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ETHNIC DIFFERENCES IN DEMOGRAPHIC BEHAVIOR IN THE UNITED STATES:  
WHAT CAN WE LEARN FROM VITAL STATISTICS ABOUT INEQUALITY?

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Ethnic Differences in Demographic Behavior in the United States: What Can We Learn from Vital Statistics about Inequality?

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**ABSTRACT**

This paper looks at the fertility and mortality experience of racial and ethnic groups in the United States from the early 20th century to the present. The first part consist of a description and critique of the racial and ethnic categories used in the federal census and in the published vital statistics. The second part looks at these two dimensions of demographic behavior. There has been both absolute and relative convergence of fertility across groups. It has been of relatively recent origin and has been due, in large part, to stable birth rates for the majority white population combined with declining birth rates for blacks and the Asian-origin, Hispanic-origin, and American Indian populations. This has not been true for mortality. The black population has experienced absolute convergence but relative deterioration in mortality (neonatal and infant mortality, maternal mortality, expectation of life at birth, and age-adjusted death rates), in contrast to the American Indian and Asian-origin populations. The Asian-origin population actually now has age-adjusted death rates significantly lower than those for the white population. The disadvantaged condition of the black population and the deteriorating social safety net are the likely origins of this outcome. This is a clear indication of relative inequality, as the black population is not sharing as much in the mortality improvements in recent decades.

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## THE CONCEPTS OF RACE AND ETHNICITY IN THE UNITED STATES CENSUS AND VITAL STATISTICS

The fascination of Americans with race, ethnicity, and counting have always come together in the census. From the earliest census's division of the population into three groups to the 63 ethnic categories in Census 2000, the census has both reflected social realities and changes and affected our perceptions of them.<sup>1</sup> This paper summarizes the most recent estimates of trends in population, births, deaths, and infant deaths for most ethnic categories throughout American history. It is meant to serve as a reference about national ethnic trends from 1790 through 2000. Perhaps the most striking patterns show that, while ethnic group behavior has largely converged in fertility and marriage patterns, African-Americans continue to be markedly less healthy than whites or Asian-Americans.

The issue of measuring and analyzing racial and ethnic differences in population characteristics and vital processes has long been a feature of demography in the United States. The federal census has been collecting data on race since the first census of 1790, though that census merely divided the population into free whites, all other free persons, and slaves. The origin of this was in the Constitution itself which specified in Article I, Section 2 that the House of Representatives was to be apportioned "by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other persons." The "three fifths compromise" allowed slave states to count three

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<sup>1</sup> It should be strongly emphasized that the concept of race is a social one with no implication of a biological or genetic significance of component. For a detailed discussion of racial and ethnic classifications in the United States Census, see Lee (1993) for the 1890-1990 period, Edmonston and Schultze (1995, ch. 7) for the 1850 to 1990 period, and Anderson and Fienberg (1999, ch. 8) for the entire range of the federal census.

fifths of their (disenfranchised and thus non-voting) slave populations for the purposes of Congressional representation. This distinction continued up to 1810, when the terms “colored persons” and “Indians not taxed” first appeared. In 1820, the free colored and slave populations were explicitly classified by age and sex. Since slaves were only persons of sub-Saharan African descent, no further racial distinction was used. Also, a category of “foreigners not naturalized” was given (and used again in 1830). This distinction continued up through 1850. In 1860, the categories of “Asiatics,” “Civilized Indians,” and “Half-Breeds” were added for some states.<sup>2</sup> In addition, in 1850, 1860, and 1870, the instruction was added to make a distinction between blacks and mulattos, though precisely how this was to be done was left unclear.<sup>3</sup> A listing of the racial categories used in the U.S. censuses from 1790 to 1990 is provided in Appendix Tables A-1 and A-2.

The question of nativity was not fully addressed until the census of 1850, the first census to enumerate each individual (i.e., a nominal census). The previous six censuses had been enumerations by the name of head of household with summary categories of persons by age, sex, and race. As mentioned, the 1820 and 1830 censuses had questions about “foreigners not naturalized,” but the 1850 census asked a question about each person’s place of birth – state within the United States if native born and country of birth if foreign born. This has continued up to the present. In 1870, questions were added about the nativity of the person’s father and

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<sup>2</sup> Asiatics (likely almost all Chinese) were tabulated only for California, while the ambiguous category of “Half-Breeds” was used only for Wisconsin and New Mexico. “Civilized Indians” were those American Indian people living in regular domiciles in areas subject to enumeration.

<sup>3</sup> For an account of instructions to enumerators up through the 2000 census, see U.S. Bureau of the Census (1979, 2002).

mother, although initially it was only native or foreign born. For the censuses of 1880 to 1970, questions were asked about the detailed nativity of the father and mother (state within the United States, country if abroad), although these were only for samples for 1940-1970.<sup>4</sup> With these questions, it was possible to tabulate the population by nativity. This was extensively done with a major distinction being made between the native white and the foreign-born white populations. Later categories were created for native white of native parentage and native white of foreign or mixed parentage. After 1970, however, the nativity of parents was no longer a question.

Some additional questions were added at various points in time that shed light on ethnicity. For example, a question on mother tongue was inserted in the censuses of 1910-1930 and again in 1960 and 1970 (for samples). Language spoken was also asked in 1910. This has been useful, for example, in analyzing some subgroups such as the Yiddish-speaking Jewish population) for which separate identification is otherwise difficult or impossible. (See, for example, Condran and Kramerow, 1991.) For immigrants, the number of years in the United States in 1900-1920 and again for 1970-1990. The ambiguous and difficult question on “ancestry” was first asked in 1980 and was repeated in 1990 and 2000. It is purely self identification and difficult to interpret.

The question of race has undergone a number of changes over time. At the 1870 census, slavery had legally ceased to exist in the United States, and the non-white population was then divided into “colored” (African American), “civilized Indians,” Chinese, and Japanese. This

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<sup>4</sup> Sampling began in 1940 in which everyone was enumerated on the main form and then persons on the “sample lines” were asked supplementary questions. The same procedure was repeated in 1950. 25% of persons were asked to answer additional questions in 1960 by the enumerator. In 1970, the first true self-enumerating census, a variety of different sample groups were asked to answer additional questions. In 1980, the practice of short and long forms began, with everyone enumerated at least on the short form. When enumerators were used, they were instructed to allow respondents to self identify race (which, of course, would occur with self enumeration).

taxonomy was continued in 1880, but in 1890 the black population was divided into blacks, mulattos, quadroons, and octoroons (see Appendix Table A-2). A simpler classification was restored in 1900, but the question on mulattos was asked again in 1910 and 1920. Thereafter, the black population was identified as “Negro” or, from 1970, also as black. From 1910, the number of categories for other groups has proliferated, as Table A-1 shows. In 1930, a decision was made to reclassify Mexicans as non-white, but that decision was reversed in the 1930s. Consequently, the 1940 census retabulated the population from 1930 with Mexicans placed among whites and published these results along with the 1940 tabulations. The 1990 census had 16 racial categories to choose from, including a residual category of “Other race.”

The detailed tabulation of race, nativity, and ethnicity in the published volumes (for example by age and sex for geographic subunits) closely followed the official categories up to 1860, although detailed tabulations of the native- and foreign-born populations by age, sex, and race did not appear until 1870. Tabulations of the population by age, sex, race, and nativity at least for states then have been published up through the present, although the non-white population has sometimes been aggregated together (e.g., 1940-1960). For 1880, all non-white groups were placed together for the tables in a group called “colored.” From 1870 to 1970, there was a distinction of the native-born and foreign-born white population, though for 1950-1970 it was generated from one of the samples. More recently (1980 and 1990), the distinction of nativity by race has been largely dropped. The current standard broad categories are: White; Black or African American; American Indian or Alaska Native; Asian; and Native Hawaiian or Pacific Islander. These categories were established by the Office of Management and Budget in 1977 in

Statistical Policy Directive 15 and modified in 1997.<sup>5</sup> There are also two questions now on ethnicity: Hispanic or Latino, and Non-Hispanic or Non-Latino.

The identification of race is now self identification, which goes along with self enumeration (in effect since 1970). Some combination of self identification and enumerator identification was used in 1960. Before 1960 the judgement was left to the enumerator's observation. Persons of mixed white and another race were usually identified with the other race. Physical appearance was likely very important. Beginning with the census of 2000, multiple race categories were created to allow individuals to identify as more than one race. The category of "Two or More Races" was 2.9% of the population in 2000 and 2.4% in 2010 (U.S. Bureau of the Census, 2011). This has created problems for the National Center for Health Statistics (NCHS), the agency responsible for collecting vital statistics data from the states. Birth, death, marriage and divorce data come mostly in the form of the four original OMB categories. As a consequence the NCHS has had to bridge the census race categories to create comparable denominators for rates. (Ingram, et. al., 2003). These are the populations used in the calculations here.

The separate enumeration and tabulation of the Hispanic population began in 1970, although the category "Mexican" had been given as an answer to the question on race or color in 1930. Before 1970, it is possible to identify a large portion of the Hispanic-origin population by looking at questions on place of birth, parent's place of birth, mother tongue or language, and (when available in the IPUMS samples) surname. These were used by Gratton and Gutmann (2000) to make their estimates of the size and composition of the Hispanic-origin population (see Table 2).

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<sup>5</sup> The official OMB (Office of Management and Budget) categories from 1977 to the present are now: White; Black or African American; American Indian or Alaska Native; and Asian or Pacific Islander. Census data for 1980 and 1990 and most recent vital statistics data are categorized this way.

Since 1970, specific questions have been asked about Spanish or Hispanic origin or descent. These are described in Appendix Table A-3. Unfortunately, Hispanic origin overlaps other racial categories, and so now there is a further division of the Hispanic and non-Hispanic populations by the OMB categories (white, black or African American, American Indian and Alaskan native, Asian, Hawaiian native or Pacific islander). A considerable amount of tabulation has been done in recent censuses for the Hispanic-origin population.

Citizenship status is a related inquiry. It was first asked in 1900 (citizen (assumed as blank), naturalized, applied for first papers, and alien) and has been included in the census since then with the exception of 1960.<sup>6</sup> In 1980, a confusing question on ancestry was introduced. It is wholly self identified and allows for multiple responses. The question certainly does not describe strict cultural or geographic categories and thus far seems to have had limited value for demographic and social science research.

The categories of race and ethnicity are still in a state of flux, having been changed as recently as 1987. They, and the politicized process of determining the categories, were seriously critiqued by William Petersen:

Indeed, the Census Bureau can do little or nothing to alter the political context of ethnic counts, nor can it escape from fiscal control by a Congress sensitive to racial and ethnic blocs. What it can do, for instance, is not to repeat the egregious error of inviting representatives of special interests to act as formal consultants supervising its operations. Instead of seeking to avoid pressure from ethnic blocs to revise definitions or enumeration procedures, the bureau invited the participation of blacks, Hispanics, Indians, and others, each of whom wanted to shape the process to its political advantage. These committees were of a type different from those made up of statisticians or typical users of census data, for the members were generally chosen less for their knowledge than for their ideology. Giving aspirant leaders this kind of quasi-official status aggravated the disadvantages of the procedure already established—the delineation of ethnic categories by

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<sup>6</sup> The citizenship question in 1970 was in the 5% sample.



self-identification combined with promotional campaigns that stressed the monetary advantages of larger counts, thus encouraging the creation of “instant” members of the various categories. (Petersen, 1987, p. 233.)

Presently, it is explicitly stated by the Census Bureau that the concept of race, whose categories are intended to be mutually exclusive, is not supposed to reflect any biological or anthropological definitions. That is laudable, but the fact remains that rather arbitrary changes over time have made secular comparisons more difficult. An example of the difficulty is the group of Hispanic origin population which is seen as an ethnic, and not a racial, group. Within the Hispanic origin population there are then racial groups. The change to self identification has further complicated matters. This is undoubtedly some improvement over enumerator identification, but further muddying the waters. For example, the American Indian population of the United States grew by 5.4% per annum in the 1970s, 3.6% per annum in the 1980s, and 7.4% per annum in the 1990s.<sup>7</sup> Since this was a group for which net in-migration was likely negligible, such rapid growth would indicate significant amounts of self-redefinition. Finally, the category of “Other” now includes persons who identify with no racial category, often persons of mixed race. We do the best we can with what we have, but the limitations must be kept in mind.

The vital statistics of the United States suffer from many of the same issues. Systematic collection of vital statistics at the federal level only began with the creation of the Death Registration Area in 1900 (comprising at first only ten states and the District of Columbia) and the Birth Registration Area in 1915 (also initially comprising only ten states and the District of Columbia). Both were complete only in 1933 with the admission of Texas. A Marriage

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<sup>7</sup> The term “American Indian” is used here in preference to the term “Native American” because the latter is not properly descriptive of the origins of that group. The Canadian official statistics have used, for example, the terms “aboriginal” and “first inhabitants”.

Registration Area was only set up in 1957, and a Divorce Registration Area was only created in 1958, although national estimates exist for the period since 1920. The Marriage and Divorce Registration Areas are still not complete. Birth and death data were reported by race (with a few exceptions), while marriages and divorces were often not. Through the 20th century, much of the published reporting was done for whites and non-whites (often referred to as “All Others”). Separate reporting for blacks began in 1960 and for the American Indian and Asian or Pacific Islander populations in 1980.

#### RACIAL AND ETHNIC DIFFERENCES IN DEMOGRAPHIC BEHAVIOR

Tables 1 provides information on the size, composition, and growth of the American population by race and ethnicity. An overview of fertility and mortality for the white and black population since 1800 is given in Table 3. Fertility is described in detail in Tables 3 and 4 and mortality in Tables 5 to 7. All the tables exhibit comparisons of differentials of population, fertility and mortality by race and ethnicity.

#### POPULATION SIZE AND COMPOSITION

Table 1 provides information on the size and racial composition of the American population since 1790. The second panel has the percentage breakdown from 1790 to 2010 by race. Note that the category “Hispanic” is not part of the racial categorization and should be looked at separately.

At the beginning of the Republic, about four-fifths of the population was white and one-fifth black, most of whom were slaves in the South. In 1820, the first census to distinguish slaves from free blacks, the free black population was 13% of the total black population. This proportion actually fell to about 11% in 1860, largely due to the higher fertility of slaves relative

to free blacks.. The share on the non-white population began to decline from the early 19th century to about 1930, when it stabilized for several decades. This decline was caused by the significant influx of migrants to the United States, most of whom were white Europeans. Between 1819 (the first date for which we have regular immigrant entry statistics) and 1920, approximately 34 million migrants entered the United States. This total was about 64 million through 1998. (Carter, et. al, 2006, series Ad1-2.)

From about 1950 the white share of total population began to decline such that it fell from about 90% to about 80% in the 2010 census. Although the share of the black population in the total has risen in recent decades, much of the increased share for non-whites has been in the category of “Other Races,” especially Asians, who were about 45% of that group, and the American Indian population (about 15% of “Other Races”). The Hispanic population is comprised of various races and is considered an ethnic and not a racial category (see Table 1). That population has grown at rates of 4% to 6% per year in the decades since 1940. A great deal of that growth more recently has been from persons of Mexican origin, who now comprise about 64% of the Hispanic origin population in 2012. The other important components are those of Puerto Rican origin and Cuban origin (9.2% and 3.5% of the Hispanic population in 2012, respectively), with a very rapidly growing group from other areas of Central and South America.

The implications for the demography of minorities is clear and well known. The United States is becoming less of a nation of white persons of European origin and more a racially and ethnically diverse group. In recent years, the Asian and Hispanic populations have shown the most rapid growth (Table 1, lower panel). The exceptionally fast growth of the American Indian population is due to ethnic re-identification. Given the present immigration laws, policies, and practices in

place and the attraction of the United States labor market, this trend shows every indication of continuing.

## FERTILITY

Evidence on fertility by race is presented in Tables 2 to 4. The measures selected are the crude birth rate, the general fertility rate, the total fertility rate, and the census-based child-woman ratio.<sup>8</sup> A notable feature of fertility in the early Republic was the large family size of white women, who exhibited a crude birth rate of about 55 in 1800 which implies a total fertility rate of about 7 live births per woman in her reproductive lifetime. Information for the black population does not become available until 1820 in the form of a child-woman ratio (children aged 0-4 per 1,000 women aged 20-44) and not until the 1850s for the crude birth rate and the total fertility rate.<sup>9</sup> It is apparent that white fertility declined fairly steadily from 1800 until the onset of the “Baby Boom” in the 1940s, while black fertility remained rather stable up to the Civil War. This is not too surprising, since the incentives under slavery were for the profitable reproduction of the slave population. Nonetheless, after about 1880, the fertility of the black population began to decline in parallel with that for whites.

Table 2 shows that the total fertility rates for blacks and whites did not begin to converge until about 1880, when the black TFR was over 70% higher than the white TFR. There was then a convergence up until about 1920, followed by some widening of the gap to about a 20-40%

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<sup>8</sup> It is possible to reconstruct fertility and mortality rates back into the 19th century. Table 3 reports some of the results currently available. Improved estimates of the fertility of the white population back to 1850 will soon be available using own-children methods with the Integrated Public Use Micro Samples (IPUMS) of the censuses of 1850-1880, being conducted by J. David Hacker.

<sup>9</sup> Note that the rates in Table 3 are for “All Other” (i.e., non-whites) for 1920-1970 for the crude birth rate and for 1940-1990 for the total fertility rate. But much of the non-white population (over 90%) was black during those decades.

higher TFR among black women (about one birth per woman). Since about 1990, however, the gap has begun to close to only a 6.4% higher TFR in 1998, amounting to only about .1 birth per woman. The decline since the end of the “Baby Boom” in the early 1960s has been significant, though much of it occurred in the 1990s. This may be seen graphically in Figure 1. Some of this has come from declines in birth rates among very young black women. For instance, birth rates for black women aged 15-17 declined from 82.3 per 1,000 in 1990 to 22.0 in 2012 (and from 152.9 to 74.4 for black women aged 18-19). (U.S. Bureau of the Census, 2013, Table 4). But there has been some decline in age-specific rates at older ages as well.

From 1980 onwards we have vital statistics for the American Indian and the Asian populations, and from 1989 onwards for the Hispanic-origin population. In all these cases, convergence has been taking place. Indeed, for the Asian and Pacific Islander group, the TFR’s are now below those for the white population, and those for the Hispanic-origin population are very close (Table 4). For the American Indian and Asian populations the convergence was taking place from the early 1980s. Table 4 provides some idea of the origins of all this. White TFR’s stabilized in the 1970s and began a slow increase to above 2 per woman (or 2,000 per 1,000 women) in the late 1990s. The increased representation of the somewhat higher fertility Hispanic women in the white population was certainly playing some role. Simultaneously, the TFR’s for black, American Indian, and Asian women declined a bit. Finally, the fertility of Hispanic-origin women remain roughly stable from 1989. What is occurring is that all groups seem to be converging on about 2 births per woman.

As to why minorities should have different fertility is an open question. If, as in the case of blacks, Hispanics, and the American Indian population, a higher proportion have lower incomes,

less wealth, less stable employment, and less education than the majority white population. These are factors often associated with higher birth rates. But there is also the “Minority Group Status Hypothesis,” which conjectures that minority groups strive to improve their status. (Bean and Marcum, 1978.) This might be achieved using the help of more children, hence leading to higher birth rates. But there is the competing view that the desire to be upwardly mobile might spur more efforts toward family limitation to conserve family resources and concentrate on more human capital per child. Thus the predicted direction of the differential is unclear. The American case would seem to support the view that lower socioeconomic status has had the effect of raising fertility, but that these effects are diminishing over time, as birth rates come close to replacement levels.

## MORTALITY

Tables 5 through 7 provide measures of mortality for the racial and ethnic groups for which reporting was available over longer periods of time. Thus, the breakdown is for whites, all non-whites (“All Others”), and blacks. In the case of Hispanics, some data are available for infant mortality since 1989. The period covered is 1850 to 2014. Table 5 contains data on the neonatal mortality rate (deaths at 0-28 days of life per 1,000 live births), the infant mortality rate (deaths in the entire first year of life per 1,000 live births), and the maternal mortality rate (deaths from childbirth and its complications per 100,000 live births). Table 6 presents the expectation of life at birth by sex and for both sexes combined. Table 7 provides data on age-adjusted death rates by race and sex from 1900 to 2014. The data in Table 5 for 1915 to 1932 are for the current Birth Registration Area only. Similarly, the data in Tables 6 and 7 for 1900 to 1932 are for are also for the Death Registration Area. The relationships to the white population are given in

Table 5 for the neonatal mortality rate, the infant mortality rate, and the maternal mortality rate, Table 6 for the expectation of life at birth, and Table 7 for age-adjusted death rates.

The picture for mortality is different from that for fertility. It is not one of relative convergence. If anything, there has been substantial relative divergence, although there has been much closing of the white/non-white gap in terms of absolute numbers of deaths per number of live births or in years of expectation of life. The difference in the number of infant deaths per 1,000 live births between whites and blacks has been reduced from 41 in 1900 and 46 in 1910 to 6.0 in 2014.. The reduction has been even greater for all non-whites (to 3.6 infant deaths in 2014). But the relative situation has deteriorated. Black infant mortality was in a more favorable circumstance relative to white infant mortality in 1900 (42% higher) than at any subsequent date. In 2014 it was 220% higher. The more favorable showing of entire group of non-whites reflects the more favorable showing of the Asian and Pacific Islander population. A graphic depiction of this relative divergence is presented in Figure 2.

The serious disadvantage of the nonwhite population is traceable significantly to their low average levels of education and income. This is true especially for blacks but also for the American Indian population with an infant mortality rate of 7.6 in 2013 (NCHS, 2016b, Table 10). It does not hold for the Hispanic population with an infant mortality rate of 5.0 in 2013. This is now known as the Hispanic mortality paradox. The Asian/Pacific Islander population as a whole does not suffer from this mortality penalty with an infant mortality rate of 4.1 in 2013.. On two counts, American society has come up short – it has failed to provide adequate health and medical care to its poor, and it has also failed to raise the level of living of many of its poor. In 2012, the United States ranked 25<sup>th</sup> in the world in infant mortality (NCHS, 2016b, Table 13). A

wealthy and technologically advanced society surely can and should do more. As Antonovsky and Bernstein (1977, p. 459) note: “Low social class *per se* does not cause high infant mortality...however,...social class does subsume a large set of more directly causative biological and behavioral variables.” Some of those causative variables may be amenable to direct policy intervention (e.g., universal child immunization programs), but some may be address by more general improvements in the living standards of the society, particularly among its poor.

The record for neonatal mortality was about the same as for overall infant mortality. Similarly, maternal mortality showed deterioration from the early 20th century up to the early 1960s and then a modest improvement. But maternal mortality is still over 2.6 times higher for the black population than the white population (2007), despite a reduction in the absolute number of maternal deaths per 100,000 live births from 1,000 per 100,000 live births in 1933 (for all non-whites) to for blacks in 200. The relative difference seems to have no trend at present.

Table 6 demonstrates that overall black and non-white mortality, as measured by the expectation of life at birth, was higher throughout the period 1900 to 2014. Table 6 (Lower panel) gives the relative deficit of the total non-white and black expectations of life at birth annually since 1900. Up to 1933, those estimates are for the current Death Registration Area. The upper panel of Table 6 contain estimates for 1900 and 1910 for the whole nation based on indirect estimation from the samples of the microdata from the 1900 and 1910 U.S. censuses. (Haines, 1998; Preston and Haines, 1991; Haines and Preston, 1997.) Since those are estimates for the whole population, rather than the rather restricted sample of the early Death Registration Area, those estimates are to be preferred to the annual estimates in the lower panel. If those benchmarks are used, the picture for the black population is somewhat more favorable, since in



1900 and 1910 the national black population was more rural than in the Death Registration Area, which afforded some degree of protection. The DRA of 1900 had less than 5% of the nation's African American population, and, of that, 82-83% was urban. The national average percentage urban of the black population was 20% in 1900 and 27% in 1910. (Haines and Preston, 1997.) Although by those standards, real progress has been made, nonetheless, in 1998, black males still had e(0) 6.9 years below those for white males. The number for black females was a deficit of 5.2 years. These numbers in 1900 had only been 8.1 and 7.4 years, respectively.

Table 7 provides data on age-adjusted death rates by race and sex from 1900 to 2014. (This table uses the new 2000 age structure standard, much different from the 1940 age structure standard.) These are also for the Death Registration Area up through 1932. The lower panel gives the ratios of these age-adjusted death rates to those for the majority white population. The record there would indicate only modest progress for the African American population (the overwhelming share of the “All Other” category until the 1950s). In 2014, the age-adjusted death rate for blacks stood 17% higher than for whites. Interestingly, for the American Indian and Asian populations, the outcomes are better. Indeed, the younger populations of those groups do relatively well, with American Indians closer to the white rates (82% of the white rate) and the Asian and Pacific Islander origin population substantially below the white population (53% of the white rates). Overall, however, the record for the substantial black minority mortality is less than admirable.

The source of this is to be found in disadvantaged socioeconomic status not ameliorated by corrective social policies. No extensive national-level information on income for individuals exists before 1939. The first census to ask a question on income was the U.S. Census of

Population of 1940, and for that census the question was only about wage and salary income for 1939, excluding proprietary, self-employment, and property income. Much of what we know about American incomes by race originates in the Current Population Survey, conducted monthly by the Bureau of the Census since 1947, particularly aimed at labor force issues such as unemployment and income.<sup>10</sup> One partial earlier piece of evidence may be gleaned from a Bureau of Labor Statistics survey taken in 1917-1919 of 12,817 families in 99 urban centers in 42 states of the United States for purposes of studying the cost of living (United States Bureau of Labor Statistics, 1924). In that study, white family heads had average earnings of \$1,352 while colored family heads had average earnings of \$979 (or 72% of that of whites).<sup>11</sup> For the period 1947 to 1970, families headed by non-whites had median incomes of 51-64% of those for whites heading families. The range was 61-78% for unrelated individuals. In the case of families, there appeared to have been an improvement over time in both real income (in constant 1967 dollars) and in relation to income for white-headed families. This was not, however, true for unrelated individuals, who did experience a rise in real income but showed no trend relative to whites. (U.S. Bureau of the Census, 1975, Series G 189-204.) By 1998, the median income of black-head households was 62% of that of white households (in contrast to 113% for Asian-headed

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<sup>10</sup> Originally in 1947, the Survey covered a representative sample of approximately 21,000 interviewed households in areas throughout the United States. This sample was increased to approximately 35,000 in May 1956 and to approximately 50,000 in January 1967. It is subject to sampling error. At present, about 50,000 occupied households are eligible for interview each month. Of these, about 4 to 5 percent are, for a variety of reasons, unavailable for the interview. Estimates of population characteristics based on the CPS will not agree with counts based on the census because the CPS and the census use different sampling procedures, different samples, and different procedures for racial groups, the Hispanic population, and other topics.

<sup>11</sup> The source for this is the digitized version of the survey, ICPSR file 8299.

households and 69% for Hispanic-headed households). (U.S. Bureau of the Census, 2000, Table 737.) In terms of income distribution, the Current Population survey also reveals that in 1947 46% of families with white head had income below \$3,000, while this was 81% for families with a non-white head. This had improved to 7.5% for whites and 20.1% for non-whites by 1970, both because of rising real and nominal incomes; but the gap was still substantial. Similar results obtain for unrelated individuals. In 1947, 61% of whites had incomes under \$1,500, while 79% of non-whites were in that situation. By 1970, this was 21% for whites but still 35% for non-whites. (U.S. Bureau of the Census, 1975, Series G 16-30.) In 2009, 12.3% of the white population fell below the official poverty threshold, while this was 25.8% for the black population and 25.3% for the Hispanic population. (U.S. Bureau of the Census, 2011, Table 711.)

Overall, the disadvantaged status of non-whites generally, and blacks in particular, are demonstrated by these income disparities. Since socioeconomic well-being has an important effect on expectation of life, infant mortality, and death rates overall, it is not surprising that the relative disadvantage of the black population in mortality has not disappeared.

#### CONCLUDING COMMENTS

Examining data from a variety of statistical sources on the demography of racial and ethnic groups in the United States to the present reveals some interesting results. Taking into account the changing definitions and boundaries of race and ethnicity in official federal statistics, there has been both relative and absolute convergence in fertility behavior across groups. It has been of relatively recent origin and has been due, in large part, to stable (or even slightly increasing) birth rates for the majority white population combined with declining birth rates for blacks and the

Asian-origin, Hispanic-origin, and American Indian populations.

This has not been true for mortality, however. The black population has experienced absolute convergence but relative deterioration in mortality (neonatal and infant mortality, maternal mortality, expectation of life at birth, and age-adjusted death rates), in contrast to the American Indian and Asian-origin populations. The Asian-origin population actually now has age-adjusted death rates significantly lower than those for the white population.<sup>12</sup> The disadvantaged condition of the black population and the deteriorating social safety net are the likely origins of this outcome.

The lessons to be learned are not that the American population is becoming more homogeneous. On the contrary, it is seemingly more heterogeneous. But it seems that groups are responding in similar ways to social trends and constraints. The most troubling result is the relative deterioration of the mortality situation for the black population. This is clearly an issue which warrants the most serious attention by policy makers.

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<sup>12</sup> The age-adjusted death rates for the Hispanic-origin population are available only since 1997. For the 1997-2014 period, those rates were lower than those for the white population (at about 80%).

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Table 1. Population, by Race & Ethnicity. United States, 1790 to 2010.

Year	All races	White	Black	Other	American	Asian	Other/1	Hispanic
				Races	Indian	or Pacific		
					Islander			
1790	3929625	3172444	757181	-----	-----	-----	-----	-----
1800	5308483	4306446	1002037	-----	-----	-----	-----	-----
1810	7239881	5862073	1377808	-----	-----	-----	-----	-----
1820	9638453	7866797	1771656	-----	-----	-----	-----	-----
1830	12866020	10537378	2328642	-----	-----	-----	-----	-----
1840	17069453	14195805	2873648	-----	-----	-----	-----	-----
1850	23191876	19553068	3638808	-----	-----	-----	-----	116943
1860	31443321	26922537	4441830	78954	44021	-----	-----	-----
1870 \2	38558371	33589377	4880009	88985	25731	-----	-----	-----
1880	50155783	43402970	6580793	172020	66407	-----	-----	393555
1890	62947714	55101258	7488676	357780	248253	-----	-----	-----
1900	75994575	66809196	8833994	351385	237196	-----	-----	503189
1910	91972266	81731957	9827763	412546	265683	-----	3015	797994
1920	105710620	94820915	10463131	426574	244437	-----	3885	1286154
1930 \3	122775046	110286740	11891143	597163	332397	-----	5770	-----
1940	131669275	118214870	12865518	588887	333969	-----	4904	2021820
1950	150697361	134942028	15042286	713047	343410	-----	48604	3231409
1960 \4	179323175	158831732	18871831	1619612	523591	-----	218087	5814784
1970 \5	203211926	177748975	22580289	2882662	792730	-----	720520	8920940
1980	226545805	188371622	26495025	11679158	1364033	3500439	8033459	14608673
1990 \6	248709873	199686070	29986060	19037743	1959234	7 273662	9804847	22354059
2000 \7	281421906	216930975	36419434	28071497	4119301	12773242	7949669	35505818
2010 \8	308758105	245431661	42069234	21257210	4263672	16993538	-----	-----

Table 1 (cont.)

## PERCENT SHARES

	Total	Other		American				Hispanic
		White	Races	Black	Indian	Asian	Other	
1790	100.0%	80.7%	19.3%	-----	-----	-----	-----	-----
1800	100.0%	81.1%	18.9%	-----	-----	-----	-----	-----
1810	100.0%	81.0%	19.0%	-----	-----	-----	-----	-----
1820	100.0%	81.6%	18.4%	-----	-----	-----	-----	-----
1830	100.0%	81.9%	18.1%	-----	-----	-----	-----	-----
1840	100.0%	83.2%	16.8%	-----	-----	-----	-----	-----
1850	100.0%	84.3%	15.7%	-----	-----	-----	-----	0.5%
1860	100.0%	85.6%	14.1%	0.3%	0.1%	-----	-----	-----
1870	100.0%	87.1%	12.7%	0.2%	0.1%	-----	-----	-----
1880	100.0%	86.5%	13.1%	0.3%	0.1%	-----	-----	0.8%
1890	100.0%	87.5%	11.9%	0.6%	0.4%	-----	-----	-----
1900	100.0%	87.9%	11.6%	0.5%	0.3%	-----	-----	0.7%
1910	100.0%	88.9%	10.7%	0.4%	0.3%	-----	0.0%	0.9%
1920	100.0%	89.7%	9.9%	0.4%	0.2%	-----	0.0%	1.2%
1930	100.0%	89.8%	9.7%	0.5%	0.3%	-----	0.0%	-----
1940	100.0%	89.8%	9.8%	0.4%	0.3%	-----	0.0%	1.5%
1950	100.0%	89.5%	10.0%	0.5%	0.2%	-----	0.0%	2.1%
1960	100.0%	88.6%	10.5%	0.9%	0.3%	-----	0.1%	3.2%
1970	100.0%	87.5%	11.1%	1.4%	0.4%	-----	0.4%	4.4%
1980	100.0%	83.1%	11.7%	5.2%	0.6%	1.5%	3.5%	6.4%
1990	100.0%	80.3%	12.1%	7.7%	0.8%	2.9%	3.9%	9.0%
2000	100.0%	77.1%	12.9%	10.0%	1.5%	4.5%	2.8%	12.6%
2010	100.0%	79.5%	13.6%	6.9%	1.4%	5.5%	-----	-----

\1 Includes races not shown separately.

\2 Revisions to include adjustments for underenumeration in the Southern States show a total (both sexes) of 34,337,292 for whites and 5,392,172 for blacks.

\3 In 1930 Mexicans were classified as nonwhite. This decision was changed by 1940, and revised tabulations were published. The revised population

estimates are given here. The actual 1930 figures are: white (108,864,207), all other races (1,428,303).

\4 Denotes first year for which figures include Alaska and Hawaii.

\5 The population of other races (i.e., neither white nor black) was overstated by about 327,000 in the 1970 census.

\6 American Indian, Eskimo or Aleut in 1990.

\7 American Indian and Alaska Native in 2000.

Source: U.S. Bureau of the Census (1975, 2011}. NCHS (2013, 2016). Carter et al;. (2006).

Table 2. Fertility and Mortality in the United States. 1800-2008.

DATE	APPROX. BIRTHRATE(a)		CHILD-WOMAN		TOTAL FERTI-		EXPECTATION		INFANT MORTAL-	
	WHITE	BLACK(f)	WHITE	BLACK	WHITE	BLACK(f)	WHITE	BLACK(f)		
1800	55.0		1342			7.04				
1810	54.3		1358			6.92				
1820	52.8		1295	1191	6.73					
1830	51.4		1145	1220	6.55					
1840	48.3		1085	1154	6.14					
1850	43.3		892	1087	5.42		39.5	23.0	216.8	340.0
1860	41.4	58.6(g)	905	1072	5.21		7.90(g)		43.6	181.3
1870	38.3	55.0(h)	814	997	4.55		7.58(h)		45.2	175.5
1880	35.2	55.4(i)	780	1090	4.24		7.69(i)		40.5	214.8
1890	31.5	51.9(j)				7.26(j)				
1890	31.5	48.1	685	930	3.87	6.56	46.8		150.7	
1900	30.1	44.4	666	845	3.56	5.61	51.8(k)	41.8(k)	110.8(k)	170.3
1910	29.2	38.5	631	736	3.42	4.61	54.6(l)	46.8(l)	96.5(l)	142.6
1920	26.9	35.0	604	608	3.17	3.64	57.4	47.0	82.1	131.7
1930	20.6	27.5	506	554	2.45	2.98	60.9	48.5	60.1	99.9
1940	18.6	26.7	419	513	2.22	2.87	64.9	53.9	43.2	73.8
1950	23.0	33.3	580	663	2.98	3.93	69.0	60.7	26.8	44.5
1960	22.7	32.1	717	895	3.53	4.52	70.7	63.9	22.9	43.2
1970	17.4	25.1	507	689	2.39	3.07	71.6	64.1	17.8	30.9

1980	15.1	21.3	300	367	1.77	2.18	74.5	68.5	10.9	22.2	
1990	15.8	22.4	298	359	2.00	2.48	76.1	69.1	7.6	18.0	
2000	13.9	16.6				2.06	2.05	77.7	72.2	5.7	14.1
2010	12.5	15.1				1.95	1.96	78.9	75.1	5.2	11.6

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(a) Births per 1000 population per annum.

(b) Children aged 0-4 per 1000 women aged 20-44. Taken from U.S. Bureau of the Census, (1975), Series 67-68 for 1800-1970. For the black population 1820-1840, Thompson and Whelpton (1933), Table 74, adjusted upward 47% for relative under-enumeration of black children aged 0-4 for the censuses of 1820-1840.

(c) Total number of births per woman if she experienced the current period age-specific fertility rates throughout her life.

(d) Expectation of life at birth for both sexes combined.

(e) Infant deaths per 1000 live births per annum.

(f) Black and other population for CBR (1920-1970), TFR (1940-1990), e(0) (1950-1960), IMR (1920-1970).

(g) Average for 1850-59.

(h) Average for 1860-69.

(i) Average for 1870-79.

(j) Average for 1880-84.

(k) Approximately 1895.

(l) Approximately 1904.

SOURCE: U.S. Bureau of the Census (1975, 1985, 2001, 2011). Coale and Zelnik (1963). Coale and Rives (1973). Haines (1998). Haines and Preston (1997). Steckel (1986b). Carter, et. al. (20065), Series Ab1-Ab10.

Table 3. Crude Birth Rate and General Fertility Rate. By Race. United States, 1800 to 2012. \1

Year	CRUDE BIRTH RATE						GENERAL FERTILITY RATE					
	Total	White	Other	Black	Amer. Indian	Asian or Pacific Islander	Total	White	Other	Black	Amer. Indian	Asian or Pacific Islander
1800	-----	55.0	-----	-----	-----	-----	-----	278.0	-----	-----	-----	-----
1810	-----	54.3	-----	-----	-----	-----	-----	274.0	-----	-----	-----	-----
1820	55.2	52.8	-----	-----	-----	-----	-----	260.0	-----	-----	-----	-----
1830	-----	51.4	-----	-----	-----	-----	-----	240.0	-----	-----	-----	-----
1840	51.8	48.3	-----	-----	-----	-----	-----	222.0	-----	-----	-----	-----
1850	-----	43.3	-----	-----	-----	-----	-----	194.0	-----	-----	-----	-----
1855	-----	42.8	-----	58.6	\5	-----	-----	-----	-----	-----	-----	-----
1860	44.3	41.8	-----	-----	-----	-----	-----	184.0	-----	-----	-----	-----
1865	-----	35.4	-----	55.1	\6	-----	-----	-----	-----	-----	-----	-----
1870	-----	37.1	-----	-----	-----	-----	-----	167.0	-----	-----	-----	-----
1875	-----	36.8	-----	55.4	\7	-----	-----	-----	-----	-----	-----	-----
1880	39.8	33.6	-----	51.9	\8	-----	-----	-----	155.0	-----	-----	-----
1890	-----	31.2	-----	48.1	-----	-----	-----	-----	137.0	-----	-----	-----
1900	32.3	28.5	-----	44.4	-----	-----	-----	-----	130.0	-----	-----	-----
1909	30.0	29.2	-----	-----	-----	-----	126.8	123.6	-----	-----	-----	-----
1910	30.1	29.2	-----	38.5	-----	-----	126.8	123.8	-----	-----	-----	-----
1911	29.9	29.1	-----	-----	-----	-----	126.3	123.6	-----	-----	-----	-----
1912	29.8	29.0	-----	-----	-----	-----	125.8	123.3	-----	-----	-----	-----
1913	29.5	28.8	-----	-----	-----	-----	124.7	122.4	-----	-----	-----	-----
1914	29.9	29.3	-----	-----	-----	-----	126.6	124.6	-----	-----	-----	-----
1915	29.5	28.9	-----	34.4	-----	-----	125.0	123.2	-----	-----	-----	-----
1916	29.1	28.5	-----	-----	-----	-----	123.4	121.8	-----	-----	-----	-----
1917	28.5	27.9	32.9	-----	-----	-----	121.0	(NA)	-----	-----	-----	-----
1918	28.2	27.6	33.0	-----	-----	-----	119.8	(NA)	-----	-----	-----	-----
1919	26.1	25.3	32.4	-----	-----	-----	111.2	(NA)	-----	-----	-----	-----
1920	27.7	26.9	35.0	-----	-----	-----	117.9	115.4	137.5	-----	-----	-----

1921	28.1	27.3	35.8	-----	-----	-----	119.8	117.2	140.8	-----	-----	-----
1922	26.2	25.4	33.2	-----	-----	-----	111.2	108.8	130.8	-----	-----	-----
1923	26.0	25.2	33.2	-----	-----	-----	110.5	108.0	130.5	-----	-----	-----
1924	26.1	25.1	34.6	-----	-----	-----	110.9	107.8	135.6	-----	-----	-----
1925	25.1	24.1	34.2	-----	-----	-----	106.6	103.3	134.0	-----	-----	-----
1926	24.2	23.1	33.4	-----	-----	-----	102.6	99.2	130.3	-----	-----	-----
1927	23.5	22.7	31.1	-----	-----	-----	99.8	97.1	121.7	-----	-----	-----
1928	22.2	21.5	28.5	-----	-----	-----	93.8	91.7	111.0	-----	-----	-----
1929	21.2	20.5	27.3	-----	-----	-----	89.3	87.3	106.1	-----	-----	-----
1930	21.3	20.6	27.5	-----	-----	-----	89.2	87.1	105.9	-----	-----	-----
1931	20.2	19.5	26.6	-----	-----	-----	84.6	82.4	102.1	-----	-----	-----
1932	19.5	18.7	26.9	-----	-----	-----	81.7	79.0	103.0	-----	-----	-----
1933	18.4	17.6	25.5	-----	-----	-----	76.3	73.7	97.3	-----	-----	-----
1934	19.0	18.1	26.3	-----	-----	-----	78.5	75.8	100.4	-----	-----	-----
1935	18.7	17.9	25.8	-----	-----	-----	77.2	74.5	98.4	-----	-----	-----
1936	18.4	17.6	25.1	-----	-----	-----	75.8	73.3	95.9	-----	-----	-----
1937	18.7	17.9	26.0	-----	-----	-----	77.1	74.4	99.4	-----	-----	-----
1938	19.2	18.4	26.3	-----	-----	-----	79.1	76.5	100.5	-----	-----	-----
1939	18.8	18.0	26.1	-----	-----	-----	77.6	74.8	100.1	-----	-----	-----
1940	19.4	18.6	26.7	-----	-----	-----	79.9	77.1	102.4	-----	-----	-----
1941	20.3	19.5	27.3	-----	-----	-----	83.4	80.7	105.4	-----	-----	-----
1942	22.2	21.5	27.7	-----	-----	-----	91.5	89.5	107.6	-----	-----	-----
1943	22.7	22.1	28.3	-----	-----	-----	94.3	92.3	111.0	-----	-----	-----
1944	21.2	20.5	27.4	-----	-----	-----	88.8	86.3	108.5	-----	-----	-----
1945	20.4	19.7	26.5	-----	-----	-----	85.9	83.4	106.0	-----	-----	-----
1946	24.1	23.6	28.4	-----	-----	-----	101.9	100.4	113.9	-----	-----	-----
1947	26.6	26.1	31.2	-----	-----	-----	113.3	111.8	125.9	-----	-----	-----
1948	24.9	24.0	32.4	-----	-----	-----	107.3	104.3	131.6	-----	-----	-----
1949	24.5	23.6	33.0	-----	-----	-----	107.1	103.6	135.1	-----	-----	-----
1950	24.1	23.0	33.3	-----	-----	-----	106.2	102.3	137.3	-----	-----	-----
1951	24.9	23.9	33.7	-----	-----	-----	111.4	107.7	141.7	-----	-----	-----
1952	25.1	24.1	33.4	-----	-----	-----	113.8	110.0	142.7	-----	-----	-----
1953	25.1	24.0	33.9	-----	-----	-----	115.0	110.9	146.4	-----	-----	-----



1954		25.3	24.2	34.7	-----	-----	-----	117.9	113.5	152.2	-----	-----	-----
1955		25.0	23.8	34.5	-----	-----	-----	118.3	113.7	154.3	-----	-----	-----
1956		25.2	24.0	35.1	-----	-----	-----	121.0	115.9	159.7	-----	-----	-----
1957		25.3	24.0	35.0	-----	-----	-----	122.7	117.6	161.7	-----	-----	-----
1958		24.5	23.3	34.0	-----	-----	-----	120.0	114.8	159.1	-----	-----	-----
1959	\2	24.0	22.9	32.9	-----	-----	-----	118.8	113.9	156.0	-----	-----	-----
1960	\3	23.7	22.7	32.1	31.9	-----	-----	118.0	113.2	153.6	153.5	-----	-----
1961		23.3	22.2	31.6	----	-----	-----	117.1	112.3	153.0	----	-----	-----
1962	\4	22.4	21.4	30.5	----	-----	-----	112.0	107.5	147.8	----	-----	-----
1963	\4	21.7	20.7	29.7	----	-----	-----	108.3	103.6	143.7	----	-----	-----
1964		21.1	20.0	29.2	29.5	-----	-----	104.7	99.8	140.0	142.6	-----	-----
1965		19.4	18.3	27.6	27.7	-----	-----	96.3	91.3	131.9	133.2	-----	-----
1966		18.4	17.4	26.1	26.2	-----	-----	90.8	86.2	123.5	124.7	-----	-----
1967	\5	17.8	16.8	25.0	25.1	-----	-----	87.2	82.8	117.1	118.5	-----	-----
1968		17.6	16.6	24.2	24.2	-----	-----	85.2	81.3	111.9	112.7	-----	-----
1969		17.9	16.9	24.5	24.4	-----	-----	86.1	82.2	111.6	112.1	-----	-----
1970		18.4	17.4	25.1	25.3	-----	-----	87.9	84.1	113.0	115.4	-----	-----
1971		17.2	16.1	24.6	24.4	-----	-----	81.6	77.3	109.1	109.7	-----	-----
1972		15.6	14.5	22.8	22.5	-----	-----	73.1	68.9	99.5	99.9	-----	-----
1973		14.8	13.8	21.7	21.4	-----	-----	68.8	64.9	93.4	93.6	-----	-----
1974		14.8	13.9	21.2	20.8	-----	-----	67.8	64.2	89.8	89.7	-----	-----
1975		14.6	13.6	21.0	20.7	-----	-----	66.0	62.5	87.7	87.9	-----	-----
1976		14.6	13.6	20.8	20.5	-----	-----	65.0	61.5	85.8	85.8	-----	-----
1977		15.1	14.1	21.6	21.4	-----	-----	66.8	63.2	87.7	88.1	-----	-----
1978		15.0	14.0	21.6	21.3	-----	-----	65.5	61.7	87.0	86.7	-----	-----
1979		15.6	14.5	22.2	22.0	-----	-----	67.2	63.4	88.5	88.3	-----	-----
1980		15.9	15.1	21.3	21.3	20.7	19.9	68.4	65.6	83.9	84.7	82.7	73.2
1981		15.8	15.0	20.8	20.8	20.0	20.1	67.3	64.8	81.1	82.0	79.6	73.7
1982		15.9	15.1	20.7	20.7	21.1	20.3	67.3	64.8	80.3	80.9	83.6	74.8
1983		15.6	14.8	20.1	20.2	20.6	19.5	65.7	63.4	77.9	78.7	81.8	71.7
1984		15.6	15.0	20.0	20.1	20.1	18.8	65.5	63.2	77.0	78.2	79.8	69.2
1985		15.8	14.8	20.1	20.4	19.8	18.7	66.3	64.1	77.3	78.8	78.6	68.4
1986		15.6	14.9	20.1	20.5	19.2	18.0	65.4	63.1	76.8	78.9	75.9	66.0

1987	15.7	15.0	20.4	20.8	19.1	18.4	65.8	63.3	77.8	80.1	75.6	67.1
1988	16.0	15.4	21.0	21.5	19.3	19.2	67.3	64.5	80.3	82.6	76.8	70.2
1989	16.4	15.4	21.6	22.3	19.7	18.7	69.2	66.4	82.7	86.2	79.0	68.2
1990	16.7	15.8	21.7	22.4	18.9	19.0	70.9	68.3	83.2	86.8	76.2	69.6
1991	16.2	15.3	-----	21.8	18.3	18.3	69.3	66.7	-----	84.8	73.9	67.1
1992	15.8	15.0	-----	21.1	17.9	17.9	68.4	66.1	-----	82.4	73.1	66.1
1993	15.4	14.6	-----	20.2	17.0	17.3	67.0	64.9	-----	79.6	69.7	64.3
1994	15.0	14.3	-----	19.1	16.0	17.1	65.9	64.2	-----	75.9	65.8	63.9
1995	14.6	14.1	-----	17.8	15.3	16.7	64.6	63.6	-----	71.0	63.0	62.6
1996	14.4	13.9	-----	17.3	14.9	16.5	64.1	63.3	-----	69.2	62.8	62.3
1997	14.2	13.7	-----	17.1	14.7	16.2	63.6	62.8	-----	69.0	60.8	61.3
1998	14.3	13.8	-----	17.1	14.8	15.9	64.3	63.6	-----	69.4	61.3	60.1
1999	14.2	13.7	-----	16.8	14.2	15.9	64.4	64.0	-----	68.5	59.0	60.9
2000	14.4	13.9	-----	17.0	14.0	17.1	65.9	65.3	-----	70.0	58.7	65.8
2001	14.1	13.7	-----	16.3	13.5	16.1	65.1	65.0	-----	67.5	56.8	62.5
2002	14.0	13.6	-----	15.7	13.2	16.3	65.0	65.1	-----	65.7	55.7	63.3
2003	14.1	13.7	-----	15.7	13.0	16.4	66.1	66.4	-----	66.0	54.8	64.2
2004	14.0	13.6	-----	15.9	12.8	16.4	66.4	66.5	-----	67.2	54.2	64.5
2005	14.0	13.6	-----	16.1	12.6	15.9	66.7	66.8	-----	68.5	53.6	63.0
2006	14.3	13.8	-----	16.7	12.9	16.0	68.6	68.7	-----	71.4	55.3	63.7
2007	14.3	13.8	-----	16.7	12.9	16.4	69.3	69.4	-----	71.7	55.3	65.3
2008	14.0	13.5	-----	16.3	12.4	15.7	68.1	68.3	-----	70.6	54.0	63.3
2009	13.5	13.0	-----	15.8	11.8	15.1	66.2	66.4	-----	68.8	51.8	61.3
2010	13.0	12.5	-----	15.1	11.0	14.5	64.1	64.4	-----	66.3	48.6	59.2
2011	12.7	12.2	-----	14.8	10.7	14.5	63.2	63.4	-----	65.5	47.7	59.9
2012	12.6	12.1	-----	14.7	10.5	15.1	63.0	63.0	-----	65.1	47.0	62.2

Footnotes:

\1 Based on estimated total live births per 1,000 population for specified group. Based on a 50-percent sample of births for 1951-1954, 1956-1966, and 1968-1970; on 20- to 50-percent sample for 1967. Prior to 1959, births adjusted for underregistration; thereafter, registered live births.

Rates by race are by race of child before 1980 and by race of mother from 1980 onwards. GFR is computed by relating total births, regardless of age of mother, to women aged 15-44 years.

\2 Includes Alaska.

\2 First year for which figures include Alaska and Hawaii.

\4 Figures by race exclude New Jersey; State did not require reporting of race.

\5 Based on 20- to 50-percent sample of births.

\6 1850-59.

\7 1860-69.

\8 1870-79.

\9 1880-84.

Source: Henry D. Sheldon, The Older Population of the United States, John Wiley and Sons, New York, 1955, p. 145 (copyright). Series B 6 and B 9, 1800-1900, Warren S. Thompson and P. K. Whelpton, Population Trends in the United States, McGraw-Hill, New York, 1933, p. 263 (copyright). Carter, et. al. 2006, Series Ab1-Ab10, 1820-1900. 1909-1968, U.S. Public Health Service, Vital Statistics of the United States, 1968, vol. I. p. 1-4; 1969-1970, same report, annual issues. NCHS, "Births: Final Data for 2012," National Vital Statistics Reports, Vol. 62, No. 9 (December 30, 2013). See Table 2.

Table 4. Total Fertility Rate, by Race: 1800 to 2012. \1

Year	Total	White	Other	Black	American Indian	Asian & Pacific Islander
1800	----	7040.0	----	----	----	----
1810	----	6920.0	----	----	----	----
1820	----	6730.0	----	----	----	----
1830	----	6550.0	----	----	----	----
1840	----	6140.0	----	----	----	----
1850	----	5420.0	----	----	----	----
1850/59	----	----	----	7900.0	----	----
1860	----	5210.0	----	----	----	----
1860/69	----	----	----	7580.0	----	----
1870	----	4550.0	----	----	----	----
1870/79	----	----	----	7690.0	----	----
1880	----	4240.0	----	----	----	----
1880/84	----	----	----	7260.0	----	----
1890	----	3870.0	----	6560.0	----	----
1900	----	3560.0	----	5610.0	----	----
1905/10	3551.0	3443.0	----	4351.0	----	----
1910	(NA)	3420.0	----	4610.0	----	----
1920	(NA)	3170.0	----	3640.0	----	----
1930	(NA)	2450.0	----	2980.0	----	----
1933	2210.3	2116.2	2962.4	----	----	----
1934	2274.3	2172.4	3098.9	----	----	----
1935	2235.2	2170.7	2728.0	----	----	----
1936	2193.3	2131.1	2660.5	----	----	----
1937	2224.8	2155.9	2755.7	----	----	----
1938	2280.5	2213.9	2789.5	----	----	----
1939	2232.4	2161.1	2779.9	----	----	----
1940	2301.3	2229.0	2870.0	2870.0	----	----
1941	2399.0	2328.0	2956.0	----	----	----
1942	2628.0	2577.0	3022.0	----	----	----
1943	2718.0	2664.0	3128.0	----	----	----
1944	2568.0	2501.0	3075.0	----	----	----
1945	2491.0	2421.0	3017.0	----	----	----
1946	2943.0	2901.0	3238.0	----	----	----
1947	3274.0	3230.0	3575.0	----	----	----
1948	3109.0	3022.0	3742.0	----	----	----
1949	3110.0	3009.0	3855.0	----	----	----
1950	3091.0	2977.0	3928.0	3930.0	----	----
1951	3269.0	3157.0	4091.0	----	----	----
1952	3358.0	3250.0	4147.0	----	----	----
1953	3424.0	3306.0	4283.0	----	----	----
1954	3543.0	3415.0	4474.0	----	----	----

1955	3580.0	3446.0	4550.0	----	----	----
1956	3689.0	3546.0	4730.0	----	----	----
1957	3767.0	3625.0	4798.0	----	----	----
1958	3701.0	3560.0	4727.0	----	----	----
1959	3670.0	3544.0	4595.0	----	----	----
1960	3653.6	3532.9	4522.1	4541.8	----	----
1961	3620.3	3496.9	4496.8	----	----	----
1962	3461.3	3341.3	4340.1	----	----	----
1963	3318.8	3193.5	4203.0	----	----	----
1964	3190.5	3065.0	4070.2	4138.6	----	----
1965	2912.6	2783.4	3807.9	3828.5	----	----
1966	2721.4	2602.9	3531.5	3545.3	----	----
1967	2557.7	2446.9	3299.2	3311.8	----	----
1968	2464.2	2365.6	3108.4	3099.8	----	----
1969	2455.5	2360.3	3061.2	3042.8	----	----
1970	2480.0	2385.0	3066.7	3099.5	----	----
1971	2266.5	2160.5	2919.5	2902.0	----	----
1972	2010.0	1906.5	2627.5	2601.0	----	----
1973	1879.0	1783.0	2443.0	2411.0	----	----
1974	1835.0	1748.5	2338.5	2298.5	----	----
1975	1774.0	1686.0	2276.0	2243.0	----	----
1976	1738.0	1652.0	2222.5	2187.0	----	----
1977	1789.5	1703.0	2278.5	2251.0	----	----
1978	1760.0	1667.5	2264.5	2218.0	----	----
1979	1808.0	1715.5	2309.5	2263.2	----	----
1980	1839.5	1773.0	2199.0	2176.5	2165.0	1953.5
1981	1812.0	1748.0	2133.5	2117.5	2092.5	1976.0
1982	1827.5	1767.0	2132.0	2106.5	2215.0	2015.5
1983	1799.0	1740.5	2084.0	2066.0	2182.0	1943.5
1984	1806.5	1748.5	2078.5	2070.5	2137.5	1892.0
1985	1844.0	1787.0	2106.5	2109.0	2129.5	1885.0
1986	1837.5	1776.0	2114.5	2135.5	2083.0	1836.0
1987	1872.0	1804.5	2168.5	2198.0	2100.5	1886.0
1988	1934.0	1856.5	2264.5	2298.0	2155.0	1983.5
1989	2014.0	1931.0	2360.5	2432.5	2248.5	1947.5
1990	2081.0	2003.0	2398.0	2480.0	2184.5	2002.5
1991	2062.5	1988.0	----	2462.0	2142.5	1928.0
1992	2046.0	1978.0	----	2416.0	2135.5	1894.5
1993	2019.5	1961.5	----	2351.0	2048.5	1841.5
1994	2001.5	1957.5	----	2258.5	1950.0	1834.0
1995	1978.0	1954.5	----	2127.5	1878.5	1795.5
1996	1976.0	1960.5	----	2088.5	1855.0	1787.0
1997	1971.0	1955.0	----	2091.5	1834.5	1757.5
1998	1999.0	1991.0	----	2111.5	1851.0	1731.5
1999	2007.5	2007.5	----	2082.5	1783.5	1754.5
2000	2056.0	2051.0	----	2129.0	1772.5	1892.0

2001	2030.5	2042.5	----	2049.5	1712.5	1785.0
2002	2020.5	2041.5	----	1990.0	1675.5	1798.5
2003	2047.5	2075.0	----	1994.5	1639.5	1819.0
2004	2051.5	2074.5	----	2026.0	1610.5	1825.0
2005	2057.0	2078.5	----	2062.0	1584.0	1784.5
2006	2108.0	2125.0	----	2143.0	1625.0	1803.0
2007	2120.0	2137.0	----	2145.5	1621.5	1850.5
2008	2072.0	2087.0	----	2102.5	1569.0	1797.5
2009	2002.0	2016.5	----	2036.0	1494.0	1743.0
2010	1931.0	1947.5	----	1957.0	1404.0	1689.0
2011	1894.5	1905.0	----	1920.0	1373.5	1706.5
2012	1880.5	1885.5	----	1899.5	1350.0	1769.5

\1 Total fertility rates are the sums of birth rates, by age of mother, multiplied by 5. Birth rates are live births per 1,000 women in specified group. Prior to 1959, births adjusted for underregistration; therefore, registered live births. Based on 50-percent sample of births for 1951-1954, 1956-1966, and 1968-1970; a 20 to 50 percent sample for 1967. Total fertility rates are the sums of birth rates by 5-year age groups of mothers multiplied by 5. Birth rates are live births per 1000 women in the specified group. Beginning 1970 excludes births to nonresidents of US. Based on 100 percent of births in selected states and on a 50 percent sample in all other states for 1972-1984. Based on 59 percent sample of births for 1960-1966, 1968-1971. 1967 is based on a 20 to 50 percent sample of births.

Source: Henry D. Sheldon, The Older Population of the United States, John Wiley and Sons, New York, 1955, p. 145 (copyright). Series B 6 and B 9, 1800-1900, Warren S. Thompson and P. K. Whelpton, Population Trends in the United States, McGraw-Hill, New York, 1933, p. 263 (copyright). Carter, et. al. 2006, Series Ab1-Ab10, 1820-1900. 1909-1968, U.S. Public Health Service, Vital Statistics of the United States, 1968, vol. I. p. 1-4; 1969-1970, same report, annual issues. NCHS, "Births: Final Data for 2012," National Vital Statistics Reports, Vol. 62, No. 9 (December 30, 2013). See Table 2.

Table 5. Infant, Neonatal, and Maternal Mortality Rates. United States. 1850-2014

Year	Neonatal mortality rate per 1,000 live births				Infant mortality rate per 1,000 live births				Maternal mortality rate per 100,000 live births			
	Total	White	All Other	Black	Total	White	All Other	Black	Total	White	All Other	Black
1850	-----	-----	-----	-----	228.9	216.8	-----	340.0	-----	-----	-----	-----
1860	-----	-----	-----	-----	196.7	181.3	-----	-----	-----	-----	-----	-----
1870	-----	-----	-----	-----	184.5	175.6	-----	-----	-----	-----	-----	-----
1880	-----	-----	-----	-----	225.1	214.8	-----	-----	-----	-----	-----	-----
1890	-----	-----	-----	-----	160.4	150.6	-----	-----	-----	-----	-----	-----
1900	-----	-----	-----	-----	129.0	119.8	-----	170.3	-----	-----	-----	-----
1910	-----	-----	-----	-----	104.2	96.5	-----	142.6	-----	-----	-----	-----
1915	44.4	-----	-----	-----	99.9	98.6	181.2	-----	608.0	601.0	1056.0	-----
1916	44.1	43.5	68.9	68.9	101.0	99.0	184.9	184.3	622.0	608.0	1179.0	-----
1917	43.4	42.6	58.0	-----	93.8	90.5	150.7	-----	662.0	632.0	1177.0	-----
1918	44.2	43.3	60.5	60.9	100.9	97.4	161.2	162.5	916.0	889.0	1393.0	-----
1919	41.5	40.3	55.2	58.6	86.6	83.0	130.5	134.3	737.0	696.0	1244.0	-----
1920	41.5	40.4	55.0	56.5	85.8	82.1	131.7	135.6	799.0	760.0	1281.0	-----
1921	39.7	38.7	50.3	51.3	75.6	72.5	108.5	110.7	682.0	644.0	1077.0	-----
1922	39.7	38.8	49.9	50.7	76.2	73.2	110.0	111.6	664.0	628.0	1068.0	-----
1923	39.5	38.6	49.9	51.4	77.1	73.5	117.4	119.9	665.0	626.0	1095.0	-----
1924	38.6	37.4	51.2	51.8	70.8	66.8	112.9	114.1	656.0	607.0	1179.0	-----
1925	37.8	36.8	49.5	50.3	71.7	68.3	110.8	112.0	647.0	603.0	1162.0	-----
1926	37.9	37.1	48.0	48.3	73.3	70.0	111.8	112.1	656.0	619.0	1071.0	-----
1927	36.1	35.0	46.1	46.3	64.6	60.6	100.1	99.9	647.0	594.0	1133.0	-----
1928	37.2	35.7	48.8	49.1	68.7	64.0	106.2	105.9	692.0	627.0	1210.0	-----
1929	36.9	35.6	47.3	47.5	67.6	63.2	102.2	101.5	695.0	631.0	1199.0	-----
1930	35.7	34.2	47.4	47.6	64.6	60.1	99.9	99.5	673.0	609.0	1174.0	-----
1931	34.6	33.2	45.2	45.4	61.6	57.4	93.1	92.7	661.0	601.0	1114.0	-----
1932	33.5	32.0	43.7	44.4	57.6	53.3	86.2	84.1	633.0	581.0	976.0	-----
1933	34.0	32.1	45.8	45.7	58.1	52.8	91.3	85.4	619.1	554.9	1073.7	999.7
1934	34.1	32.3	45.3	46.0	60.1	54.5	94.4	91.0	593.2	534.8	1005.1	931.1
1935	32.4	31.0	42.7	42.7	55.7	51.9	83.2	81.9	582.1	530.6	945.7	954.8
1936	32.6	31.0	43.9	43.8	57.1	52.9	87.6	86.1	568.0	511.6	971.8	980.9
1937	31.3	29.7	42.1	42.2	54.4	50.3	83.2	82.0	488.8	436.1	858.5	862.2
1938	29.6	28.3	39.1	39.2	51.0	47.1	79.1	77.9	435.2	377.2	849.4	861.0
1939	29.3	27.8	39.6	39.7	48.0	44.3	74.2	73.2	403.9	352.8	762.1	771.3
1940	28.8	27.2	39.7	39.9	47.0	43.2	73.8	72.9	376.0	319.8	773.5	781.7
1941	27.7	26.1	39.0	39.3	45.3	41.2	74.8	74.1	316.5	266.0	678.1	690.2
1942	25.7	24.5	34.6	34.9	40.4	37.3	64.6	64.2	258.7	221.8	544.0	549.1
1943	24.7	23.7	32.9	33.1	40.4	37.5	62.5	61.5	245.2	210.5	509.9	512.8
1944	24.7	23.6	32.5	32.7	39.8	36.9	60.3	59.3	227.9	189.4	506.0	513.9
1945	24.3	23.3	32.0	32.2	38.3	35.6	57.0	56.2	207.2	172.1	454.8	456.7

1946		24.0	23.1	31.5	31.7	33.8	31.8	49.5	48.8	156.7	130.7	358.9	363.6
1947		22.8	21.7	31.0	31.1	32.2	30.1	48.5	47.7	134.5	108.6	334.6	336.2
1948		22.2	21.2	29.1	29.3	32.0	29.9	46.5	45.7	116.6	89.4	301.0	303.6
1949		21.4	20.3	28.6	28.8	31.3	28.9	47.3	46.8	90.3	68.1	234.8	237.6
1950		20.5	19.4	27.5	27.8	29.2	26.8	44.5	43.9	83.3	61.1	221.6	223.0
1951		20.0	18.9	27.3	27.6	28.4	25.8	44.8	44.3	75.0	54.9	201.3	204.2
1952		19.8	18.5	28.0	28.5	28.4	25.5	47.0	46.9	67.8	48.9	188.1	189.2
1953		19.6	18.3	27.4	27.8	27.8	25.0	44.7	44.5	61.1	44.1	166.1	168.3
1954		19.1	17.8	27.0	27.5	26.6	23.9	42.9	42.9	52.4	37.2	143.8	145.9
1955		19.1	17.7	27.2	27.8	26.4	23.6	42.8	43.1	47.0	32.8	130.3	134.3
1956		18.9	17.5	27.0	27.6	26.0	23.2	42.1	42.4	40.9	28.7	110.7	114.3
1957		19.1	17.5	27.8	28.5	26.3	23.3	43.7	44.2	41.0	27.5	118.3	121.6
1958		19.5	17.8	29.0	29.7	27.1	23.8	45.7	46.3	37.6	26.3	101.8	104.5
1959	√3	19.0	17.5	27.7	28.4	26.4	23.2	44.0	44.8	37.4	25.8	102.1	105.0
1960	*	18.7	17.2	26.9	27.8	26.0	22.9	43.2	44.3	37.1	26.0	97.9	103.6
1961		18.4	16.9	26.2	27.1	25.3	22.4	40.7	41.8	36.9	24.9	101.3	105.4
1962	√2	18.3	16.9	26.1	27.1	25.3	22.3	41.4	42.6	35.2	23.8	95.9	99.4
1963	√2	18.2	16.7	26.1	27.0	25.2	22.2	41.5	42.8	35.8	24.0	96.9	101.1
1964		17.9	16.2	26.5	27.5	24.8	21.6	41.1	42.3	33.3	22.3	89.9	93.8
1965		17.7	16.1	25.4	26.5	24.7	21.5	40.3	41.7	31.6	21.0	83.7	88.3
1966		17.2	15.6	24.8	25.9	23.7	20.6	38.8	40.2	29.1	20.2	72.4	74.2
1967		16.5	15.0	23.8	25.0	22.4	19.7	35.9	37.5	28.0	19.5	69.5	72.6
1968		16.1	14.7	23.0	24.3	21.8	19.2	34.5	36.2	24.5	16.6	63.6	65.9
1969		15.6	14.2	22.5	23.9	20.9	18.4	32.9	34.8	22.2	15.5	55.7	59.5
1970		15.1	13.8	21.4	22.6	20.0	17.8	30.9	32.6	21.5	14.4	55.9	59.8
1971		14.2	13.0	19.6	21.0	19.1	17.1	28.5	30.3	18.8	13.0	45.3	48.3
1972		13.6	12.4	19.2	20.7	18.5	16.4	27.7	29.6	18.8	14.3	38.5	40.7
1973		13.0	11.8	17.9	19.3	17.7	15.8	26.2	28.1	15.2	10.7	34.6	38.4
1974		12.3	11.1	17.2	18.7	16.7	14.8	24.9	26.8	14.6	10.0	35.1	38.3
1975		11.6	10.4	16.8	18.3	16.1	14.2	24.2	26.2	12.8	9.1	29.0	31.3
1976		10.9	9.7	16.3	17.9	15.2	13.3	23.5	25.5	12.3	9.0	26.5	29.5
1977		9.9	8.7	14.7	16.1	14.1	12.3	21.7	23.6	11.2	7.7	26.0	29.2
1978		9.5	8.4	14.0	15.5	13.8	12.0	21.1	23.1	9.6	6.4	23.0	25.0
1979		8.9	7.9	12.9	14.3	13.1	11.4	19.8	21.8	9.6	6.4	22.7	25.1
1980		8.5	7.4	13.2	14.6	12.6	10.9	20.2	22.2	9.2	6.7	19.8	21.5
1981		8.0	7.0	12.5	14.0	11.9	10.3	18.8	20.8	8.5	6.3	17.3	20.4
1982		7.7	6.7	12.0	13.6	11.5	9.9	18.3	20.5	7.9	5.8	16.4	16.2
1983		7.3	6.3	11.4	12.9	11.2	9.6	17.8	20.0	8.0	5.9	16.3	18.3
1984		7.0	6.1	10.9	12.3	10.8	9.3	17.1	19.2	7.8	5.4	16.9	19.7
1985		7.0	6.0	11.0	12.6	10.6	9.2	16.8	19.0	7.8	5.2	18.1	20.4
1986		6.7	5.7	10.8	12.3	10.4	8.8	16.7	18.9	7.2	4.9	16.0	18.8
1987		6.5	5.4	10.7	12.3	10.1	8.5	16.5	18.8	6.6	5.1	12.0	14.2
1988		6.3	5.3	10.3	12.1	10.0	8.4	16.1	18.5	8.4	5.9	17.4	19.5
1989		6.2	5.1	10.3	11.9	9.8	8.1	16.3	18.6	7.9	5.7	15.4	17.5
1990		5.8	4.8	9.9	11.6	9.2	7.6	15.5	18.0	8.2	5.5	17.8	21.1
1991		5.6	4.5	9.5	11.2	8.9	7.3	15.1	17.6	7.9	5.9	14.5	17.2



1992	5.4	4.4	9.2	10.8	8.5	6.9	14.4	16.8	7.8	5.1	16.8	19.5
1993	5.3	4.3	9.0	10.7	8.4	6.8	14.1	16.5	7.5	4.8	17.6	20.5
1994	5.1	4.2	8.6	10.2	8.0	6.6	13.5	15.8	8.3	6.2	16.2	18.5
1995	4.9	4.1	8.1	9.8	7.6	6.3	12.6	15.1	7.1	4.2	18.5	22.1
1996	4.8	4.0	7.9	9.6	7.3	6.1	12.2	14.7	7.6	5.1	16.9	20.3
1997	4.8	4.0	7.7	9.4	7.2	6.0	11.8	14.2	8.4	5.8	18.3	20.8
1998	4.8	4.0	7.9	9.6	7.2	6.0	11.9	14.3	7.1	5.1	14.9	17.1
1999	4.7	3.9	7.9	9.8	7.1	5.8	11.9	14.6	9.9	6.8	21.4	25.4
2000	4.6	3.8	7.6	9.4	6.9	5.7	11.4	14.1	9.8	7.5	18.0	22.0
2001	4.5	3.8	7.4	9.2	6.8	5.6	11.3	14.0	9.9	7.2	20.2	24.7
2002	4.7	3.9	7.6	9.5	7.0	5.8	11.4	14.4	8.9	6.0	----	24.9
2003	4.6	3.9	7.4	9.4	6.8	5.7	11.1	14.0	12.1	8.7	----	30.5
2004	4.5	3.8	7.2	9.2	6.8	5.7	10.9	13.8	13.1	9.3	----	34.7
2005	4.5	3.8	7.2	9.1	6.9	5.7	10.9	13.7	15.1	11.1	----	36.5
2006	4.4	3.7	7.0	8.8	6.7	5.6	10.6	13.3	13.3	9.5	----	32.7
2007	4.4	3.7	6.9	8.6	6.8	5.6	10.6	13.2	12.7	10.0	----	26.5
2008	4.3	3.6	6.5	8.2	6.6	5.6	10.2	12.7	----	----	----	----
2009	4.2	3.5	6.5	8.2	6.4	5.3	10.0	12.6	----	----	----	----
2010	4.0	3.5	6.0	7.5	6.2	5.2	9.3	11.6	----	----	----	----
2011	4.1	3.5	6.0	7.5	6.1	5.1	9.1	11.5	----	----	----	----
2012	4.0	3.5	5.8	7.4	6.0	5.1	8.8	11.2	----	----	----	----
2013	4.0	3.5	5.8	7.4	6.0	5.1	8.8	11.2	----	----	----	----
2014	4.0	3.4	5.7	7.3	5.9	5.0	8.6	11.0	----	----	----	----

RATIO TO WHITES:

	Neonatal Mortality		Infant Mortality		Maternal Mortality	
	All Other	Black	All Other	Black	All	Black
1850	----	----	----	1.568	----	----
1860	----	----	----	----	----	----
1870	----	----	----	----	----	----
1880	----	----	----	----	----	----
1890	----	----	----	----	----	----
1900	----	----	----	1.422	----	----
1910	----	----	----	1.478	----	----
1915	----	----	----			
1916	1.584	1.584	1.868	0.997	1.939	----
1917	1.362	----	1.665	----	1.862	----
1918	1.397	1.406	1.655	1.008	1.567	----
1919	1.370	1.454	1.572	1.029	1.787	----
1920	1.361	1.399	1.604	1.030	1.686	----
1921	1.300	1.326	1.497	1.020	1.672	----
1922	1.286	1.307	1.503	1.015	1.701	----
1923	1.293	1.332	1.597	1.021	1.749	----
1924	1.369	1.385	1.690	1.011	1.942	----
1925	1.345	1.367	1.622	1.011	1.927	----
1926	1.294	1.302	1.597	1.003	1.730	----
1927	1.317	1.323	1.652	0.998	1.907	----
1928	1.367	1.375	1.659	0.997	1.930	----
1929	1.329	1.334	1.617	0.993	1.900	----
1930	1.386	1.392	1.662	0.996	1.928	----
1931	1.361	1.367	1.622	0.996	1.854	----
1932	1.366	1.388	1.617	0.976	1.680	----
1933	1.427	1.424	1.729	0.935	1.935	1.802
1934	1.402	1.424	1.732	0.964	1.879	1.741
1935	1.377	1.377	1.603	0.984	1.782	1.799
1936	1.416	1.413	1.656	0.983	1.900	1.917
1937	1.418	1.421	1.654	0.986	1.969	1.977
1938	1.382	1.385	1.679	0.985	2.252	2.283
1939	1.424	1.428	1.675	0.987	2.160	2.186
1940	1.460	1.467	1.708	0.988	2.419	2.444
1941	1.494	1.506	1.816	0.991	2.549	2.595
1942	1.412	1.424	1.732	0.994	2.453	2.476
1943	1.388	1.397	1.667	0.984	2.422	2.436
1944	1.377	1.386	1.634	0.983	2.672	2.713

1945	1.373	1.382	1.601	0.986	2.643	2.654
1946	1.364	1.372	1.557	0.986	2.746	2.782
1947	1.429	1.433	1.611	0.984	3.081	3.096
1948	1.373	1.382	1.555	0.983	3.367	3.396
1949	1.409	1.419	1.637	0.989	3.448	3.489
1950	1.418	1.433	1.660	0.987	3.627	3.650
1951	1.444	1.460	1.736	0.989	3.667	3.719
1952	1.514	1.541	1.843	0.998	3.847	3.869
1953	1.497	1.519	1.788	0.996	3.766	3.816
1954	1.517	1.545	1.795	1.000	3.866	3.922
1955	1.537	1.571	1.814	1.007	3.973	4.095
1956	1.543	1.577	1.815	1.007	3.857	3.983
1957	1.589	1.629	1.876	1.011	4.302	4.422
1958	1.629	1.669	1.920	1.013	3.871	3.973
1959	1.583	1.623	1.897	1.018	3.957	4.070
1960	1.564	1.616	1.886	1.025	3.765	3.985
1961	1.550	1.604	1.817	1.027	4.068	4.233
1962	1.544	1.604	1.857	1.029	4.029	4.176
1963	1.563	1.617	1.869	1.031	4.038	4.213
1964	1.636	1.698	1.903	1.029	4.031	4.206
1965	1.578	1.646	1.874	1.035	3.986	4.205
1966	1.590	1.660	1.883	1.036	3.584	3.673
1967	1.587	1.667	1.822	1.045	3.564	3.723
1968	1.565	1.653	1.797	1.049	3.831	3.970
1969	1.585	1.683	1.788	1.058	3.594	3.839
1970	1.551	1.638	1.736	1.055	3.882	4.153
1971	1.508	1.615	1.667	1.063	3.485	3.715
1972	1.548	1.669	1.689	1.069	2.692	2.846
1973	1.517	1.636	1.658	1.073	3.234	3.589
1974	1.550	1.685	1.682	1.076	3.510	3.830
1975	1.615	1.760	1.704	1.083	3.187	3.440
1976	1.680	1.845	1.767	1.085	2.944	3.278
1977	1.690	1.851	1.764	1.088	3.377	3.792
1978	1.667	1.845	1.758	1.095	3.594	3.906
1979	1.633	1.810	1.737	1.101	3.547	3.922
1980	1.784	1.973	1.853	1.099	2.955	3.209
1981	1.786	2.000	1.825	1.106	2.746	3.238
1982	1.791	2.030	1.848	1.120	2.828	2.793
1983	1.810	2.048	1.854	1.124	2.763	3.102
1984	1.787	2.016	1.839	1.123	3.130	3.648
1985	1.833	2.100	1.826	1.131	3.481	3.923
1986	1.895	2.158	1.898	1.132	3.265	3.837
1987	1.981	2.278	1.941	1.139	2.353	2.784
1988	1.943	2.283	1.917	1.149	2.949	3.305
1989	2.020	2.333	2.012	1.141	2.702	3.070
1990	2.063	2.417	2.039	1.161	3.236	3.836

1991	2.111	2.489	2.068	1.166	2.458	2.915
1992	2.091	2.455	2.087	1.167	3.294	3.824
1993	2.093	2.488	2.074	1.170	3.667	4.271
1994	2.048	2.429	2.045	1.170	2.613	2.984
1995	1.976	2.390	2.000	1.198	4.405	5.262
1996	1.975	2.400	2.000	1.205	3.314	3.980
1997	1.925	2.350	1.967	1.203	3.155	3.586
1998	1.975	2.400	1.983	1.202	2.922	3.353
1999	2.026	2.513	2.052	1.227	3.147	3.735
2000	2.000	2.474	2.000	1.237	2.400	2.933
2001	1.947	2.421	2.018	1.239	2.806	3.431
2002	1.949	2.436	1.966	1.263	-----	4.150
2003	1.897	2.410	1.947	1.261	-----	3.506
2004	1.895	2.421	1.912	1.266	-----	3.731
2005	1.895	2.395	1.912	1.257	-----	3.288
2006	1.892	2.378	1.893	1.255	-----	3.442
2007	1.865	2.324	1.893	1.245	-----	2.650
2008	1.806	2.278	1.821	1.245	-----	-----
2009	1.857	2.343	1.887	1.260	-----	-----
2010	1.714	2.143	1.788	1.247	-----	-----
2011	1.714	2.143	1.784	1.264	-----	-----
2012	1.657	2.114	1.725	1.273	-----	-----
2013	1.657	2.114	1.725	1.273	-----	-----
2014	1.676	2.147	1.720	1.279	-----	-----

Source: See Table 2. Carter, et al., (2006), Series Ab920-Ab927. NCHS, "Deaths: Final Data for 2014" National Vital Statistics Reports, Vol. 65, No. 4 (June 30, 2016). See Table 2.

Table 6. Expectation of Life (in Years) at Birth, by Race and Sex: 1850 to 2014.

Year		Total			White		Negro and other			Black			
		Both	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female
1850		38.3	37.2	39.4	39.5	38.4	40.6	----	----	----	----	----	----
1860		41.8	41.6	42.2	43.6	43.2	44.1	----	----	----	----	----	----
1870		44.0	43.0	44.9	45.2	44.1	46.4	----	----	----	----	----	----
1880		39.4	39.7	39.1	40.5	40.4	40.6	----	----	----	----	----	----
1890		45.2	44.8	45.6	46.8	46.0	47.4	----	----	----	----	----	----
1900		47.8	47.1	48.4	49.6	48.5	50.7	----	----	----	41.8	40.4	43.3
1910		53.1	51.5	54.7	54.6	53.0	56.0	----	----	----	46.2	44.7	47.7
1900	\1	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5	----	----	----
1901	\1	49.1	47.6	50.6	49.4	48.0	51.0	33.7	32.2	35.3	----	----	----
1902	\1	51.5	49.8	53.4	51.9	50.2	53.8	34.6	32.9	36.4	----	----	----
1903	\1	50.5	49.1	52.0	50.9	49.5	52.5	33.1	31.7	34.6	----	----	----
1904	\1	47.6	46.2	49.1	48.0	46.6	49.5	30.8	29.1	32.7	----	----	----
1905	\1	48.7	47.3	50.2	49.1	47.6	50.6	31.3	29.6	33.1	----	----	----
1906	\1	48.7	46.9	50.8	49.3	47.3	51.4	32.9	31.8	33.9	----	----	----
1907	\1	47.6	45.6	49.9	48.1	46.0	50.4	32.5	31.1	34.0	----	----	----
1908	\1	51.1	49.5	52.8	51.5	49.9	53.3	34.9	33.8	36.0	----	----	----
1909	\1	52.1	50.5	53.8	52.5	50.9	54.2	35.7	34.2	37.3	----	----	----
1910	\1	50.0	48.4	51.8	50.3	48.6	52.0	35.6	33.8	37.5	----	----	----
1911	\1	52.6	50.9	54.4	53.0	51.3	54.9	36.4	34.6	38.2	----	----	----
1912	\1	53.5	51.5	55.9	53.9	51.9	56.2	37.9	35.9	40.0	----	----	----
1913	\1	52.5	50.3	55.0	53.0	50.8	55.7	38.4	36.7	40.3	----	----	----
1914	\1	54.2	52.0	56.8	54.9	52.7	57.5	38.9	37.1	40.8	----	----	----
1915	\1	54.5	52.5	56.8	55.1	53.1	57.5	38.9	37.5	40.5	----	----	----
1916	\1	51.7	49.6	54.3	52.5	50.2	55.2	41.3	39.6	43.1	----	----	----
1917	\1	50.9	48.4	54.0	52.0	49.3	55.3	38.8	37.0	40.8	----	----	----
1918	\1	39.1	36.6	42.2	39.8	37.1	43.2	31.1	29.9	32.5	----	----	----
1919	\1	54.7	53.5	56.0	55.8	54.5	57.4	44.5	44.5	44.4	----	----	----
1920	\1	54.1	53.6	54.6	54.9	54.4	55.6	45.3	45.5	45.2	----	----	----
1921	\1	60.8	60.0	61.8	61.8	60.8	62.9	51.5	51.6	51.3	----	----	----
1922	\1	59.6	58.4	61.0	60.4	59.1	61.9	52.4	51.8	53.0	----	----	----
1923	\1	57.2	56.1	58.5	58.3	57.1	59.6	48.3	47.7	48.9	----	----	----
1924	\1	59.7	58.1	61.5	61.4	59.8	63.4	46.6	45.5	47.8	----	----	----
1925	\1	59.0	57.6	60.6	60.7	59.3	62.4	45.7	44.9	46.7	----	----	----
1926	\1	56.7	55.5	58.0	58.2	57.0	59.6	44.6	43.7	45.6	----	----	----
1927	\1	60.4	59.0	62.1	62.0	60.5	63.9	48.2	47.6	48.9	----	----	----
1928	\1	56.8	55.6	58.3	58.4	57.0	60.0	46.3	45.6	47.0	----	----	----
1929	\1	57.1	55.8	58.7	58.6	57.2	60.3	46.7	45.7	47.8	----	----	----
1930		59.7	58.1	61.6	61.4	59.7	63.5	48.1	47.3	49.2	----	----	----
1931		61.1	59.4	63.1	62.6	60.8	64.7	50.4	49.5	51.5	----	----	----

1932	62.1	61.0	63.5	63.2	62.0	64.5	53.7	52.8	54.6	----	----	----
1933	63.3	61.7	65.1	64.3	62.7	66.3	54.7	53.5	56.0	----	----	----
1934	61.1	59.3	63.3	62.4	50.6	64.6	51.8	50.2	53.7	----	----	----
1935	61.7	59.9	63.9	62.9	61.0	65.0	53.1	51.3	55.2	----	----	----
1936	58.5	56.6	60.6	59.8	58.0	61.9	49.0	47.0	51.4	----	----	----
1937	60.0	58.0	62.4	61.4	59.3	63.8	50.3	48.3	52.5	----	----	----
1938	63.5	61.9	65.3	65.0	63.2	66.8	52.9	51.7	54.3	----	----	----
1939	63.7	62.1	65.4	64.9	63.3	66.6	54.5	53.2	56.0	----	----	----
1940	62.9	60.8	65.2	64.2	62.1	66.6	53.1	51.5	54.9	----	----	----
1941	64.8	63.1	66.8	66.2	64.4	68.5	53.8	52.5	55.3	----	----	----
1942	66.2	64.7	67.9	67.3	65.9	69.4	56.6	55.4	58.2	----	----	----
1943	63.3	62.4	64.4	64.2	63.2	65.7	55.6	55.4	56.1	----	----	----
1944	65.2	63.6	66.8	66.2	64.5	68.4	56.6	55.8	57.7	----	----	----
1945	65.9	63.6	67.9	66.8	64.4	69.5	57.7	56.1	59.6	----	----	----
1946	66.7	64.4	69.4	67.5	65.1	70.3	59.1	57.5	61.0	----	----	----
1947	66.8	64.4	69.7	67.6	65.2	70.5	59.7	57.9	61.9	----	----	----
1948	67.2	64.6	69.9	68.0	65.5	71.0	60.0	58.1	62.5	----	----	----
1949	68.0	65.2	70.7	68.8	66.2	71.9	60.6	58.9	62.7	----	----	----
1950	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9	----	----	----
1951	68.4	65.6	71.4	69.3	66.5	72.4	61.2	59.2	63.4	----	----	----
1952	68.6	65.8	71.6	69.5	66.6	72.6	61.4	59.1	63.8	----	----	----
1953	68.8	66.0	72.0	69.7	66.8	73.0	62.0	59.7	64.5	----	----	----
1954	69.6	66.7	72.8	70.5	67.5	73.7	63.4	61.1	65.9	----	----	----
1955	69.6	66.7	72.8	70.5	67.4	73.7	63.7	61.4	66.1	----	----	----
1956	69.7	66.7	72.9	70.5	67.5	73.9	63.6	61.3	66.1	----	----	----
1957	69.5	66.4	72.7	70.3	67.7	73.7	63.0	60.7	65.5	----	----	----
1958	69.6	66.6	72.9	70.5	67.4	73.9	63.4	61.0	65.8	----	----	----
1959	∨ <sub>2</sub>	69.9	66.8	73.2	70.7	67.5	74.2	63.9	61.3	66.5	----	----
1960	*	69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3	----	----
1961		70.2	67.1	73.6	71.0	67.8	74.6	64.5	62.0	67.1	----	----
1962	∨ <sub>3</sub>	70.1	66.9	73.5	70.9	67.7	74.5	64.2	61.6	66.9	----	----
1963	∨ <sub>3</sub>	69.9	66.6	73.4	70.8	67.4	74.4	63.7	61.0	66.6	----	----
1964		70.2	66.8	73.7	71.0	67.7	74.7	64.2	61.3	67.3	----	----
1965		70.2	66.8	73.8	71.1	67.6	74.8	64.3	61.2	67.6	----	----
1966		70.2	66.7	73.9	71.1	67.5	74.8	64.2	60.9	67.6	----	----
1967		70.5	67.0	74.3	71.4	67.8	75.2	64.9	61.4	68.5	----	----
1968		70.2	66.6	74.1	71.1	67.5	75.0	64.1	60.4	67.9	----	----
1969		70.5	66.8	74.4	71.4	67.7	75.3	64.5	60.6	68.6	----	----
1970		70.8	67.1	74.7	71.7	68.0	75.6	65.3	61.3	69.4	64.1	60.0
1971		71.1	67.4	75.0	72.0	68.3	75.8	65.6	61.6	69.8	64.6	60.5
1972		71.2	67.4	75.1	72.0	68.3	75.9	65.7	61.5	70.1	64.7	60.4
1973		71.4	67.6	75.3	72.2	68.5	76.1	66.1	62.0	70.3	65.0	60.9
1974		72.0	68.2	75.9	72.8	69.0	76.7	67.1	62.9	71.3	66.0	61.7
1975		72.6	68.8	76.6	73.4	69.5	77.3	68.0	63.7	72.4	66.8	62.4
1976		72.9	69.1	76.8	73.6	69.9	77.5	68.4	64.2	72.7	67.2	62.9
1977		73.3	69.5	77.2	74.0	70.2	77.9	68.9	64.7	73.2	67.7	63.4

1978	73.5	69.6	77.3	74.1	70.4	78.0	69.3	65.0	73.5	68.1	63.7	72.4
1979	73.9	70.0	77.8	74.6	70.8	78.4	69.8	65.4	74.1	68.5	64.0	72.9
1980	73.7	70.0	77.4	74.4	70.7	78.1	69.5	65.3	73.6	68.1	63.8	72.5
1981	74.1	70.4	77.8	74.8	71.1	78.4	70.3	66.2	74.4	68.9	64.5	73.2
1982	74.5	70.8	78.1	75.1	71.5	78.7	70.9	66.8	74.9	69.4	65.1	73.6
1983	74.6	71.0	78.1	75.2	71.6	78.7	70.9	67.0	74.7	69.4	65.2	73.5
1984	74.7	71.1	78.2	75.3	71.8	78.7	71.1	67.2	74.9	69.5	65.3	73.6
1985	74.7	71.1	78.2	75.3	71.8	78.7	71.0	67.0	74.8	69.3	65.0	73.4
1986	74.7	71.2	78.2	75.4	71.9	78.8	70.9	66.8	74.9	69.1	64.8	73.4
1987	74.9	71.4	78.3	75.6	72.1	78.9	71.0	66.9	75.0	69.1	64.7	73.4
1988	74.9	71.4	78.3	75.6	72.2	78.9	70.8	66.7	74.8	68.9	64.4	73.2
1989	75.1	71.7	78.5	75.9	72.5	79.2	70.9	66.7	74.9	68.8	64.3	73.3
1990	75.4	71.8	78.8	76.1	72.7	79.4	71.2	67.0	75.2	69.1	64.5	73.6
1991	75.5	72.0	78.9	76.3	72.9	79.6	71.5	67.3	75.5	69.3	64.6	73.8
1992	75.8	72.3	79.1	76.5	73.2	79.8	71.8	67.7	75.7	69.6	65.0	73.9
1993	75.5	72.2	78.8	76.3	73.1	79.5	71.5	67.3	75.5	69.2	64.6	73.7
1994	75.7	72.4	79.0	76.5	73.3	79.6	71.7	67.6	75.7	69.5	64.9	73.9
1995	75.8	72.5	78.9	76.5	73.4	79.6	71.9	67.9	75.7	69.6	65.2	73.9
1996	76.1	73.1	79.1	76.8	73.9	79.7	72.6	68.9	76.1	70.2	66.1	74.2
1997	76.5	73.6	79.4	77.1	74.3	79.9	73.4	69.8	76.7	71.1	67.2	74.7
1998	76.7	73.8	79.5	77.3	74.5	80.0	-----	-----	-----	71.3	67.6	74.8
1999	76.7	73.9	79.4	77.3	74.6	79.9	-----	-----	-----	71.4	67.8	74.7
2000	76.8	74.1	79.3	77.3	74.7	79.9	-----	-----	-----	71.8	68.2	75.1
2001	77.0	74.3	79.5	77.5	74.9	80.0	-----	-----	-----	72.0	68.5	75.3
2002	77.0	74.4	79.6	77.5	74.9	80.1	-----	-----	-----	72.2	68.7	75.4
2003	77.2	74.5	79.7	77.7	75.1	80.2	-----	-----	-----	72.4	68.9	75.7
2004	77.6	75.0	80.1	78.1	75.5	80.5	-----	-----	-----	72.9	69.4	76.1
2005	77.6	75.0	80.1	78.0	75.5	80.5	-----	-----	-----	73.0	69.5	76.2
2006	77.8	75.2	80.3	78.3	75.8	80.7	-----	-----	-----	73.4	69.9	76.7
2007	78.1	75.5	80.6	78.5	76.0	80.9	-----	-----	-----	73.8	70.3	77.0
2008	78.2	75.6	80.6	78.5	76.1	80.9	-----	-----	-----	74.3	70.9	77.3
2009	78.5	76.0	80.9	78.8	76.4	81.2	-----	-----	-----	74.7	71.4	77.7
2010	78.7	76.2	81.0	78.9	76.5	81.3	-----	-----	-----	75.1	71.8	78.0
2011	78.7	76.3	81.1	79.0	76.6	81.3	-----	-----	-----	75.3	72.2	78.2
2012	78.8	76.4	81.2	79.1	76.7	81.4	-----	-----	-----	75.5	72.3	78.4
2013	78.8	76.4	81.2	79.1	76.7	81.4	-----	-----	-----	75.5	72.3	78.4
2014	78.8	76.4	81.2	79.0	76.7	81.4	-----	-----	-----	75.6	72.5	78.4

\1 Prior to 1929, for death-registration area only.

\* Denotes first year for which figures includes Alaska and Hawaii.

\2 Excludes New Jersey; State did not require reporting of race.

\3 Includes Alaska.

Source: 1850-1910: Carter et al., 2006, Series Ab1-Ab10, Ab704-Ab911. U.S. Public Health Service, 1900-1967, Vital Statistics of the United States, 1967, vol. II, part A, pp.. 5-8; 1968-1980, same report, annual issues. 1990-2014, NCHS, "Deaths: Final Data for 2014" National Vital Statistics Reports, Vol. 65, No. 4

(June 30, 2016), Table 8. See Table 2.



Table 7. Age-Adjusted Death Rates. By Sex and Race. United States, 1900-2000. 2000 Standard.\1

	Total			White			All other		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
1900	2,516.3	2,629.1	2,408.7	2,499.6	2,611.6	2,392.3	3,420.9	3,574.0	3,305.7
1901	2,471.5	2,598.8	2,349.0	2,454.6	2,580.6	2,333.1	3,335.8	3,522.0	3,164.8
1902	2,299.8	2,446.3	2,161.3	2,282.8	2,428.6	2,144.9	3,188.0	3,397.3	3,001.0
1903	2,377.5	2,511.9	2,249.1	2,358.4	2,492.7	2,230.1	3,371.0	3,543.7	3,208.3
1904	2,500.9	2,651.3	2,357.2	2,480.4	2,628.9	2,338.2	3,583.4	3,842.6	3,359.8
1905	2,422.2	2,564.0	2,286.2	2,402.6	2,543.2	2,267.6	3,437.3	3,651.9	3,244.8
1906	2,397.4	2,552.0	2,243.2	2,373.4	2,527.7	2,219.4	3,220.6	3,338.2	3,112.7
1907	2,492.9	2,658.6	2,325.9	2,469.3	2,635.5	2,302.4	3,292.3	3,405.0	3,176.7
1908	2,297.6	2,432.0	2,161.0	2,276.8	2,410.9	2,140.6	3,045.6	3,137.4	2,961.1
1909	2,247.9	2,384.4	2,110.2	2,227.2	2,362.5	2,090.9	3,004.4	3,146.5	2,873.3
1910	2,315.9	2,458.5	2,170.0	2,298.1	2,440.5	2,152.8	2,981.0	3,085.0	2,872.9
1911	2,244.1	2,373.1	2,110.8	2,220.0	2,349.0	2,087.2	2,998.1	3,091.6	2,897.3
1912	2,210.4	2,352.2	2,065.4	2,186.7	2,326.9	2,043.2	2,957.3	3,112.0	2,806.4
1913	2,205.3	2,349.4	2,057.4	2,175.4	2,320.3	2,026.9	2,905.5	3,010.9	2,801.6
1914	2,148.1	2,284.9	2,007.8	2,115.6	2,252.9	1,975.1	2,912.1	3,014.7	2,807.7
1915	2,173.6	2,301.4	2,043.2	2,138.3	2,266.6	2,007.4	3,019.3	3,101.5	2,946.4
1916	2,265.3	2,404.9	2,122.2	2,222.7	2,364.4	2,077.2	2,937.7	3,032.4	2,851.0
1917	2,274.5	2,426.4	2,118.7	2,220.3	2,374.6	2,062.2	3,066.7	3,169.8	2,967.9
1918	2,538.2	2,736.7	2,339.9	2,474.5	2,677.0	2,272.2	3,407.4	3,527.6	3,300.0
1919	2,055.7	2,140.0	1,971.6	2,004.2	2,094.6	1,913.7	2,645.6	2,647.4	2,660.2
1920	2,145.7	2,211.9	2,079.8	2,095.0	2,165.4	2,024.5	2,740.7	2,746.0	2,753.5
1921	1,957.2	2,024.0	1,889.4	1,914.0	1,985.3	1,841.4	2,457.7	2,459.1	2,472.8
1922	2,048.5	2,130.8	1,964.1	2,003.5	2,087.3	1,916.8	2,505.7	2,558.3	2,474.0
1923	2,140.4	2,228.5	2,049.5	2,086.1	2,173.3	1,995.1	2,715.6	2,801.7	2,655.6
1924	2,037.1	2,145.9	1,926.2	1,967.9	2,072.9	1,859.7	2,804.3	2,944.7	2,691.0
1925	2,067.7	2,177.1	1,956.1	1,998.3	2,103.5	1,889.7	2,856.3	2,998.3	2,739.6

1926	2,145.2	2,261.2	2,027.0	2,078.0	2,189.8	1,963.0	2,903.6	3,052.2	2,775.6
1927	1,988.6	2,112.9	1,862.9	1,924.8	2,047.8	1,799.6	2,673.9	2,798.8	2,563.3
1928	2,123.6	2,255.3	1,989.6	2,052.2	2,181.9	1,919.4	2,833.1	2,977.8	2,700.7
1929	2,080.2	2,218.7	1,939.9	2,006.0	2,140.3	1,869.1	2,830.2	3,010.1	2,662.4
1930	1,942.9	2,087.8	1,797.4	1,866.1	2,008.7	1,722.5	2,719.0	2,886.4	2,561.5
1931	1,894.1	2,046.5	1,742.7	1,823.3	1,973.6	1,673.5	2,599.4	2,772.4	2,437.7
1932	1,896.2	2,035.5	1,757.5	1,837.0	1,974.2	1,699.9	2,471.2	2,631.1	2,322.8
1933	1,849.3	2,001.1	1,698.4	1,786.6	1,937.0	1,636.7	2,435.8	2,593.9	2,288.7
1934	1,887.3	2,055.8	1,719.9	1,820.6	1,985.9	1,656.1	2,509.4	2,703.9	2,323.3
1935	1,859.2	2,030.4	1,689.8	1,809.2	1,978.6	1,641.4	2,314.1	2,500.8	2,134.6
1936	1,962.9	2,147.7	1,779.8	1,905.9	2,086.3	1,726.8	2,494.5	2,720.1	2,276.8
1937	1,881.8	2,072.0	1,694.4	1,828.5	2,015.8	1,643.7	2,372.0	2,594.0	2,156.7
1938	1,763.7	1,931.7	1,598.5	1,714.3	1,882.1	1,548.9	2,215.5	2,382.4	2,055.4
1939	1,766.2	1,936.5	1,599.3	1,723.5	1,893.8	1,556.3	2,155.3	2,326.3	1,990.9
1940	1,770.8	1,960.9	1,586.1	1,720.3	1,909.3	1,536.3	2,243.7	2,448.0	2,047.9
1941	1,693.6	1,892.2	1,502.3	1,644.2	1,842.3	1,453.0	2,141.5	2,348.4	1,944.6
1942	1,633.6	1,830.0	1,444.4	1,592.8	1,789.0	1,403.4	1,984.9	2,183.0	1,798.1
1943	1,697.6	1,896.9	1,507.2	1,661.2	1,863.0	1,468.2	2,003.1	2,172.7	1,843.6
1944	1,608.8	1,798.1	1,427.8	1,574.5	1,766.5	1,390.8	1,887.3	2,049.3	1,735.1
1945	1,563.1	1,760.3	1,376.0	1,533.4	1,733.2	1,343.7	1,790.7	1,958.4	1,633.1
1946	1,527.9	1,723.1	1,342.8	1,502.9	1,701.2	1,314.9	1,707.0	1,867.2	1,555.5
1947	1,530.5	1,740.8	1,332.8	1,502.7	1,716.9	1,301.5	1,748.5	1,917.6	1,590.0
1948	1,500.3	1,719.0	1,296.3	1,468.8	1,689.8	1,262.8	1,763.2	1,957.3	1,579.0
1949	1,456.4	1,675.6	1,252.6	1,423.5	1,646.6	1,216.4	1,737.4	1,913.0	1,570.6
1950	1,426.9	1,651.2	1,219.9	1,395.5	1,624.5	1,184.9	1,686.2	1,863.9	1,515.3
1951	1,413.7	1,638.7	1,206.1	1,383.1	1,612.6	1,171.8	1,661.7	1,839.5	1,491.6
1952	1,385.4	1,607.5	1,180.2	1,354.5	1,579.3	1,147.4	1,632.5	1,830.9	1,443.8
1953	1,377.0	1,606.4	1,166.9	1,348.2	1,580.7	1,135.8	1,602.6	1,801.0	1,415.8
1954	1,307.2	1,529.3	1,104.6	1,283.4	1,509.1	1,078.0	1,478.3	1,666.9	1,302.6
1955	1,325.1	1,554.6	1,117.1	1,303.4	1,537.5	1,091.8	1,474.1	1,658.4	1,302.6
1956	1,327.1	1,565.4	1,113.1	1,304.7	1,548.1	1,086.8	1,483.1	1,672.2	1,308.6
1957	1,350.4	1,597.2	1,130.5	1,325.0	1,576.4	1,101.7	1,535.6	1,740.5	1,347.8
1958	1,337.9	1,587.9	1,117.4	1,313.1	1,568.0	1,088.9	1,517.4	1,723.2	1,329.6

1959	√2	1,313.0	1,566.5	1,090.8	1,289.8	1,548.7	1,063.8	1,472.9	1,678.5	1,284.5
1960	*	1,328.5	1,597.0	1,095.8	1,300.6	1,573.9	1,065.0	1,537.1	1,766.2	1,328.8
1961		1,297.7	1,565.7	1,068.4	1,271.4	1,545.0	1,038.4	1,489.4	1,706.6	1,294.1
1962	√3	1,322.4	1,601.7	1,086.9	1,293.7	1,572.1	1,057.7	1,527.2	1,762.8	1,321.5
1963	√3	1,345.1	1,641.9	1,098.4	1,314.7	1,605.9	1,070.7	1,577.9	1,836.9	1,349.0
1964		1,302.8	1,594.8	1,061.2	1,274.2	1,570.4	1,030.8	1,506.3	1,763.3	1,281.8
1965		1,305.6	1,612.3	1,055.8	1,277.3	1,587.6	1,026.3	1,506.2	1,784.8	1,265.6
1966		1,307.9	1,620.9	1,054.9	1,277.6	1,592.9	1,024.7	1,528.8	1,826.5	1,274.7
1967		1,272.7	1,588.6	1,020.2	1,245.3	1,563.8	992.9	1,464.3	1,764.3	1,210.0
1968		1,303.2	1,631.3	1,043.2	1,270.2	1,599.4	1,011.7	1,551.0	1,875.7	1,277.1
1969		1,270.2	1,597.8	1,012.9	1,239.0	1,567.0	983.9	1,500.1	1,832.8	1,222.1
1970		1,229.4	1,557.9	974.7	1,197.9	1,526.7	945.7	1,460.1	1,791.8	1,184.7
1971		1,212.1	1,540.4	960.4	1,183.0	1,512.4	933.3	1,416.2	1,741.1	1,149.1
1972		1,213.9	1,549.3	958.5	1,184.5	1,518.9	932.6	1,419.0	1,771.5	1,133.1
1973		1,200.5	1,535.7	947.7	1,171.0	1,505.6	921.2	1,408.5	1,755.5	1,130.5
1974		1,151.1	1,477.0	907.3	1,124.6	1,449.5	884.1	1,331.6	1,673.2	1,060.3
1975		1,093.7	1,416.0	854.9	1,069.0	1,389.7	833.8	1,262.5	1,604.6	993.6
1976		1,083.4	1,403.2	849.1	1,059.6	1,378.3	828.7	1,244.2	1,579.8	981.8
1977		1,051.0	1,368.0	820.6	1,026.6	1,342.4	799.5	1,218.5	1,552.4	960.8
1978		1,043.1	1,356.9	816.3	1,019.6	1,331.6	796.5	1,201.5	1,535.6	944.3
1979		1,010.4	1,315.4	790.0	986.5	1,289.0	770.1	1,171.1	1,502.7	918.5
1980		1,039.1	1,348.1	817.9	1,012.7	1,317.6	796.1	1,208.7	1,551.6	952.5
1981		1,007.1	1,308.2	792.7	984.0	1,282.2	773.6	1,158.4	1,485.9	914.0
1982		985.0	1,279.9	776.6	963.6	1,255.9	758.7	1,122.7	1,441.5	886.6
1983		990.0	1,284.5	783.3	967.3	1,259.4	763.9	1,136.9	1,452.4	904.6
1984		982.5	1,271.4	779.8	959.7	1,245.9	760.7	1,129.4	1,445.9	897.8
1985		988.1	1,278.1	784.5	963.6	1,249.8	764.3	1,147.1	1,469.9	911.2
1986		978.6	1,261.7	778.7	952.8	1,230.5	758.1	1,144.7	1,473.2	906.1
1987		970.0	1,246.1	774.2	943.4	1,213.4	753.3	1,137.5	1,464.5	900.3
1988		975.7	1,250.7	781.0	947.6	1,215.9	759.1	1,150.9	1,480.2	912.2
1989		950.5	1,215.0	761.8	920.2	1,176.6	738.8	1,140.6	1,468.6	902.6
1990		938.7	1,202.8	750.9	909.8	1,165.9	728.8	1,108.2	1,435.1	874.5
1991		922.3	1,180.5	738.2	893.2	1,143.1	716.1	1,096.7	1,419.2	866.5

1993	926.1	1,177.3	745.9	897.0	1,138.9	724.1	1,092.9	1,413.5	865.1
1994	913.5	1,155.5	738.6	885.6	1,118.7	717.5	1,068.2	1,374.8	849.2
1995	909.8	1,143.9	739.4	882.3	1,107.5	718.7	1,061.0	1,361.8	847.3
1996	894.1	1,115.7	733.0	869.0	1,082.9	713.6	1,027.9	1,307.0	830.6
1997	878.1	1,088.1	725.6	855.7	1,059.1	707.8	994.6	1,254.1	812.7
1998	870.6	1,069.4	724.7	849.3	1,042.0	707.3	980.3	1,225.3	808.6
1999	875.6	1,067.0	734.0	854.6	1,040.0	716.6	983.3	1,220.7	817.2
2000	869.0	1,053.8	731.4	849.8	1,029.4	715.3	955.5	1,176.7	798.5
2001	858.8	1,035.4	725.6	840.7	1,012.1	710.4			
2002	855.9	1,030.6	723.6	839.0	1,009.0	709.3			
2003	843.5	1,010.3	715.2	827.1	988.8	701.6			
2004	813.7	973.3	690.5	798.5	953.2	677.7			
2005	815.0	971.9	692.3	801.1	952.9	680.9			
2006	791.8	943.5	672.2	779.3	925.8	662.3			
2007	775.3	922.9	658.1	764.3	907.1	649.4			
2008	774.9	918.8	659.9	767.2	907.1	653.7			
2009	749.6	890.9	636.8	742.8	880.5	631.3			
2010	747.0	887.1	634.9	741.8	878.5	630.8			
2011	741.3	875.3	632.4	738.8	870.2	630.3			
2012	732.8	865.1	624.7	730.9	860.0	623.8			
2013	731.9	863.6	623.5	731.0	859.2	623.6			
2014	724.6	855.1	616.7	725.4	853.4	617.6			

		Black			American Indian			Asian & Pacific Islander		
		Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
1960	*	1,566.9	1,805.7	1,356.3	-----	-----	-----	-----	-----	-----
1961		1,522.8	1,755.5	1,320.5	-----	-----	-----	-----	-----	-----
1962	\3	1,529.0	1,776.1	1,317.5	-----	-----	-----	-----	-----	-----
1963	\3	1,580.9	1,858.8	1,346.6	-----	-----	-----	-----	-----	-----
1964		1,557.5	1,841.0	1,318.0	-----	-----	-----	-----	-----	-----
1965		1,554.0	1,854.5	1,302.6	-----	-----	-----	-----	-----	-----
1966		1,581.5	1,903.4	1,315.1	-----	-----	-----	-----	-----	-----
1967		1,517.5	1,840.2	1,252.1	-----	-----	-----	-----	-----	-----
1968		1,613.2	1,965.7	1,324.6	-----	-----	-----	-----	-----	-----
1969		1,566.6	1,926.3	1,274.5	-----	-----	-----	-----	-----	-----
1970		1,527.7	1,888.4	1,236.2	-----	-----	-----	-----	-----	-----
1971		1,479.2	1,831.5	1,196.7	-----	-----	-----	-----	-----	-----
1972		1,484.3	1,865.5	1,182.2	-----	-----	-----	-----	-----	-----
1973		1,472.9	1,845.5	1,180.5	-----	-----	-----	-----	-----	-----
1974		1,396.3	1,765.0	1,109.5	-----	-----	-----	-----	-----	-----
1975		1,326.2	1,696.5	1,041.0	-----	-----	-----	-----	-----	-----
1976		1,309.3	1,673.0	1,030.4	-----	-----	-----	-----	-----	-----
1977		1,285.4	1,646.5	1,011.5	-----	-----	-----	-----	-----	-----
1978		1,266.1	1,625.1	994.1	-----	-----	-----	-----	-----	-----
1979		1,240.5	1,602.1	969.7	-----	-----	-----	-----	-----	-----
1980		1,314.8	1,697.8	1,033.3	867.0	1,111.5	662.4	589.9	786.5	425.9
1981		1,258.4	1,626.6	986.6	784.6	1,030.2	588.0	544.7	710.3	405.3
1982		1,221.3	1,580.4	960.1	757.0	940.1	604.4	550.4	738.2	410.3
1983		1,240.5	1,600.7	980.7	757.3	945.0	605.5	565.1	718.8	428.8
1984		1,236.7	1,600.8	976.9	761.7	946.0	567.9	574.4	724.7	443.1
1985		1,261.2	1,634.5	994.4	731.7	926.1	577.2	586.5	755.4	456.7
1986		1,266.7	1,650.1	994.4	720.8	926.7	549.3	576.4	730.5	445.4
1987		1,263.1	1,650.3	989.7	719.8	899.3	583.7	577.3	732.4	448.1
1988		1,284.3	1,677.6	1,006.8	718.6	917.4	563.6	584.2	732.0	451.0
1989		1,275.5	1,670.1	998.1	761.6	999.8	586.3	581.3	729.6	458.4

1990	1,250.3	1,644.5	975.1	716.3	916.2	561.8	582.0	716.4	469.3
1991	1,235.4	1,626.1	963.3	763.9	970.6	608.3	566.2	703.4	453.2
1992	1,206.7	1,587.8	942.5	759.0	970.4	599.4	558.5	697.3	445.8
1993	1,241.2	1,632.2	969.5	796.4	1,006.3	641.6	565.8	709.9	450.4
1994	1,216.9	1,592.8	954.6	764.8	953.3	618.8	562.7	702.5	452.1
1995	1,213.9	1,585.7	955.9	771.2	932.0	643.9	554.8	693.4	446.7
1996	1,178.4	1,524.2	940.3	763.6	924.8	641.7	543.2	676.1	439.6
1997	1,139.8	1,458.8	922.1	774.0	974.8	625.3	531.8	660.2	432.6
1998	1,127.8	1,430.5	921.6	770.4	943.9	640.5	522.4	646.9	426.7
1999	1,135.7	1,432.6	933.6	780.9	925.9	668.2	519.7	641.2	427.5
2000	1,121.4	1,403.5	927.6	709.3	841.5	604.5	506.4	624.2	416.8
2001	1,106.2	1,380.5	917.9	714.1	834.4	617.1	495.4	603.7	413.9
2002	1,097.3	1,364.8	913.5	713.0	841.3	611.1	486.5	595.3	405.5
2003	1,080.5	1,343.5	898.3	726.3	850.6	628.1	480.5	583.6	404.2
2004	1,043.8	1,296.8	869.8	691.8	811.4	594.9	460.7	557.4	389.1
2005	1,035.1	1,281.3	862.7	701.1	824.5	601.8	459.6	560.6	385.2
2006	997.9	1,239.5	828.4	676.6	780.8	589.0	450.7	544.9	381.2
2007	972.0	1,204.8	808.1	661.3	780.3	565.2	436.2	525.9	369.2
2008	947.7	1,168.0	792.0	644.0	757.2	548.7	435.1	518.5	372.4
2009	912.8	1,123.1	763.3	616.0	709.0	536.4	424.6	509.2	361.1
2010	898.2	1,104.0	752.5	628.3	730.2	541.7	424.3	512.1	359.0
2011	877.1	1,067.1	739.8	600.9	691.7	522.5	410.3	490.7	349.8
2012	864.8	1,058.6	723.9	595.3	690.5	512.3	407.1	484.1	348.8
2013	860.8	1,052.8	720.6	591.7	689.2	508.3	405.4	487.8	343.0
2014	849.3	1,034.0	713.3	594.1	685.4	514.1	388.3	462.0	331.1

\1Prior to 1929, for death-registration area only.

\* Denotes first year for which figures includes Alaska and Hawaii.

\2 Excludes New Jersey; State did not require reporting of race.

\3 Includes Alaska.

Source: 1850-1910: Carter et al., 2006, Series Ab1-Ab10, Ab704-Ab911. U.S. Public Health Service, 1900-1967, Vital Statistics of the United States, 1967, vol. II, part A, pp.. 5-8; 1968-1980, same report, annual issues. 1990-2014, NCHS, "Deaths: Final Data for 2014" [National Vital Statistics](#)

Reports, Vol. 65, No. 4 (June 30, 2016), Table 1. For years prior to 1980, the rates were calculated directly using the 2000 U.S. Census age distribution adopted in 2002 by the National Center for Health Statistics.







1959	1.142	1.084	1.207	----	----	----	----	----	----	----	----	----
1960	1.182	1.122	1.248	1.205	1.147	1.274	----	----	----	----	----	----
1961	1.171	1.105	1.246	1.198	1.136	1.272	----	----	----	----	----	----
1962	1.180	1.121	1.249	1.182	1.130	1.246	----	----	----	----	----	----
1963	1.200	1.144	1.260	1.202	1.157	1.258	----	----	----	----	----	----
1964	1.182	1.123	1.244	1.222	1.172	1.279	----	----	----	----	----	----
1965	1.179	1.124	1.233	1.217	1.168	1.269	----	----	----	----	----	----
1966	1.197	1.147	1.244	1.238	1.195	1.283	----	----	----	----	----	----
1967	1.176	1.128	1.219	1.219	1.177	1.261	----	----	----	----	----	----
1968	1.221	1.173	1.262	1.270	1.229	1.309	----	----	----	----	----	----
1969	1.211	1.170	1.242	1.264	1.229	1.295	----	----	----	----	----	----
1970	1.219	1.174	1.253	1.275	1.237	1.307	----	----	----	----	----	----
1971	1.197	1.151	1.231	1.250	1.211	1.282	----	----	----	----	----	----
1972	1.198	1.166	1.215	1.253	1.228	1.268	----	----	----	----	----	----
1973	1.203	1.166	1.227	1.258	1.226	1.281	----	----	----	----	----	----
1974	1.184	1.154	1.199	1.242	1.218	1.255	----	----	----	----	----	----
1975	1.181	1.155	1.192	1.241	1.221	1.249	----	----	----	----	----	----
1976	1.174	1.146	1.185	1.236	1.214	1.243	----	----	----	----	----	----
1977	1.187	1.156	1.202	1.252	1.227	1.265	----	----	----	----	----	----
1978	1.178	1.153	1.186	1.242	1.220	1.248	----	----	----	----	----	----
1979	1.187	1.166	1.193	1.258	1.243	1.259	----	----	----	----	----	----
1980	1.194	1.178	1.196	1.298	1.289	1.298	0.856	0.844	0.832	0.583	0.597	0.535
1981	1.177	1.159	1.181	1.279	1.269	1.275	0.797	0.803	0.760	0.554	0.554	0.524
1982	1.165	1.148	1.169	1.267	1.258	1.265	0.786	0.749	0.797	0.571	0.588	0.541
1983	1.175	1.153	1.184	1.282	1.271	1.284	0.783	0.750	0.793	0.584	0.571	0.561
1984	1.177	1.161	1.180	1.289	1.285	1.284	0.794	0.759	0.747	0.599	0.582	0.582
1985	1.190	1.176	1.192	1.309	1.308	1.301	0.759	0.741	0.755	0.609	0.604	0.598
1986	1.201	1.197	1.195	1.329	1.341	1.312	0.757	0.753	0.725	0.605	0.594	0.588
1987	1.206	1.207	1.195	1.339	1.360	1.314	0.763	0.741	0.775	0.612	0.604	0.595
1988	1.215	1.217	1.202	1.355	1.380	1.326	0.758	0.755	0.742	0.617	0.602	0.594
1989	1.239	1.248	1.222	1.386	1.419	1.351	0.828	0.850	0.794	0.632	0.620	0.620
1990	1.218	1.231	1.200	1.374	1.410	1.338	0.787	0.786	0.771	0.640	0.614	0.644
1991	1.228	1.242	1.210	1.383	1.423	1.345	0.855	0.849	0.849	0.634	0.615	0.633

1992	1.216	1.231	1.199	1.375	1.415	1.339	0.865	0.865	0.851	0.636	0.621	0.633
1993	1.218	1.241	1.195	1.384	1.433	1.339	0.888	0.884	0.886	0.631	0.623	0.622
1994	1.206	1.229	1.184	1.374	1.424	1.330	0.864	0.852	0.862	0.635	0.628	0.630
1995	1.202	1.230	1.179	1.376	1.432	1.330	0.874	0.842	0.896	0.629	0.626	0.622
1996	1.183	1.207	1.164	1.356	1.408	1.318	0.879	0.854	0.899	0.625	0.624	0.616
1997	1.162	1.184	1.148	1.332	1.377	1.303	0.905	0.920	0.883	0.621	0.623	0.611
1998	1.154	1.176	1.143	1.328	1.373	1.303	0.907	0.906	0.906	0.615	0.621	0.603
1999	1.151	1.174	1.140	1.329	1.378	1.303	0.914	0.890	0.932	0.608	0.617	0.597
2000	1.124	1.143	1.116	1.320	1.363	1.297	0.835	0.817	0.845	0.596	0.606	0.583
2001	-----	-----	-----	1.316	1.364	1.292	0.849	0.824	0.869	0.589	0.596	0.583
2002	-----	-----	-----	1.308	1.353	1.288	0.850	0.834	0.862	0.580	0.590	0.572
2003	-----	-----	-----	1.306	1.359	1.280	0.878	0.860	0.895	0.581	0.590	0.576
2004	-----	-----	-----	1.307	1.360	1.283	0.866	0.851	0.878	0.577	0.585	0.574
2005	-----	-----	-----	1.292	1.345	1.267	0.875	0.865	0.884	0.574	0.588	0.566
2006	-----	-----	-----	1.281	1.339	1.251	0.868	0.843	0.889	0.578	0.589	0.576
2007	-----	-----	-----	1.272	1.328	1.244	0.865	0.860	0.870	0.571	0.580	0.569
2008	-----	-----	-----	1.235	1.288	1.212	0.839	0.835	0.839	0.567	0.572	0.570
2009	-----	-----	-----	1.229	1.276	1.209	0.829	0.805	0.850	0.572	0.578	0.572
2010	-----	-----	-----	1.211	1.257	1.193	0.847	0.831	0.859	0.572	0.583	0.569
2011	-----	-----	-----	1.187	1.226	1.174	0.813	0.795	0.829	0.555	0.564	0.555
2012	-----	-----	-----	1.183	1.231	1.160	0.814	0.803	0.821	0.557	0.563	0.559
2013	-----	-----	-----	1.178	1.225	1.156	0.809	0.802	0.815	0.555	0.568	0.550
2014	-----	-----	-----	1.171	1.212	1.155	0.819	0.803	0.832	0.535	0.541	0.536

Appendix Table A-1. Census Race Categories, 1790-1840.

Year	Race Category
1790	Free white males 16 years and upward, including heads of families under 16 years Free white females, including heads of families All other free persons Slaves
1800-1810	Free white males, divided into 5 age groups Free white females, divided into 5 age groups All other free persons, except Indians not taxed Slaves
1820	Free white males, divided into 6 age groups Free white females, divided into 5 age groups Slave males, divided into 4 age groups Slave females, divided into 4 age groups Free colored males, divided into 4 age groups Free colored females, divided into 4 age groups All other persons, except Indians not taxed
1830-1840	Free white males, divided into 13 age groups Free white females, divided into 13 age groups Slave males, divided into 6 age groups Slave females, divided into 6 age groups Free colored males, divided into 6 age groups Free colored females, divided into 6 age groups

Source: Adapted from Anderson and Fienberg (1999}, Table 8.1. Originally from Wright and Hunt (1900).

Appendix Table A-2. Census Race Categories, 1850-1990.(a)

Year		Census Race Category	
1850(b)		B	M
1850(b)		B	M (Ind.)(c)
1870	W	B	M, C, I
1880	W	B	M, C, I
1890	white	black	mulatto, quadroon, octoroon, Chinese, Japanese, Indian
1900	W	B	Ch, Jp, In
1910	W	B	Mu, Ch, Jp, In, Ot (+ write in)
1920	W	B	Mu, In, Ch, Jp, Fil, Hin, Kor, (Other races, spell out in full)
1930	W	Neg	Mex, In, Ch, Jp, Fil, Hin, Kor, (Other races, spell out in full)
1940	W	Neg	In, Ch, Jp, Fil, Hin, Kor, (Other races, spell out in full)
1950	W	Neg	Ind, Jap, Chi, Fil, (Other race--spell out)
1960	White	Negro	American Indian, Japanese, Chinese, Filipino, Hawaiian, Part Hawaiian, Aleut, Eskimo, (etc)

1970	White	Negro or Black	Indian (Amer), Japanese, Chinese, Filipino, Hawaiian, Korean, Other (print race)
1980	White	Negro or Black	Japanese, Chinese, Filipino, Korean, Vietnamese, Indian (Amer), Asian Indian, Hawaiian, Guamanian, Samoan, Eskimo, Aleut, Other (specify)
1990	White	Negro or Black	Indian (Amer), Eskimo, Aleut, Chinese, Filipino, Hawaiian, Korean, Vietnamese, Japanese, Asian Indian, Samoan, Guamanian, Other API, Other race
2000	White		Black, African American, or Negro; American Indian or Alaska Native (specify tribal name) Asian Indian, Chinese, Japanese, Native Hawaiian Chinese, Korean, Guamanian or Chamorro Filipino, Vietnamese, Samoan, Other Asian (specify) Other Pacific Islander (specify), Some other race (Specify)
2010	White		Black, African American, or Negro; American Indian or Alaska Native (specify tribal name) Asian Indian, Chinese, Japanese, Native Hawaiian Chinese, Korean, Guamanian or Chamorro Filipino, Vietnamese, Samoan, Other Asian (specify) Other Pacific Islander (specify), Some other race (Specify)

(a) The categories are given in the order in which they appeared on the schedule or in the enumerator's instructions. The abbreviations are those that were to be used on the schedules. W= white; B=black; M=Mulatto; Neg=Negro; I, In, Ind., or Indian (Amer)=Indian (American Indian); C, Ch, or Chi=Chinese; Jp or Jap=Japanese; Ot=other; Fil=Filipino; Hin=Hindu (South Asian Indian); Kor=Korean; Mex=Mexican; API= Asian or Pacific Islander.

(b) In 1850 and 1860, on the schedule for free persons, the instructions to the enumerators were "in all cases where the person is White leave the space blank in the column marked 'Color'." For the slave schedule, the listed categories were "B" and "M".

(c) Although a category for American Indian people was not listed on the census form, the enumerator's instructions for 1860 were: "5. Indians –

Indians not taxed were not to be enumerated. The families of Indians who have renounced tribal rule, and who under State or Territorial laws exercise the rights of citizens, are to be enumerated. In all such cases write "Ind." opposite their names, in column 6, under the heading "Color"....9. Color. Under heading 6, entitled "Color," in all cases where the person is white leave the space blank; in all cases where the person is black with admixture insert the letter "B"; if a mulatto, or of mixed blood, write "M"; if an Indian, write "Ind." It is very desirable to have these instructions carefully observed."

Source: Adapted from Anderson and Fienberg (1999}, Table 8.2. Originally from Wright and Hunt (1900) and U.S. Bureau of the Census (1979, 1993, 2016).

Appendix Table A-3. Census Questions on Hispanic or Spanish Origin or Descent.  
1970-1990.(a)

Year	Questions
1970	Is this person's origin or descent? Mexican Puerto Rican Cuban Central American Other Spanish?(b)
1980	Is this person of Spanish/Hispanic origin or descent? No, not Spanish/Hispanic Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic
1990	Is this person of Spanish/Hispanic origin? No, not Spanish/Hispanic Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic, print one group..
2000	Is Person (number) of Hispanic, Latino, or Spanish origin? No, not Spanish/Hispanic/Latino Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, another Hispanic, Latino



2010 Is Person (number) of Hispanic, Latino, or Spanish origin?  
Yes, Mexican, Mexican American, Chicano  
Yes, Puerto Rican  
Yes, Cuban  
Yes, another Hispanic, Latino

(a) The census asked a specific question on “Spanish origin or descent” in 1970 on the 5% sample as a second part of a sample question on birthplace. In 1980, the question on “Spanish/Hispanic Origin or Descent” appeared on the short form (100% sample). Before 1970, members of the Hispanic origin population could be identified by a combination of questions on place of birth, place of birth of parents, and mother tongue. In the 1930 census only, the category “Mexican” was a separate category for answers to the question on “Color or Race.” See Gratton and Gutmann (2000).  
(b) This question appeared in the 1970 5% sample long form.

Source: Adapted from Anderson and Fienberg (1999), Table 8.4.

Figure 1  
TFR in Relation to Whites  
U.S. 1960-1998.

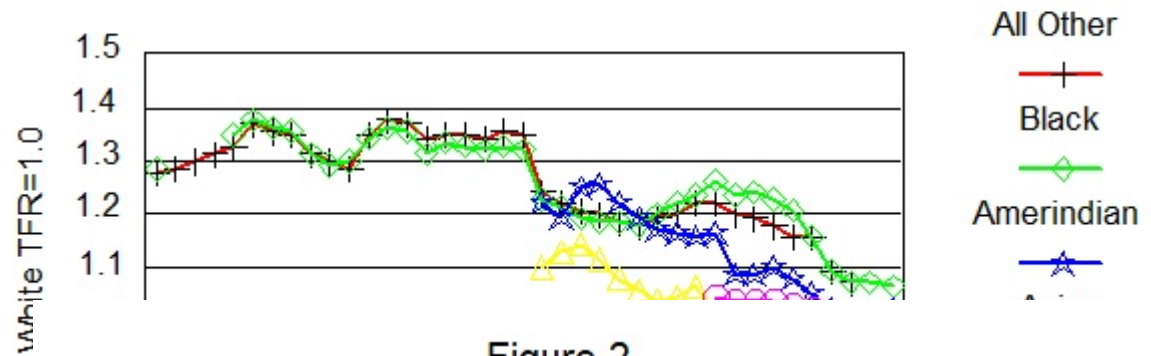


Figure 2  
Infant Mortality Rate in Relation to Whites  
U.S. 1915-1998

