the island rather than any important changes in age-specific fertility rates. In 1962 the estimated population of the Virgin Islands was 35,700; for Puerto Rico it was 2,458,000. The percent distributions of births by age of mother for the United States, Puerto Rico, and the Virgin Islands for 1962 are as follows:

Age of mother	*United States*	*Puerto Rico*	*Virgin Islands*
Total----------	100.0	100.0	100.0
Under 15 years ---	0.2	0.1	0.1
15-19 years ------	14.4	16.7	20.2
20-24 years ------	34.7	34.3	31.3
25-29 years ------	25.1	22.6	24.6
30-34 years ------	15.3	13.4	14.5
35-39 years ------	8.0	9.2	6.5
40 years and over-	2.3	3.8	2.8

Distributions of births by age of mother show a greater concentration of maternities among young women aged 15-19 years in the Virgin Islands than in either Puerto Rico or the United States. In all three geographic areas the largest

numbers of births were to women aged 20-24 years. Additional statistics on Puerto Rico and the Virgin Islands on live births by month, attendant at birth, live-birth order, birth weight, color and sex of child, age of father, and by municipio and specified urban place are shown in Section 3, Volume I of *Vital Statistics of the United States, 1962.*

Illegitimate Births

There were 18,484 illegitimate births in Puerto Rico in 1962 and 615 in the Virgin Islands. Puerto Rico's illegitimacy ratio was 241.3 illegitimate births per 1,000 total live births compared with 63.0 for the United States. About one-third of the teenage mothers had children out of wedlock, and in every 5-year age group 20 years and over approximately one-fourth were illegitimate.

The Virgin Islands data show an even higher incidence of illegitimacy. Almost two-thirds of all births to teenagers were illegitimate, and between one-third and one-half of all births to older women by 5-year age groups were illegitimate. The illegitimacy ratio for the Virgin Islands was 447.3 illegitimate births per 1,000 live births.

Caution should be used in comparing the illegitimacy ratios of Puerto Rico and the Virgin Islands with that of the United States because of the differentials which exist in culture, attitudes, and family patterns. In Puerto Rico, for example, 75.7 percent of all births in 1962 were to legally married mothers, and 20.1 percent were to mothers living with the fathers in consensual union. Only 4.1 percent of the births were to mothers who were not legally married and not living in consensual union.

Legal status of parents	*Number of live births*	*Percent of total live births*
Total----------	76,596	100.0
Legally married-----	58,008	75.7
Not married, living together as man and wife----------	15,366	20.1
Not married, not living together-----	3,120	4.1
Not stated ----------	102	0.1

Further, illegitimacy in Puerto Rico has decreased in the last two decades. The proportion of total live births that is illegitimate declined from 34.8 percent in 1944 to 24.3 percent in 1962, according to data published by the Puerto Rico Department of Health.[21]

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Table 10. Birth probabilities, by parity and exact age of mother: United States, 1940-62

(Notes to tables given on page VIII)

Exact age of mother at beginning of year	Parity							
	Zero	One	Two	Three	Four	Five	Six	Seven and over
	Rates per 1,000 female population							
15-19 years								
1962	63	347	352	377	...	...	...	...
1961	66	356	364	404	...	...	...	...
1960	67	357	365	397	...	...	...	...
1959	70	352	360	398	...	...	...	...
1958	71	345	348	393	...	...	...	...
1957	75	354	355	398	...	...	...	...
1956	73	357	361	393	...	...	...	...
1955	69	335	350	390	...	...	...	...
1954	70	331	347	396	...	...	...	...
1953	68	332	333	370	...	...	...	...
1952	65	323	326	392	...	...	...	...
1951	66	334	320	370	...	...	...	...
1950	60	322	320	337	...	...	...	...
1949	62	316	341	406	...	...	...	...
1948	64	300	323	352	...	...	...	...
1947	64	303	314	*	...	...	...	...
1946	46	268	291	*	...	...	...	...
1945	39	228	266	340	...	...	...	...
1944	41	232	301	*	...	...	...	...
1943	47	261	341	*	...	...	...	...
1942	47	269	337	*	...	...	...	...
1941	43	271	347	*	...	...	...	...
1940	41	257	360	*	...	...	...	...
20-24 years								
1962	175	326	270	283	330	385	408	*
1961	184	337	278	296	338	390	446	*
1960	187	341	281	300	350	406	444	*
1959	186	335	273	292	340	398	465	*
1958	189	331	270	288	344	392	424	*
1957	195	338	276	296	348	414	449	*
1956	188	329	268	294	343	404	460	*
1955	176	317	258	286	347	394	462	*
1954	172	314	256	290	351	402	518	*
1953	162	300	247	285	355	382	*	*
1952	159	287	246	287	355	393	*	*
1951	154	277	245	291	358	397	*	*
1950	142	257	237	284	354	403	*	*
1949	149	251	233	289	369	455	*	*
1948	157	241	229	277	340	410	*	*
1947	174	247	223	268	318	395	*	*
1946	139	231	218	270	320	381	*	*
1945	101	168	188	250	312	377	*	*
1944	107	190	215	281	352	442	*	*
1943	118	215	229	291	365	476	*	*
1942	127	210	222	284	358	464	*	*
1941	104	197	220	286	362	489	*	*
1940	92	191	221	299	373	506	*	*
25-29 years								
1962	141	240	175	176	200	246	285	355
1961	143	248	180	183	209	258	300	367
1960	140	252	181	184	208	258	303	352
1959	140	255	181	186	213	262	310	372
1958	139	253	178	183	213	260	309	385
1957	139	254	179	184	217	267	318	385
1956	134	245	174	183	218	273	325	385
1955	134	236	169	182	221	275	320	378
1954	135	231	167	185	230	282	329	377
1953	135	221	162	181	227	285	327	369
1952	136	216	160	181	227	282	320	363
1951	136	205	152	177	223	285	323	361
1950	130	194	144	168	213	274	322	364
1949	138	187	140	165	212	273	321	389
1948	145	182	137	159	207	263	305	356
1947	165	193	142	166	208	256	294	347
1946	135	180	136	170	214	264	294	356
1945	89	147	128	164	212	264	293	363
1944	89	148	137	178	225	278	311	359
1943	103	160	142	185	230	279	312	374
1942	113	146	129	173	215	268	299	363
1941	93	131	123	170	217	279	311	379
1940	83	126	122	170	215	276	308	391

Table 10. Birth probabilities, by parity and exact age of mother: United States, 1940-62—Con.

(Notes to tables given on page VIII)

Exact age of mother at beginning of year	Parity							
	Zero	One	Two	Three	Four	Five	Six	Seven and over
30-34 years	Rates per 1,000 female population							
1962	57	117	90	97	115	149	185	264
1961	59	121	95	104	121	159	198	277
1960	61	120	95	105	124	162	201	282
1959	64	120	98	108	129	169	210	291
1958	65	120	99	110	129	170	211	289
1957	68	123	101	112	135	178	219	296
1956	70	122	100	112	136	180	219	295
1955	73	121	99	112	135	179	217	291
1954	79	125	100	113	136	180	217	297
1953	77	121	98	110	133	172	213	288
1952	77	122	97	109	131	173	211	291
1951	71	118	91	102	125	166	213	290
1950	65	114	87	98	120	163	205	291
1949	64	111	85	96	119	162	210	296
1948	66	111	86	96	119	162	202	285
1947	79	119	91	101	125	169	206	287
1946	69	115	91	105	129	176	210	289
1945	52	104	87	103	131	181	217	296
1944	53	96	85	105	133	187	220	302
1943	60	98	83	104	133	185	218	296
1942	61	86	72	92	121	170	203	281
1941	52	76	67	89	117	167	198	284
1940	48	72	65	87	115	167	200	287
35-39 years								
1962	23	38	35	46	62	85	110	181
1961	25	40	38	49	67	93	119	193
1960	27	40	38	52	68	94	120	195
1959	29	41	40	54	71	99	125	200
1958	30	43	42	55	72	99	124	196
1957	29	44	44	58	75	102	127	207
1956	27	45	45	58	75	100	130	207
1955	26	46	45	59	75	100	127	208
1954	25	46	46	60	75	99	129	212
1953	24	46	45	58	73	97	123	209
1952	25	46	44	56	71	96	118	215
1951	25	44	42	54	68	97	119	215
1950	25	44	41	52	66	93	119	215
1949	27	44	41	52	66	94	119	220
1948	28	45	42	54	67	94	118	211
1947	33	48	45	57	71	99	122	216
1946	29	47	45	56	71	100	125	220
1945	25	43	43	56	71	101	126	227
1944	24	39	39	53	68	100	124	222
1943	25	36	37	50	66	95	119	219
1942	24	30	31	43	59	89	110	208
1941	20	28	29	41	57	88	111	207
1940	19	27	28	40	58	89	109	209
40-44 years								
1962	5	7	7	12	18	27	37	72
1961	5	7	8	13	20	29	40	75
1960	5	7	8	14	21	31	39	77
1959	5	7	9	14	21	31	41	78
1958	4	8	9	14	21	31	41	77
1957	5	8	9	15	21	32	41	81
1956	5	8	10	15	22	31	40	81
1955	5	8	10	15	23	31	38	78
1954	5	8	10	15	22	32	39	81
1953	5	8	9	15	21	30	38	81
1952	5	8	10	14	20	28	36	80
1951	5	8	9	14	19	28	35	83
1950	5	8	8	13	18	27	34	80
1949	6	8	8	13	18	25	33	81
1948	6	8	9	13	18	26	34	80
1947	6	8	9	14	19	27	35	85
1946	6	7	9	13	19	27	34	85
1945	5	7	9	13	18	29	35	87
1944	5	6	8	12	17	27	34	84
1943	4	6	7	11	16	26	32	83
1942	4	5	6	10	15	23	30	78
1941	4	5	6	10	14	24	30	77
1940	4	5	6	10	14	23	31	78

Table 11. Annual central birth rates for all women, by live-birth order, by current age, in groups of cohorts from 1914-18 to 1943-47: United States, 1958-62

(Notes to tables given on page VIII)

Cohort and current age	Calendar year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
		Rates per 1,000 female population								
Current ages-15-19										
1943-47	1962	83.9	57.8	20.4	4.8	0.9	...	...	...	...
1942-46	1961	88.7	61.1	21.5	5.2	0.9	...	...	...	...
1941-45	1960	90.9	62.0	22.5	5.4	1.0	...	...	...	...
1940-44	1959	93.2	63.8	23.0	5.5	0.9	...	...	...	...
1939-43	1958	94.0	64.7	23.2	5.2	0.9	...	...	...	...
Current ages-20-24										
1938-42	1962	243.2	81.6	81.0	47.6	21.0	8.2	2.7	0.8	0.3
1937-41	1961	253.0	85.0	84.7	49.5	21.8	8.2	2.7	0.8	0.3
1936-40	1960	257.0	86.3	87.2	50.2	21.4	8.1	2.7	0.8	0.3
1935-39	1959	252.7	86.0	86.9	48.1	20.4	7.6	2.6	0.8	0.3
1934-38	1958	252.0	88.2	86.4	46.9	19.6	7.5	2.4	0.7	0.3
Current ages-25-29										
1933-37	1962	191.2	24.5	44.5	48.5	34.0	19.5	10.5	5.3	4.4
1932-36	1961	196.5	25.5	46.6	50.2	34.5	19.6	10.5	5.3	4.3
1931-35	1960	196.8	26.5	48.5	50.7	33.7	18.5	10.0	5.0	3.9
1930-34	1959	197.9	27.8	50.3	50.6	33.1	17.9	9.5	4.9	3.8
1929-33	1958	195.0	29.3	51.5	49.4	31.1	16.8	8.9	4.5	3.5
Current ages-30-34										
1928-32	1962	107.3	7.4	15.1	22.8	21.1	15.1	9.9	6.3	9.6
1927-31	1961	112.2	8.0	16.5	24.6	22.3	15.2	9.9	6.3	9.4
1926-30	1960	112.3	8.6	17.4	25.1	22.1	14.8	9.4	6.0	8.9
1925-29	1959	114.5	9.2	18.6	26.4	22.3	14.5	9.2	5.8	8.5
1924-28	1958	114.3	9.6	19.8	27.3	22.0	13.7	8.6	5.5	7.8
Current ages-35-39										
1923-27	1962	53.1	2.8	5.3	8.8	9.4	7.8	5.7	4.1	9.2
1922-26	1961	56.2	3.0	6.0	9.7	10.0	8.2	5.9	4.2	9.2
1921-25	1960	56.6	3.2	6.3	10.0	10.4	8.1	5.7	4.0	8.9
1920-24	1959	58.3	3.5	6.8	10.7	10.6	8.1	5.7	4.0	8.9
1919-23	1958	58.3	3.7	7.4	11.2	10.6	7.8	5.4	3.8	8.4
Current ages-40-44										
1918-22	1962	14.9	0.6	1.2	1.9	2.3	2.0	1.6	1.3	4.0
1917-21	1961	15.5	0.7	1.3	2.0	2.4	2.1	1.7	1.3	4.0
1916-20	1960	15.5	0.8	1.3	2.1	2.4	2.1	1.7	1.2	3.9
1915-19	1959	15.1	0.8	1.3	2.1	2.3	2.0	1.6	1.2	3.8
1914-18	1958	15.0	0.8	1.4	2.1	2.3	2.0	1.5	1.2	3.7

NOTE: These rates are simple averages of the rates for single cohorts in table 12. For comparable data for the years 1917 to 1957, see table 1, "Fertility Tables for Birth Cohorts of American Women, Part 1," by Pascal K. Whelpton and Arthur A. Campbell, National Office of Vital Statistics, Vital Statistics—Special Reports, Vol. 51, No. 1, 1960.

Table 12. Annual central birth rates for all women, by live-birth order, by current age, in each cohort from 1909 to 1948: United States, 1958-62

(Notes to tables given on page VIII)

Cohort and current age	Calendar year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
		Rates per 1,000 female population								
1948										
14 years	1962	4.2	4.2	*	*	*	...	...	...	...
1947										
14 years	1961	4.0	4.0	*	*	*	...	...	...	...
15 years	1962	11.7	10.6	1.0	0.1	0.0	...	...	...	...
1946										
14 years	1960	4.9	4.9	*	*	*	...	...	...	...
15 years	1961	14.7	13.2	1.4	0.1	0.0	...	...	...	...
16 years	1962	37.7	32.1	5.1	0.5	0.0	...	...	...	...
1945										
14 years	1959	4.8	4.8	*	*	*	...	...	...	...
15 years	1960	14.5	13.1	1.3	0.1	0.0	...	...	...	...
16 years	1961	38.9	33.2	5.2	0.5	0.0	...	...	...	...
17 years	1962	73.5	56.4	14.8	2.1	0.2	...	...	...	...
1944										
14 years	1958	4.6	4.6	*	*	*	...	...	...	...
15 years	1959	14.7	13.3	1.3	0.1	0.0	...	...	...	...
16 years	1960	38.6	33.1	5.0	0.5	0.0	...	...	...	...
17 years	1961	76.2	58.8	15.0	2.2	0.2	...	...	...	...
18 years	1962	123.0	83.3	31.6	7.1	1.0	...	...	...	...
1943										
15 years	1958	13.9	12.6	1.2	0.1	0.0	...	...	...	...
16 years	1959	38.3	33.1	4.8	0.4	0.0	...	...	...	...
17 years	1960	75.5	58.3	14.9	2.1	0.2	...	...	...	...
18 years	1961	123.2	84.1	31.4	6.7	1.0	...	...	...	...
19 years	1962	173.8	106.8	49.5	14.4	3.1	...	...	...	...
1942										
16 years	1958	39.8	34.3	5.1	0.4	0.0	...	...	...	...
17 years	1959	79.1	61.4	15.4	2.1	0.2	...	...	...	...
18 years	1960	129.9	88.0	33.8	7.0	1.1	...	...	...	...
19 years	1961	190.1	116.0	54.3	16.4	3.4	...	...	...	...
20 years	1962	219.8	110.0	71.8	27.1	7.7	2.6	0.4	0.1	0.1
1941										
17 years	1958	83.4	64.6	16.4	2.2	0.2	...	...	...	...
18 years	1959	136.7	92.7	35.5	7.5	1.0	...	...	...	...
19 years	1960	195.6	117.4	57.4	17.3	3.5	...	...	...	...
20 years	1961	231.9	114.3	76.1	29.7	8.6	2.6	0.5	0.1	0.0
21 years	1962	247.1	98.6	87.2	41.5	14.4	4.1	1.0	0.2	0.1
1940										
18 years	1958	137.7	93.7	35.7	7.2	1.1	...	...	...	...
19 years	1959	197.3	118.6	57.9	17.3	3.5	...	...	...	...
20 years	1960	235.2	114.2	78.5	30.7	8.5	2.6	0.5	0.1	0.1
21 years	1961	254.3	100.9	89.7	42.8	15.3	4.3	1.0	0.2	0.1
22 years	1962	253.9	82.4	87.9	51.8	21.4	7.7	2.1	0.5	0.1
1939										
19 years	1958	195.4	118.5	57.5	16.1	3.3	...	...	...	...
20 years	1959	234.7	114.2	79.7	29.5	8.2	2.5	0.5	0.1	0.0
21 years	1960	256.8	102.4	91.2	43.3	14.7	4.0	0.9	0.2	0.1
22 years	1961	260.8	85.6	91.0	52.1	22.0	7.3	2.1	0.5	0.2
23 years	1962	252.8	65.8	83.5	58.4	28.2	11.4	4.0	1.1	0.4
1938										
20 years	1958	230.4	115.2	76.6	27.9	7.6	2.5	0.4	0.1	0.1
21 years	1959	253.5	102.3	90.7	41.4	14.1	3.8	0.9	0.2	0.1
22 years	1960	266.4	87.7	93.7	53.5	21.5	7.2	2.1	0.5	0.2
23 years	1961	264.0	69.6	87.7	60.4	29.1	11.5	4.1	1.2	0.4
24 years	1962	242.5	51.2	74.5	59.3	33.2	15.2	6.1	2.1	0.9
1937										
21 years	1958	251.4	103.7	89.1	39.9	13.8	3.8	0.8	0.2	0.1
22 years	1959	257.7	86.0	91.8	50.0	20.5	6.8	1.9	0.5	0.2
23 years	1960	268.1	71.6	90.3	60.4	28.8	11.6	3.9	1.1	0.4
24 years	1961	254.1	54.6	79.1	62.5	33.9	15.1	5.9	2.1	0.9
25 years	1962	226.1	39.2	63.8	57.7	34.7	17.7	8.2	3.2	1.6

Table 12. Annual central birth rates for all women, by live-birth order, by current age, in each cohort from 1909 to 1948: United States, 1958-62—Con.

(Notes to tables given on page VIII)

Cohort and current age	Calendar years	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
		Rates per 1,000 female population								
1936										
22 years	1958	262.0	90.0	92.8	50.3	19.9	6.7	1.8	0.4	0.1
23 years	1959	264.5	71.5	90.4	58.7	27.4	11.0	3.9	1.1	0.5
24 years	1960	259.2	55.8	82.4	62.9	33.7	15.2	6.2	2.1	0.9
25 years	1961	233.0	40.5	66.3	59.3	35.5	18.2	8.2	3.3	1.7
26 years	1962	209.6	29.7	53.1	54.2	36.0	19.3	9.9	4.6	2.8
1935										
23 years	1958	264.3	74.0	90.8	57.5	26.5	10.4	3.7	1.0	0.4
24 years	1959	253.2	55.8	81.8	60.9	32.0	14.0	5.8	2.1	0.8
25 years	1960	234.4	41.2	69.0	60.2	34.6	16.9	7.8	3.2	1.5
26 years	1961	214.7	30.8	55.3	55.8	36.1	19.6	9.9	4.4	2.8
27 years	1962	190.8	22.9	43.3	48.7	34.9	20.4	11.0	5.5	4.1
1934										
24 years	1958	252.3	58.2	82.5	59.1	30.3	14.0	5.5	1.9	0.8
25 years	1959	236.1	43.3	70.1	59.9	34.1	16.5	7.6	3.1	1.5
26 years	1960	216.9	31.8	57.2	56.3	36.3	18.7	9.6	4.3	2.7
27 years	1961	196.3	23.4	45.2	50.6	35.9	20.4	10.9	5.7	4.2
28 years	1962	173.8	17.3	34.4	43.8	33.6	20.6	11.7	6.4	6.0
1933										
25 years	1958	234.4	45.1	71.7	57.8	32.4	16.0	7.1	2.8	1.5
26 years	1959	218.9	33.4	60.3	55.8	35.2	18.2	9.1	4.3	2.6
27 years	1960	196.9	24.7	46.9	51.5	34.8	19.3	10.4	5.3	4.0
28 years	1961	180.0	18.4	37.0	45.9	34.0	20.7	11.9	6.3	5.8
29 years	1962	155.6	13.5	28.1	38.0	30.6	19.4	11.9	6.8	7.3
1932										
26 years	1958	212.2	34.8	60.2	53.7	32.2	16.8	8.3	3.8	2.4
27 years	1959	194.9	25.8	48.3	50.6	33.5	18.2	9.8	5.0	3.7
28 years	1960	177.5	19.4	38.4	45.6	32.9	19.0	11.0	6.1	5.1
29 years	1961	159.4	14.6	29.4	39.6	31.2	19.2	11.6	6.8	7.0
30 years	1962	135.9	10.7	21.8	31.6	27.2	18.3	11.2	6.9	8.2
1931										
27 years	1958	192.7	27.4	50.1	49.6	31.4	16.9	9.3	4.7	3.3
28 years	1959	178.0	20.6	39.9	45.9	32.1	18.5	10.4	5.6	5.0
29 years	1960	158.2	15.2	31.2	39.8	30.1	18.4	11.1	6.3	6.1
30 years	1961	142.5	11.8	24.3	33.9	28.2	18.1	11.2	6.7	8.3
31 years	1962	118.4	8.6	17.7	26.6	23.7	16.1	10.5	6.5	8.7
1930										
28 years	1958	177.6	21.8	41.5	45.6	30.9	17.5	10.0	5.5	4.8
29 years	1959	161.9	16.1	33.1	40.9	30.4	18.0	10.8	6.3	6.3
30 years	1960	145.4	12.9	25.5	34.5	28.2	17.9	11.2	6.9	8.3
31 years	1961	125.9	9.5	19.2	28.6	25.5	16.7	10.7	6.8	8.9
32 years	1962	108.9	7.2	14.8	22.4	21.3	15.7	10.3	6.8	10.4
1929										
29 years	1958	158.3	17.4	34.2	40.5	28.7	16.6	9.6	5.6	5.7
30 years	1959	147.4	13.6	27.5	36.0	28.3	17.2	10.7	6.5	7.6
31 years	1960	122.9	9.8	20.2	28.9	24.3	15.8	9.7	6.1	8.1
32 years	1961	111.0	7.7	15.7	23.9	22.3	15.4	10.0	6.4	9.6
33 years	1962	92.0	5.7	11.6	18.1	18.0	13.4	9.1	5.8	10.3
1928										
30 years	1958	146.2	14.2	28.7	36.8	27.2	16.2	9.8	6.2	7.1
31 years	1959	124.7	10.6	20.9	30.1	24.5	15.6	9.5	5.8	7.7
32 years	1960	111.5	8.2	16.7	24.7	22.1	15.0	9.6	6.1	9.1
33 years	1961	97.4	6.1	12.8	19.8	19.1	13.9	9.3	6.2	10.2
34 years	1962	81.6	4.8	9.6	15.3	15.5	11.9	8.4	5.7	10.4
1927										
31 years	1958	122.6	10.9	22.5	30.6	23.6	14.1	8.7	5.3	6.9
32 years	1959	112.8	8.7	17.6	25.9	22.1	14.5	9.5	5.9	8.6
33 years	1960	95.9	6.4	13.3	20.1	19.2	13.2	8.6	5.8	9.3
34 years	1961	84.1	5.1	10.3	16.6	16.3	12.0	8.2	5.7	9.9
35 years	1962	71.3	4.1	7.7	13.0	13.3	10.6	7.5	5.1	10.0

Table 12. Annual central birth rates for all women, by live-birth order, by current age, in each cohort from 1909 to 1948: United States, 1958-62—Con.

(Notes to tables given on page VIII)

Cohort and current age	Calendar year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
		Rates per 1,000 female population								
1926										
32 years	1958	113.9	9.3	19.2	26.8	22.3	13.9	8.7	5.6	8.1
33 years	1959	99.2	7.1	14.6	21.4	19.6	13.2	8.5	5.6	9.2
34 years	1960	85.9	5.6	11.2	17.5	16.6	12.1	8.0	5.3	9.6
35 years	1961	76.4	4.4	9.0	14.3	14.3	11.2	7.6	5.3	10.3
36 years	1962	62.0	3.3	6.5	10.6	11.1	9.2	6.6	4.6	10.1
1925										
33 years	1958	100.1	7.5	15.6	22.9	19.5	13.0	8.1	5.2	8.3
34 years	1959	88.2	6.0	12.2	18.6	17.0	12.1	7.8	5.3	9.2
35 years	1960	76.9	4.7	9.5	14.8	15.0	10.9	7.3	5.0	9.7
36 years	1961	65.5	3.7	7.1	11.7	12.0	9.4	6.8	4.8	10.0
37 years	1962	51.8	2.5	5.1	8.3	9.4	7.8	5.7	4.0	9.0
1924										
34 years	1958	89.3	6.3	13.1	19.5	17.5	11.5	7.5	5.1	8.8
35 years	1959	78.2	5.1	10.0	15.7	15.0	10.8	7.2	4.9	9.5
36 years	1960	65.7	3.9	7.6	12.0	12.3	9.4	6.5	4.4	9.6
37 years	1961	54.7	2.8	5.6	9.2	9.8	8.3	5.9	4.0	9.1
38 years	1962	44.4	2.2	4.1	6.9	7.5	6.5	4.7	3.6	8.9
1923										
35 years	1958	78.5	5.3	10.8	16.7	15.0	10.4	7.0	4.5	8.8
36 years	1959	66.9	4.2	8.1	12.7	12.5	9.4	6.5	4.5	9.0
37 years	1960	55.1	3.0	6.0	9.6	10.0	8.0	5.8	4.0	8.7
38 years	1961	47.2	2.4	4.7	7.4	8.0	6.9	5.1	3.8	8.9
39 years	1962	35.3	1.7	3.0	5.2	5.7	5.0	3.9	3.0	7.8
1922										
36 years	1958	67.2	4.5	8.9	13.3	12.6	9.1	6.2	4.2	8.4
37 years	1959	56.8	3.3	6.4	10.3	10.3	8.2	5.7	3.9	8.7
38 years	1960	47.7	2.6	4.7	7.8	8.5	6.7	4.9	3.6	8.9
39 years	1961	37.5	1.8	3.5	5.7	6.1	5.4	4.2	2.9	7.9
40 years	1962	27.5	1.2	2.4	3.8	4.4	3.8	3.0	2.3	6.6
1921										
37 years	1958	57.5	3.7	7.2	10.8	10.5	7.9	5.3	3.7	8.4
38 years	1959	49.1	2.7	5.2	8.2	8.7	6.8	5.0	3.6	8.9
39 years	1960	37.8	2.0	3.6	5.9	6.2	5.3	4.0	3.0	7.8
40 years	1961	28.9	1.4	2.6	4.1	4.7	4.0	3.1	2.4	6.6
41 years	1962	19.0	0.8	1.6	2.5	3.1	2.6	2.1	1.6	4.7
1920										
38 years	1958	51.0	3.0	5.9	8.9	8.7	6.9	5.0	3.6	9.0
39 years	1959	40.2	2.3	4.1	6.5	6.6	5.4	4.1	3.0	8.2
40 years	1960	29.7	1.5	2.6	4.3	4.9	4.1	3.2	2.4	6.7
41 years	1961	20.7	1.0	1.7	2.7	3.3	2.8	2.3	1.8	5.1
42 years	1962	14.6	0.6	1.1	1.7	2.1	1.9	1.6	1.3	4.3
1919										
39 years	1958	37.6	2.2	4.2	6.2	6.3	4.9	3.7	2.8	7.3
40 years	1959	29.1	1.6	2.7	4.4	4.7	3.9	3.0	2.2	6.6
41 years	1960	20.0	1.0	1.8	2.7	3.2	2.8	2.1	1.6	4.8
42 years	1961	14.1	0.7	1.0	1.9	2.0	1.9	1.5	1.2	3.9
43 years	1962	8.4	0.4	0.6	0.9	1.1	1.1	0.9	0.7	2.7
1918										
40 years	1958	28.6	1.7	3.0	4.4	4.6	3.9	2.8	2.2	6.0
41 years	1959	19.5	1.1	1.7	2.8	3.1	2.6	2.0	1.6	4.6
42 years	1960	14.0	0.7	1.1	1.8	1.9	1.9	1.6	1.1	3.9
43 years	1961	8.7	0.3	0.7	1.0	1.2	1.2	0.9	0.7	2.7
44 years	1962	4.5	0.2	0.3	0.5	0.6	0.5	0.5	0.4	1.5
1917										
41 years	1958	19.0	1.0	1.9	2.8	3.0	2.5	1.9	1.4	4.5
42 years	1959	14.0	0.7	1.2	1.8	2.1	1.8	1.5	1.1	3.8
43 years	1960	8.8	0.4	0.7	1.1	1.2	1.1	1.0	0.6	2.7
44 years	1961	4.8	0.2	0.3	0.5	0.6	0.7	0.5	0.4	1.6
45 years	1962	2.5	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.9

Table 12. Annual central birth rates for all women, by live-birth order, by current age, in each cohort from 1909 to 1948: United States, 1958-62—Con.

(Notes to tables given on page VIII)

Cohort and current age	Calendar year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
		Rates per 1,000 female population								
1916										
42 years	1958	13.7	0.7	1.2	1.7	2.0	1.8	1.4	1.1	3.8
43 years	1959	8.6	0.4	0.7	1.0	1.2	1.1	0.9	0.7	2.6
44 years	1960	4.7	0.2	0.3	0.5	0.7	0.6	0.5	0.4	1.5
45 years	1961	2.7	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.9
46 years	1962	1.1	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.4
1915										
43 years	1958	8.6	0.4	0.7	1.0	1.2	1.0	0.9	0.7	2.7
44 years	1959	5.0	0.3	0.4	0.6	0.6	0.6	0.5	0.4	1.6
45 years	1960	2.4	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.9
46 years	1961	1.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.4
47 years	1962	0.5	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.2
1914										
44 years	1958	4.9	0.3	0.3	0.5	0.6	0.6	0.5	0.4	1.7
45 years	1959	2.7	0.1	0.2	0.3	0.4	0.3	0.3	0.2	0.9
46 years	1960	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5
47 years	1961	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
48 years	1962	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1913										
45 years	1958	2.6	0.1	0.2	0.3	0.3	0.3	0.2	0.2	1.0
46 years	1959	1.3	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.5
47 years	1960	0.5	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2
48 years	1961	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
49 years	1962	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1912										
46 years	1958	1.2	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.5
47 years	1959	0.5	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.2
48 years	1960	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
49 years	1961	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1911										
47 years	1958	0.6	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.3
48 years	1959	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
49 years	1960	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1910										
48 years	1958	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
49 years	1959	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1909										
49 years	1958	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

NOTE: For comparable data for the years 1917 to 1957, see table 3, Vital Statistics—Special Reports, Vol. 51, No. 1, 1960. Method of computation is discussed in the publication.

Table 13. Cumulative birth rates for all women, by live-birth order, by exact age, in groups of cohorts from 1905-09 to 1944-48: United States, 1959-63

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
Exact ages-15-19		Rates per 1,000 female population								
1944-48	1963	93.2	73.9	16.3	2.7	0.3	...	...	...	...
1943-47	1962	94.4	75.2	16.3	2.6	0.3	...	...	...	...
1942-46	1961	96.8	77.1	16.8	2.6	0.3	...	...	...	...
1941-45	1960	101.0	80.5	17.5	2.7	0.3	...	...	...	...
1940-44	1959	104.2	83.3	17.9	2.7	0.3	...	...	...	...
Exact ages-20-24										
1939-43	1963	956.7	522.5	279.1	107.5	34.4	9.8	2.6	0.6	0.2
1938-42	1962	974.8	533.4	285.0	108.7	34.5	9.7	2.6	0.6	0.3
1937-41	1961	976.0	537.1	285.4	107.1	33.6	9.4	2.5	0.6	0.3
1936-40	1960	968.6	537.8	282.3	103.8	32.3	9.1	2.4	0.6	0.3
1935-39	1959	959.1	536.7	277.8	101.3	31.3	8.8	2.3	0.6	0.3
Exact ages-25-29										
1934-38	1963	2,140.8	826.6	642.9	368.6	175.0	75.9	31.8	12.6	7.4
1933-37	1962	2,126.4	826.3	641.0	363.7	171.1	73.8	30.9	12.3	7.3
1932-36	1961	2,088.9	821.1	632.9	352.9	164.0	70.1	29.4	11.7	6.8
1931-35	1960	2,035.4	811.3	618.9	338.8	155.2	66.3	27.6	11.0	6.3
1930-34	1959	1,979.8	801.2	603.9	323.9	146.3	62.4	25.9	10.3	5.9
Exact ages-30-34										
1929-33	1963	2,714.1	877.8	754.7	503.8	281.9	145.2	75.1	38.5	37.1
1928-32	1962	2,646.3	870.3	741.4	487.2	268.5	137.1	70.7	36.4	34.7
1927-31	1961	2,573.7	863.4	727.8	468.8	253.7	128.2	66.0	33.8	32.0
1926-30	1960	2,507.5	859.9	715.2	450.5	239.5	119.8	61.5	31.4	29.7
1925-29	1959	2,434.6	855.4	700.6	430.3	224.0	111.2	56.8	29.1	27.2
Exact ages-35-39										
1924-28	1963	2,808.8	882.7	749.1	503.5	294.2	162.8	92.3	53.3	70.9
1923-27	1962	2,748.8	880.0	739.7	487.9	281.4	154.4	87.5	50.6	67.3
1922-26	1961	2,697.2	881.0	731.3	473.7	269.4	146.8	83.0	47.9	64.1
1921-25	1960	2,645.6	880.3	722.1	459.2	257.9	139.7	79.1	45.8	61.5
1920-24	1959	2,602.0	880.2	713.3	446.0	248.0	134.0	76.1	44.2	60.2
Exact ages-40-44										
1919-23	1963	2,739.4	885.1	720.9	463.2	270.8	155.0	92.8	57.0	94.6
1918-22	1962	2,671.8	874.7	703.8	447.5	260.4	149.0	89.2	55.0	92.2
1917-21	1961	2,594.2	859.4	684.3	430.2	249.3	142.6	85.5	53.1	89.8
1916-20	1960	2,515.3	842.4	663.6	412.9	238.5	136.6	82.2	51.3	87.8
1915-19	1959	2,426.6	822.3	640.0	394.0	226.8	130.2	78.7	49.3	85.3
Exact ages-45-49										
1914-18	1963	2,401.9	810.9	625.0	384.6	223.9	130.8	80.7	51.2	94.8
1913-17	1962	2,363.2	804.7	612.1	373.2	217.7	128.4	80.1	51.0	96.0
1912-16	1961	2,335.3	800.0	600.8	364.5	213.5	126.9	80.2	51.4	98.0
1911-15	1960	2,315.1	795.3	591.3	357.8	210.5	126.5	80.9	52.2	100.6
1910-14	1959	2,302.2	791.1	583.2	352.6	209.3	126.9	82.0	53.3	103.8
Exact ages-50-54										
1909-13	1963	2,282.8	784.8	573.2	346.4	207.6	127.2	82.7	54.3	106.6
1908-12	1962	2,273.0	780.8	566.2	342.7	207.2	128.0	83.9	55.4	108.8
1907-11	1961	2,268.8	777.9	560.3	339.9	207.5	129.6	85.4	56.5	111.7
1906-10	1960	2,273.0	777.2	555.9	338.7	209.3	131.8	87.4	57.9	114.8
1905-09	1959	2,288.1	779.3	554.3	339.4	212.0	134.8	90.0	59.8	118.5

NOTE: These rates are simple averages of the rates for single cohorts in table 14. For comparable data for the years 1917 to 1958, see table 2, Vital Statistics—Special Reports, Vol. 51, No. 1, 1960.

Table 14. Cumulative birth rates for all women, by live-birth order, by exact age, in each cohort from 1909 to 1948: United States, 1959-63

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
		Rates per 1,000 female population								
1948										
15 years	1963	4.2	4.2	*	*	*	...	...	...	...
1947										
15 years	1962	4.0	4.0	*	*	*	...	...	...	...
16 years	1963	15.7	14.6	1.0	0.1	0.0	...	...	...	...
1946										
15 years	1961	4.9	4.9	*	*	*	...	...	...	...
16 years	1962	19.6	18.1	1.4	0.1	0.0	...	...	...	...
17 years	1963	57.3	50.2	6.5	0.6	0.0	...	...	...	...
1945										
15 years	1960	4.8	4.8	*	*	*	...	...	...	...
16 years	1961	19.3	17.9	1.3	0.1	0.0	...	...	...	...
17 years	1962	58.2	51.1	6.5	0.6	0.0	...	...	...	...
18 years	1963	131.7	107.5	21.3	2.7	0.2	...	...	...	...
1944										
15 years	1959	4.6	4.6	*	*	*	...	...	...	...
16 years	1960	19.3	17.9	1.3	0.1	0.0	...	...	...	...
17 years	1961	57.9	51.0	6.3	0.6	0.0	...	...	...	...
18 years	1962	134.1	109.8	21.3	2.8	0.2	...	...	...	...
19 years	1963	257.1	193.1	52.9	9.9	1.2	...	...	...	...
1943										
16 years	1959	18.7	17.4	1.2	0.1	0.0	...	...	...	...
17 years	1960	57.0	50.5	6.0	0.5	0.0	...	...	...	...
18 years	1961	132.5	108.8	20.9	2.6	0.2	...	...	...	...
19 years	1962	255.7	192.9	52.3	9.3	1.2	...	...	...	...
20 years	1963	429.5	299.7	101.8	23.7	4.3	...	...	...	...
1942										
17 years	1959	60.2	53.3	6.4	0.5	0.0	...	...	...	...
18 years	1960	139.3	114.7	21.8	2.6	0.2	...	...	...	...
19 years	1961	269.2	202.7	55.6	9.6	1.3	...	...	...	...
20 years	1962	459.3	318.7	109.9	26.0	4.7	...	...	...	...
21 years	1963	679.1	428.7	181.7	53.1	12.4	2.6	0.4	0.1	0.1
1941										
18 years	1959	147.8	121.9	22.9	2.8	0.2	...	...	...	...
19 years	1960	284.5	214.6	58.4	10.3	1.2	...	...	...	...
20 years	1961	480.1	332.0	115.8	27.6	4.7	...	...	...	...
21 years	1962	712.0	446.3	191.9	57.3	13.3	2.6	0.5	0.1	0.0
22 years	1963	959.1	544.9	279.1	98.8	27.7	6.7	1.5	0.3	0.1
1940										
19 years	1959	289.5	219.1	59.0	10.0	1.4	...	...	...	...
20 years	1960	486.8	337.7	116.9	27.3	4.9	...	...	...	...
21 years	1961	722.0	451.9	195.4	58.0	13.4	2.6	0.5	0.1	0.1
22 years	1962	976.3	552.8	285.1	100.8	28.7	6.9	1.5	0.3	0.2
23 years	1963	1,230.2	635.2	373.0	152.6	50.1	14.6	3.6	0.8	0.3
1939										
20 years	1959	480.9	336.2	114.4	25.8	4.5	...	...	...	...
21 years	1960	715.6	450.4	194.1	55.3	12.7	2.5	0.5	0.1	0.0
22 years	1961	972.4	552.8	285.3	98.6	27.4	6.5	1.4	0.3	0.1
23 years	1962	1,233.2	638.4	376.3	150.7	49.4	13.8	3.5	0.8	0.3
24 years	1963	1,486.0	704.2	459.8	209.1	77.6	25.2	7.5	1.9	0.7
1938										
21 years	1959	709.0	451.2	189.6	53.2	11.9	2.5	0.4	0.1	0.1
22 years	1960	962.5	553.5	280.3	94.6	26.0	6.3	1.3	0.3	0.2
23 years	1961	1,228.9	641.2	374.0	148.1	47.5	13.5	3.4	0.8	0.4
24 years	1962	1,492.9	710.8	461.7	208.5	76.6	25.0	7.5	2.0	0.8
25 years	1963	1,735.4	762.0	536.2	267.8	109.8	40.2	13.6	4.1	1.7
1937										
22 years	1959	950.4	550.2	274.2	92.6	25.5	6.2	1.2	0.3	0.2
23 years	1960	1,208.1	636.2	366.0	142.6	46.0	13.0	3.1	0.8	0.4
24 years	1961	1,476.2	707.8	456.3	203.0	74.8	24.6	7.0	1.9	0.8
25 years	1962	1,730.3	762.4	535.4	265.5	108.7	39.7	12.9	4.0	1.7
26 years	1963	1,956.4	801.6	599.2	323.2	143.4	57.4	21.1	7.2	3.3

Table 14. Cumulative birth rates for all women, by live-birth order, by exact age, in each cohort from 1909 to 1948: United States, 1959-63—Con.

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
1936		Rates per 1,000 female population								
23 years	1959	1,205.0	639.5	363.8	140.6	44.5	12.6	3.1	0.6	0.3
24 years	1960	1,469.5	711.0	454.2	199.3	71.9	23.6	7.0	1.7	0.8
25 years	1961	1,728.7	766.8	536.6	262.2	105.6	38.8	13.2	3.8	1.7
26 years	1962	1,961.7	807.3	602.9	321.5	141.1	57.0	21.4	7.1	3.4
27 years	1963	2,171.3	837.0	656.0	375.7	177.1	76.3	31.3	11.7	6.2
1935										
24 years	1959	1,450.3	707.3	446.8	194.2	69.9	22.8	6.7	1.8	0.8
25 years	1960	1,703.5	763.1	528.6	255.1	101.9	36.8	12.5	3.9	1.6
26 years	1961	1,937.9	804.3	597.6	315.3	136.5	53.7	20.3	7.1	3.1
27 years	1962	2,152.6	835.1	652.9	371.1	172.6	73.3	30.2	11.5	5.9
28 years	1963	2,343.4	858.0	696.2	419.8	207.5	93.7	41.2	17.0	10.0
1934										
25 years	1959	1,674.6	758.7	519.8	245.9	97.3	35.7	12.1	3.6	1.5
26 years	1960	1,910.7	802.0	589.9	305.8	131.4	52.2	19.7	6.7	3.0
27 years	1961	2,127.6	833.8	647.1	362.1	167.7	70.9	29.3	11.0	5.7
28 years	1962	2,323.9	857.2	692.3	412.7	203.6	91.3	40.2	16.7	9.9
29 years	1963	2,497.7	874.5	726.7	456.5	237.2	111.9	51.9	23.1	15.9
1933										
26 years	1959	1,867.7	792.9	577.5	294.3	125.5	49.6	18.5	6.3	3.1
27 years	1960	2,086.6	826.3	637.8	350.1	160.7	67.8	27.6	10.6	5.7
28 years	1961	2,283.5	851.0	684.7	401.6	195.5	87.1	38.0	15.9	9.7
29 years	1962	2,463.5	869.4	721.7	447.5	229.5	107.8	49.9	22.2	15.5
30 years	1963	2,619.1	882.9	749.8	485.5	260.1	127.2	61.8	29.0	22.8
1932										
27 years	1959	1,994.4	804.4	611.6	327.2	148.4	62.8	25.3	9.7	5.0
28 years	1960	2,189.3	830.2	659.9	377.8	181.9	81.0	35.1	14.7	8.7
29 years	1961	2,366.8	849.6	698.3	423.4	214.8	100.0	46.1	20.8	13.8
30 years	1962	2,526.2	864.2	727.7	463.0	246.0	119.2	57.7	27.6	20.8
31 years	1963	2,662.1	874.9	749.5	494.6	273.2	137.5	68.9	34.5	29.0
1931										
28 years	1959	2,109.2	814.2	638.3	359.5	168.0	75.1	32.9	13.6	7.6
29 years	1960	2,287.2	834.8	678.2	405.4	200.1	93.6	43.3	19.2	12.6
30 years	1961	2,445.4	850.0	709.4	445.2	230.2	112.0	54.4	25.5	18.7
31 years	1962	2,587.9	861.8	733.7	479.1	258.4	130.1	65.6	32.2	27.0
32 years	1963	2,706.3	870.4	751.4	505.7	282.1	146.2	76.1	38.7	35.7
1930										
29 years	1959	2,252.7	835.8	672.5	392.7	192.1	88.6	40.8	18.1	12.1
30 years	1960	2,414.6	851.9	705.6	433.6	222.5	106.6	51.6	24.4	18.4
31 years	1961	2,560.0	864.8	731.1	468.1	250.7	124.5	62.8	31.3	26.7
32 years	1962	2,685.9	874.3	750.3	496.7	276.2	141.2	73.5	38.1	35.6
33 years	1963	2,794.8	881.5	765.1	519.1	297.5	156.9	83.8	44.9	46.0
1929										
30 years	1959	2,315.3	842.7	682.8	407.1	203.6	96.6	45.4	20.7	16.4
31 years	1960	2,462.7	856.3	710.3	443.1	231.9	113.8	56.1	27.2	24.0
32 years	1961	2,585.6	866.1	730.5	472.0	256.2	129.6	65.8	33.3	32.1
33 years	1962	2,696.6	873.8	746.2	495.9	278.5	145.0	75.8	39.7	41.7
34 years	1963	2,788.6	879.5	757.8	514.0	296.5	158.4	84.9	45.5	52.0
1928										
31 years	1959	2,402.2	852.3	698.9	426.9	217.8	105.7	52.6	26.4	21.6
32 years	1960	2,526.9	862.9	719.8	457.0	242.3	121.3	62.1	32.2	29.3
33 years	1961	2,638.4	871.1	736.5	481.7	264.4	136.3	71.7	38.3	38.4
34 years	1962	2,735.8	877.2	749.3	501.5	283.5	150.2	81.0	44.5	48.6
35 years	1963	2,817.4	882.0	758.9	516.8	299.0	162.1	89.4	50.2	59.0
1927										
32 years	1959	2,430.8	850.1	700.6	431.1	225.5	111.0	57.1	29.1	26.3
33 years	1960	2,543.6	858.8	718.2	457.0	247.6	125.5	66.6	35.0	34.9
34 years	1961	2,639.5	865.2	731.5	477.1	266.8	138.7	75.2	40.8	44.2
35 years	1962	2,723.6	870.3	741.8	493.7	283.1	150.7	83.4	46.5	54.1
36 years	1963	2,794.9	874.4	749.5	506.7	296.4	161.3	90.9	51.6	64.1

Table 14. Cumulative birth rates for all women, by live-birth order, by exact age, in each cohort from 1909 to 1948: United States, 1959-63--Con.

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
1926		Rates per 1,000 female population								
33 years	1959	2,490.6	862.5	707.6	440.6	233.4	118.7	62.5	32.8	32.5
34 years	1960	2,589.8	869.6	722.2	462.0	253.0	131.9	71.0	38.4	41.7
35 years	1961	2,675.7	875.2	733.4	479.5	269.6	144.0	79.0	43.7	51.3
36 years	1962	2,752.1	879.6	742.4	493.8	283.9	155.2	86.6	49.0	61.6
37 years	1963	2,814.1	882.9	748.9	504.4	295.0	164.4	93.2	53.6	71.7
1925										
34 years	1959	2,534.0	869.5	713.1	445.7	239.5	124.0	66.6	36.3	39.3
35 years	1960	2,622.2	875.5	725.3	464.3	256.5	136.1	74.4	41.6	48.5
36 years	1961	2,699.1	880.2	734.8	479.1	271.5	147.0	81.7	46.6	58.2
37 years	1962	2,764.6	883.9	741.9	490.8	283.5	156.4	88.5	51.4	68.2
38 years	1963	2,816.4	886.4	747.0	499.1	292.9	164.2	94.2	55.4	77.2
1924										
35 years	1959	2,557.8	874.0	713.9	446.6	242.9	127.0	69.4	38.6	45.4
36 years	1960	2,636.0	879.1	723.9	462.3	257.9	137.8	76.6	43.5	54.9
37 years	1961	2,701.7	883.0	731.5	474.3	270.2	147.2	83.1	47.9	64.5
38 years	1962	2,756.4	885.8	737.1	483.5	280.0	155.5	89.0	51.9	73.6
39 years	1963	2,800.8	888.0	741.2	490.4	287.5	162.0	93.7	55.5	82.5
1923										
36 years	1959	2,578.0	870.6	716.3	448.2	246.1	130.1	72.6	41.8	52.3
37 years	1960	2,644.9	874.8	724.4	460.9	258.6	139.5	79.1	46.3	61.3
38 years	1961	2,700.0	877.8	730.4	470.5	268.6	147.5	84.9	50.3	70.0
39 years	1962	2,747.2	880.2	735.1	477.9	276.6	154.4	90.0	54.1	78.9
40 years	1963	2,782.5	881.9	738.1	483.1	282.3	159.4	93.9	57.1	86.7
1922										
37 years	1959	2,605.4	882.9	715.4	447.0	248.4	133.6	75.7	43.5	58.9
38 years	1960	2,662.2	886.2	721.8	457.3	258.7	141.8	81.4	47.4	67.6
39 years	1961	2,709.9	888.8	726.5	465.1	267.2	148.5	86.3	51.0	76.5
40 years	1962	2,747.4	890.6	730.0	470.8	273.3	153.9	90.5	53.9	84.4
41 years	1963	2,774.9	891.8	732.4	474.6	277.7	157.7	93.5	56.2	91.0
1921										
38 years	1959	2,613.7	883.4	709.7	442.9	249.1	136.7	78.8	46.7	66.4
39 years	1960	2,662.8	886.1	714.9	451.1	257.8	143.5	83.8	50.3	75.3
40 years	1961	2,700.6	888.1	718.5	457.0	264.0	148.8	87.8	53.3	83.1
41 years	1962	2,729.5	889.5	721.1	461.1	268.7	152.8	90.9	55.7	89.7
42 years	1963	2,748.5	890.3	722.7	463.6	271.8	155.4	93.0	57.3	94.4
1920										
39 years	1959	2,655.0	889.9	711.3	445.1	253.3	142.6	84.1	50.6	78.1
40 years	1960	2,695.2	892.2	715.4	451.6	259.9	148.0	88.2	53.6	86.3
41 years	1961	2,724.9	893.7	718.0	455.9	264.8	152.1	91.4	56.0	93.0
42 years	1962	2,745.6	894.7	719.7	458.6	268.1	154.9	93.7	57.8	98.1
43 years	1963	2,760.2	895.3	720.8	460.3	270.2	156.8	95.3	59.1	102.4
1919										
40 years	1959	2,559.7	862.7	684.6	424.7	241.2	135.9	80.7	49.6	80.3
41 years	1960	2,588.8	864.3	687.3	429.1	245.9	139.8	83.7	51.8	86.9
42 years	1961	2,608.8	865.3	689.1	431.8	249.1	142.6	85.8	53.4	91.7
43 years	1962	2,622.9	866.0	690.1	433.7	251.1	144.5	87.3	54.6	95.6
44 years	1963	2,631.3	866.4	690.7	434.6	252.2	145.6	88.2	55.3	98.3
1918										
41 years	1959	2,470.9	830.4	654.4	407.7	234.8	133.0	79.0	49.6	82.0
42 years	1960	2,490.4	831.5	656.1	410.5	237.9	135.6	81.0	51.2	86.6
43 years	1961	2,504.4	832.2	657.2	412.3	239.8	137.5	82.6	52.3	90.5
44 years	1962	2,513.1	832.5	657.9	413.3	241.0	138.7	83.5	53.0	93.2
45 years	1963	2,517.6	832.7	658.2	413.8	241.6	139.2	84.0	53.4	94.7
1917										
42 years	1959	2,410.4	816.8	636.7	391.3	225.6	129.3	77.5	48.8	84.4
43 years	1960	2,424.4	817.5	637.9	393.1	227.7	131.1	79.0	49.9	88.2
44 years	1961	2,433.2	817.9	638.6	394.2	228.9	132.2	80.0	50.5	90.9
45 years	1962	2,438.0	818.1	638.9	394.7	229.5	132.9	80.5	50.9	92.5
46 years	1963	2,440.5	818.2	639.1	395.0	229.8	133.2	80.7	51.1	93.4

Table 14. Cumulative birth rates for all women, by live-birth order, by exact age, in each cohort from 1909 to 1948: United States, 1959-63—Con.

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Live-birth order								
		Total births	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth and over
1916		Rates per 1,000 female population								
43 years	1959	2,369.4	806.1	620.6	379.2	220.0	127.5	78.4	49.1	88.5
44 years	1960	2,378.0	806.5	621.3	380.2	221.2	128.6	79.3	49.8	91.1
45 years	1961	2,382.7	806.7	621.6	380.7	221.9	129.2	79.8	50.2	92.6
46 years	1962	2,385.4	806.8	621.8	381.0	222.2	129.5	80.1	50.5	93.5
47 years	1963	2,386.5	806.8	621.9	381.1	222.4	129.6	80.2	50.6	93.9
1915										
44 years	1959	2,322.0	795.4	603.6	367.1	212.3	125.1	77.7	49.6	91.2
45 years	1960	2,327.0	795.7	604.0	367.7	212.9	125.7	78.2	50.0	92.8
46 years	1961	2,329.4	795.8	604.1	368.0	213.2	126.0	78.4	50.2	93.7
47 years	1962	2,330.6	795.9	604.2	368.1	213.3	126.2	78.5	50.3	94.1
48 years	1963	2,331.1	795.9	604.2	368.2	213.3	126.3	78.6	50.3	94.3
1914										
45 years	1959	2,329.6	800.7	601.5	364.3	212.1	125.3	79.5	50.4	95.8
46 years	1960	2,332.3	800.8	601.7	364.6	212.5	125.6	79.8	50.6	96.7
47 years	1961	2,333.5	800.9	601.8	364.7	212.6	125.7	79.9	50.7	97.2
48 years	1962	2,333.9	800.9	601.8	364.7	212.6	125.8	80.0	50.7	97.4
49 years	1963	2,334.0	800.9	601.8	364.7	212.6	125.8	80.0	50.7	97.5
1913										
46 years	1959	2,326.2	801.6	593.9	357.3	210.7	127.2	81.4	52.2	101.9
47 years	1960	2,327.5	801.7	594.0	357.4	210.8	127.4	81.5	52.3	102.4
48 years	1961	2,328.0	801.7	594.0	357.4	210.9	127.5	81.5	52.4	102.6
49 years	1962	2,328.1	801.7	594.0	357.4	210.9	127.5	81.5	52.4	102.7
50 years	1963	2,328.2	801.7	594.0	357.4	210.9	127.5	81.5	52.4	102.8
1912										
47 years	1959	2,302.5	794.9	582.6	351.7	208.7	126.2	81.5	53.4	103.5
48 years	1960	2,303.0	794.9	582.6	351.7	208.8	126.3	81.6	53.4	103.7
49 years	1961	2,303.1	794.9	582.6	351.7	208.8	126.3	81.6	53.4	103.8
50 years	1962	2,303.2	794.9	582.6	351.7	208.8	126.3	81.6	53.4	103.9
1911										
48 years	1959	2,285.1	783.4	574.0	347.6	207.4	127.3	83.3	54.8	107.3
49 years	1960	2,285.2	783.4	574.0	347.6	207.4	127.3	83.3	54.8	107.4
50 years	1961	2,285.3	783.4	574.0	347.6	207.4	127.3	83.3	54.8	107.5
1910										
49 years	1959	2,267.9	774.9	563.9	342.3	207.8	128.7	84.2	55.5	110.6
50 years	1960	2,268.0	774.9	563.9	342.3	207.8	128.7	84.2	55.5	110.7
1909										
50 years	1959	2,229.7	769.0	551.7	332.8	203.1	126.4	83.1	55.4	108.2

NOTE: For comparable data for the years 1917 to 1958, see table 4, Vital Statistics—Special Reports, Vol. 51, No. 1, 1960. Method of computation is discussed in the publication.

Table 16. Percent distribution of all women, by parity, by exact age, in selected groups of cohorts from 1876-80 to 1944-48: United States, 1920-63

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Parity								
		Total	Zero	One	Two	Three	Four	Five	Six	Seven and over
Exact ages-15-19		Percent distribution								
1944-48	1963	100.0	92.6	5.8	1.4	0.2	-	-	-	-
1943-47	1962	100.0	92.5	5.9	1.4	0.2	-	-	-	-
1942-46	1961	100.0	92.3	6.1	1.4	0.2	-	-	-	-
1941-45	1960	100.0	92.0	6.3	1.5	0.2	-	-	-	-
1936-40	1955	100.0	92.1	6.4	1.3	0.2	-	-	-	-
1931-35	1950	100.0	92.9	5.7	1.2	0.2	-	-	-	-
1926-30	1945	100.0	94.9	4.3	0.7	0.1	-	-	-	-
1921-25	1940	100.0	94.9	4.4	0.6	0.1	-	-	-	-
1916-20	1935	100.0	95.4	4.1	0.5	0.1	-	-	-	-
1911-15	1930	100.0	94.7	4.6	0.6	0.1	-	-	-	-
1906-10	1925	100.0	94.5	4.8	0.6	0.1	-	-	-	-
1901-05	1920	100.0	95.2	4.2	0.5	0.1	-	-	-	-
Exact ages-20-24										
1939-43	1963	100.0	47.7	24.3	17.2	7.3	2.5	0.7	0.2	0.1
1938-42	1962	100.0	46.7	24.8	17.6	7.4	2.5	0.7	0.2	0.1
1937-41	1961	100.0	46.3	25.2	17.8	7.3	2.4	0.7	0.2	0.1
1936-40	1960	100.0	46.2	25.5	17.8	7.2	2.3	0.7	0.2	0.1
1931-35	1955	100.0	50.4	25.4	15.9	5.9	1.8	0.5	0.1	0.0
1926-30	1950	100.0	55.7	26.5	12.7	3.7	1.0	0.3	0.1	-
1921-25	1945	100.0	63.2	22.7	9.6	3.2	1.0	0.2	0.1	0.0
1916-20	1940	100.0	67.2	20.7	8.5	2.6	0.7	0.2	0.1	-
1911-15	1935	100.0	67.9	19.8	8.4	2.8	0.8	0.2	0.1	0.0
1906-10	1930	100.0	63.5	22.1	9.8	3.3	1.0	0.2	0.1	0.0
1901-05	1925	100.0	61.0	23.2	10.5	3.7	1.2	0.2	0.1	0.1
1896-1900	1920	100.0	62.7	21.7	10.1	3.8	1.4	0.2	0.0	0.1
Exact ages-25-29										
1934-38	1963	100.0	17.3	18.4	27.4	19.4	9.9	4.4	1.9	1.3
1933-37	1962	100.0	17.4	18.5	27.7	19.3	9.7	4.3	1.9	1.2
1932-36	1961	100.0	17.9	18.8	28.0	18.9	9.4	4.1	1.7	1.2
1931-35	1960	100.0	18.9	19.2	28.0	18.3	8.9	3.9	1.7	1.1
1926-30	1955	100.0	24.3	23.2	27.4	14.5	6.3	2.6	1.1	0.6
1921-25	1950	100.0	28.4	29.4	24.5	10.4	4.2	1.8	0.8	0.5
1916-20	1945	100.0	37.8	28.0	19.1	8.4	3.9	1.7	0.8	0.3
1911-15	1940	100.0	43.7	26.2	16.2	7.4	3.7	1.7	0.7	0.4
1906-10	1935	100.0	41.5	25.6	16.7	8.3	4.4	2.0	0.9	0.6
1901-05	1930	100.0	36.3	26.2	18.1	9.8	5.5	2.5	1.1	0.1
1896-1900	1925	100.0	34.8	25.3	18.5	10.5	6.1	2.8	1.2	0.8
1891-95	1920	100.0	35.1	23.3	18.5	11.4	6.6	3.0	1.2	0.9

Table 16. Percent distribution of all women, by parity, by exact age, in selected groups of cohorts from 1876-80 to 1944-48: United States, 1920-63—Con.

(Notes to tables given on page VIII)

Cohort and exact age	January 1 of each year	Parity								
		Total	Zero	One	Two	Three	Four	Five	Six	Seven and over
Exact ages-30-34		Percent distribution								
1929-33	1963	100.0	12.2	12.3	25.1	22.2	13.7	7.0	3.7	3.8
1928-32	1962	100.0	13.0	12.9	25.4	21.9	13.1	6.6	3.4	3.7
1927-31	1961	100.0	13.7	13.6	25.9	21.5	12.5	6.2	3.2	3.4
1926-30	1960	100.0	14.0	14.5	26.5	21.1	12.0	5.8	3.0	3.1
1921-25	1955	100.0	15.7	19.8	29.0	18.2	8.9	4.1	2.1	2.2
1916-20	1950	100.0	22.0	23.6	26.4	14.1	6.8	3.3	1.8	2.0
1911-15	1945	100.0	28.7	25.2	22.2	11.2	5.8	3.1	1.8	2.0
1906-10	1940	100.0	30.2	25.1	20.1	10.6	6.1	3.4	2.2	2.3
1901-05	1935	100.0	26.7	24.2	20.2	11.8	7.3	4.2	2.8	2.8
1896-1900	1930	100.0	24.5	22.0	19.9	12.9	8.6	5.1	3.3	3.7
1891-95	1925	100.0	23.3	20.2	19.3	13.6	9.6	5.9	3.7	4.4
1886-90	1920	100.0	24.1	19.1	17.6	13.3	10.1	6.7	4.3	4.8
Exact ages-35-39										
1924-28	1963	100.0	11.7	13.4	24.6	20.9	13.1	7.1	3.9	5.3
1923-27	1962	100.0	12.0	14.0	25.2	20.6	12.7	6.7	3.7	5.1
1922-26	1961	100.0	11.9	15.0	25.8	20.4	12.2	6.4	3.5	4.8
1921-25	1960	100.0	12.0	15.8	26.3	20.1	11.8	6.1	3.3	4.6
1916-20	1955	100.0	17.1	19.1	26.1	17.2	9.3	4.7	2.6	3.9
1911-15	1950	100.0	22.4	21.7	23.9	14.1	7.6	4.0	2.5	3.8
1906-10	1945	100.0	24.7	23.2	21.7	12.3	7.1	4.0	2.7	4.3
1901-05	1940	100.0	22.9	22.8	20.6	12.5	7.9	4.6	3.3	5.4
1896-1900	1935	100.0	21.2	20.3	19.5	13.3	9.1	5.5	4.0	7.1
1891-95	1930	100.0	19.7	18.2	18.4	13.9	10.1	6.4	4.7	8.6
1886-90	1925	100.0	20.0	17.0	16.3	13.2	10.5	7.3	5.5	10.2
1881-85	1920	100.0	20.0	16.3	15.7	12.5	10.2	7.5	6.2	11.6
Exact ages-40-44										
1919-23	1963	100.0	11.5	16.4	25.8	19.2	11.6	6.2	3.6	5.7
1918-22	1962	100.0	12.5	17.1	25.6	18.7	11.2	6.0	3.4	5.5
1917-21	1961	100.0	14.1	17.5	25.4	18.1	10.7	5.7	3.2	5.3
1916-20	1960	100.0	15.8	17.9	25.1	17.4	10.2	5.4	3.1	5.1
1911-15	1955	100.0	20.7	20.5	23.5	14.7	8.3	4.5	2.8	5.0
1906-10	1950	100.0	22.6	22.2	21.8	12.9	7.7	4.4	2.9	5.5
1901-05	1945	100.0	21.4	22.3	20.5	12.7	8.1	4.8	3.5	6.7
1896-1900	1940	100.0	20.2	19.9	19.2	13.3	9.1	5.5	4.1	8.7
1891-95	1935	100.0	18.7	17.7	17.9	13.6	10.1	6.4	4.8	10.8
1886-90	1930	100.0	18.8	16.4	15.7	12.8	10.4	7.2	5.6	13.1
1881-85	1925	100.0	18.7	15.6	15.0	11.9	9.9	7.3	6.2	15.4
1876-80	1920	100.0	17.6	15.3	13.9	11.5	9.8	7.5	6.7	17.7

NOTE: The percent distributions are based upon the cumulative rates in table 13.

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