

## U.S. Decennial Life Tables for 1999–2001, United States Life Tables

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### Abstract

**Objectives**—This report presents period life tables for the United States based on age-specific death rates for the period 1999–2001. These tables are the most recent in a 100-year series of decennial life tables for the United States.

**Methods**—This report presents complete life tables by age, race (white and black), and sex. Also presented are standard errors of the probability of dying and life expectancy. The data used to prepare these life tables are population estimates based on the 2000 decennial census, deaths occurring in the United States to U.S. residents in the 3 years 1999–2001, counts of U.S. resident births in the years 1997–2001, and population and death counts from the Medicare program for years 1999–2001.

**Results**—In 1999–2001, life expectancy at birth was 76.83 years for the total U.S. population, representing an increase of 27.59 years from a life expectancy of 49.24 years in 1900. Between 1900 and 2000, life expectancy increased by 40.08 years for black females (from 35.04 to 75.12), by 35.54 years for black males (from 32.54 to 68.08), by 28.89 years for white females (from 51.08 to 79.97), and by 26.51 years for white males (from 48.23 to 74.74).

### Introduction

The life tables presented in this report are the most recent in a series of decennial life tables for the United States that dates to the beginning of the 20th century. The 1999–2001 life tables are the 11th in the decennial series. The reporting of deaths at the national level began in 1900 with 10 states and the District of Columbia. As the quality of the reporting improved, states were added to the death-registration area. Beginning with the period 1929–1931, the decennial life tables were produced using data for all of the coterminous United States. Alaska and Hawaii were included beginning with the 1959–1961 decennial life tables. Each set of life tables is based on population data from a decennial census and reported deaths of the 3-year period surrounding the census year (the census year is the

middle year in all but the first in the series, in which deaths for 1900–1902 were used because death reports for 1899 were not collected (1)). The decennial life tables differ in one main respect from the life tables prepared and published annually in the Centers for Disease Control and Prevention's National Center for Health Statistics' (NCHS) *National Vital Statistics Reports*. The annual tables are based on deaths in a single year and, except for census years, on postcensal population estimates rather than on the data from a decennial census.

This report is the first of a series of reports containing life tables for 1999–2001 and other information related to the decennial life table program. Also included in the series is a methodological report that describes in detail the methods employed to estimate the national life tables, a report on national life tables analyzed by major groups of causes of death, and a report containing life tables for individual states and the District of Columbia, including a description of the methods used to estimate individual state life tables.

### Data and Methods

Mortality rates for a specific period may be summarized by the life table method to obtain measures of comparative longevity. There are two types of life tables—the cohort (or generation) life table and the period (or current) life table. The cohort life table provides a longitudinal perspective in that it follows the mortality experience of an actual cohort—for example, all persons born in the year 1945—from the moment of birth through consecutive ages in successive years. On the basis of age-specific death rates observed during consecutive years, the cohort life table reflects the mortality experience of a cohort from birth until no lives remain in the group. To prepare just a single complete cohort life table requires data over many years. Constructing cohort life tables entirely on the basis of observed data for real cohorts is usually not feasible because of data unavailability or incompleteness (2–4).

In contrast, the period life table does not represent the mortality experience of an actual birth cohort. Rather, the period life table

presents what would happen to a hypothetical cohort if it experienced throughout its entire life the mortality conditions of a particular period of relatively short duration (often 1 to 3 years). For example, the period life tables for 1999–2001 are based on the assumption that a hypothetical birth cohort will be subject throughout its lifetime to the age-specific death rates prevailing for the actual population in 1999–2001. The period life table may be characterized as rendering a “snapshot” of current mortality experience and shows the long-range implications of a set of age-specific death rates that prevailed at a particular point in time. The life tables presented in this report are period life tables based on age-specific death rates for the period 1999–2001.

The data used to prepare the U.S. decennial life tables for 1999–2001 include deaths occurring in the United States to residents of the United States in the 3 years 1999–2001. The data are classified by age at death, age-specific population estimates for census year 2000, reported number of births for each of the years 1997–2001, and single-year population and death counts for those aged 66–100 years from the Medicare program of the Centers for Medicare and Medicaid Services for the years 1999–2001.

The census population counts used to estimate the life tables shown in this report were produced under a collaborative agreement with the U.S. Census Bureau. Reflecting the new guidelines issued in 1997 by the Office of Management and Budget (OMB), the 2000 census included an option for individuals to report more than one race as appropriate for themselves and household members (5). The 1997 OMB guidelines also provided for the reporting of Asian persons separately from Native Hawaiians or Other Pacific Islanders (NHOPI). Under the prior OMB standards (issued in 1977), data for Asian or Pacific Islander (API) persons were collected as a single group (6). Death certificates filed in state vital statistics offices for the years 1999–2001 included only one race for the decedent in the same categories as specified in the 1977 OMB guidelines, which also called for the grouping of Asians and NHOPI. Death certificate data by race were therefore incompatible with the population data collected in the 2000 census. As a result, NCHS developed a bridging algorithm that bridges reported 2000 decennial population data for multiple-race persons back to single-race categories and that groups API consistent with the 1977 OMB race categories (7).

Certain other data adjustments were necessary prior to the construction of the life tables. In accordance with standard practice, deaths for which age was not stated were allocated proportionally among the various age groups. Similarly, graduation techniques were used to eliminate anomalies arising from random variation and problems with age reporting in vital statistics and census data. Thus, to estimate the complete 1999–2001 life tables, Beer’s minimized fifth-difference procedure was employed to interpolate single-year-of-age number of deaths and population counts from 5-year age intervals (2). Death rates at ages 95 years and over, where the data from the census and from registered deaths are suspect because the accuracy of the reporting of age is not as good as at younger ages, are based on data from the Medicare program. To obtain a smooth transition between vital statistics and Medicare-based rates, the rates from the two sources are blended for ages 66–94 years.

These life tables are based on a complete count of resident deaths in the United States during the 3 years 1999, 2000, and 2001. As such, they are not subject to sampling error. However, even complete counts may be considered as one of a large series of possible results that could

have arisen under the same circumstances. This type of variation is known as random error. The reader should remember that the standard errors shown in this report reflect only this random error. Other errors, such as misreporting age on death certificates or in the census, are not reflected in them.

The probabilities of dying and the expectation of life presented in the report are “point” estimates. They do not give the reader an indication of how accurate they are. Therefore, standard errors of these two estimates are also presented. These can be used to develop confidence intervals within which the parameters are believed to lie. Standard errors of the probability of dying contain six decimal places, and standard errors of life expectancy contain three; they are shown in [Tables 10](#) and [11](#). In both cases, the standard errors contain one place more than the corresponding variable in the life tables. In computing confidence intervals, the limits are rounded to the same number of decimal places that the variable has in the life table.

To obtain a confidence interval around a point estimate, one would add and subtract from the estimated point estimate the product of the standard z-value corresponding to the desired confidence probability and the standard error of the point estimate. For example, a 95% confidence interval for the probability that a black female will die before reaching her 61st birthday is 0.01282–(1.96 x 0.000179) and 0.01282 + (1.96 x 0.000179) (from [Table 10](#)). The resulting 95% confidence interval ranges from 0.01247 to 0.01317. Likewise, to obtain a 95% confidence interval around the life expectancy of a 60-year-old black female, one would add and subtract the product of the standard z-value (1.96) and the standard error of the point estimate (0.017) (from [Table 11](#)) to life expectancy at 60 years of age (21.18 years). The 95% confidence interval in this case is from 21.15 to 21.21 years. The standard errors and confidence intervals are relatively small because of the large number of deaths in the combined 3 years of data 1999–2001.

*Expectation of life*—The life table provides a convenient tool for comparing the longevity of different populations or of different subdivisions of a population. The most commonly used measure of longevity is life expectancy ( $e_x$ ), which is the average number of years of life remaining for persons who have attained a given age ( $x$ ). Life expectancy and other life table values for each age in the 1999–2001 period are shown for the total population and by race and sex in [Tables 1–9](#). On the basis of the mortality experience of the U.S. resident population in 1999–2001, life expectancy at birth ( $e_0$ ) was 76.83 years for the total population.

*Survivors to specified ages*—Another way of estimating the longevity of the hypothetical life table cohort is by determining the proportion who survive to specified ages. The  $l_x$  column of the life table provides the data to estimate the proportion. For example, 50,819 persons out of the original life table cohort of 100,000 were alive at exactly 80 years of age (or 50.8%). Thus, the probability that a person will survive from birth to 80 years of age, given 1999–2001 age-specific mortality, is approximately 51%. Probabilities of survival can be calculated at any age by simply dividing the number of survivors at the terminal age by the number at the beginning age. For example, to calculate the probability of surviving from ages 20 to 85 years, one would divide the number of survivors at 85 years of age (34,471) by the number of survivors at 20 years of age (98,664), which results in a 34.9% probability of survival.

## Explanation of the columns of the life table

**Column 1—Age ( $x$  to  $x + n$ )**—This column shows the age interval between the two exact ages indicated. For instance, “7–28” days means the 21-day interval between the exact ages of 7 days and 28 days, and “43–44” years means the interval of 1 year between the 43rd and 44th birthdays. In the life tables in this report, the age interval is always 1 year, except in the case of subdivisions of the first year of life (Table 1).

**Column 2—Probability of dying ( ${}_nq_x$ )**—This column shows the probability of dying between the beginning of an age interval and before reaching the end of that age interval on the basis of the mortality rates of 1999–2001. For example, for black males, the probability of dying between the 1st and 7th day of life is 0.00186 (Table 8). In other words, for every 1,000 black male babies surviving to day 1 of life, 1.86 of them will die before reaching the 7th day of life. Similarly, for black males in the age interval 20–21 years, the probability of dying is 0.00208, which translates to 2.08 of every 1,000 black males who reach their 20th birthday dying before reaching their 21st birthday. When the age interval is 1 year, the symbol  $q_x$  (instead of  ${}_1q_x$ ) is generally used for the probability of dying.

**Column 3—Number surviving ( $l_x$ )**—This column shows the number of persons from the original life table cohort of 100,000 live births who survive to the beginning of each age interval. The  $l_x$  values are computed from the  ${}_nq_x$  values, which are successively applied to the remainder of the original 100,000 persons still alive at the beginning of each age interval. Thus, out of 100,000 white female babies born alive, 99,488 will complete the first year of life and enter the second; 99,319 will reach age 10; 99,049 will reach age 20; 42,820 will live to age 85; and, 13 will live to age 109 (Table 6).

**Column 4—Number dying ( ${}_nd_x$ )**—This column shows the number dying in each successive age interval out of the original 100,000 live births. For example, out of 100,000 males born alive, 298 will die in the first day of life, 126 will die between ages 20 and 21 years, and 234 will die between ages 100 and 101 years (Table 2). Each figure in column 4 is the difference between two successive figures in column 3. When the age interval is 1 year, the symbol  $d_x$  (instead of  ${}_1d_x$ ) is generally used for the number dying.

**Column 5—Person-years lived ( ${}_nL_x$ )**—This column shows the number of person-years lived by the life table cohort within an age interval  $x$  to  $x + n$ . Each figure in column 5 represents the total time (in days or years) lived between two indicated birthdays by all those reaching the earlier birthday. Thus, the figure 98,893 for females in the age interval 20–21 years is the total number of years lived between the 20th and 21st birthdays by the 98,915 (column 3) females who reached their 20th birthday out of 100,000 females born alive (Table 3). When the age interval is 1 year, the symbol  $L_x$  is generally used instead of  ${}_1L_x$ .

**Column 6—Total number of person-years lived ( $T_x$ )**. This column shows the total number of person-years that would be lived after the beginning of the age interval  $x$  to  $x + n$  by the life table cohort. For example, the figure 7,846,008 is the total number of years lived after attaining 1 year of age by the 99,375 females reaching that age (Table 3).

**Column 7—Expectation of life ( $e_x$ )**—The expectation of life at any given age is the average number of years remaining to be lived by those surviving to that age on the basis of a given set of age-specific rates of dying. It is derived by dividing the total person-years that would be

lived above age  $x$  by the number of persons who survived to that age interval ( $T_x/l_x$ ). Thus, the average remaining lifetime for black males who reach age 1 year is 68.16 years (6,709,633 divided by 98,437) (Table 8).

The expectation of life at birth ( $e_0$ ) is strongly affected by the number of deaths occurring during the first year of life. In comparing the longevity of different populations, also considering expectation of life at 1 year of age ( $e_1$ ) may be desirable because this measure is not affected by the infant mortality rate. When infant mortality is high, life expectancy at 1 year of age is higher than at birth. This is a unique situation. At all other ages, life expectancy declines with advancing age. For the black population, life expectancy at 1 year of age has been greater than life expectancy at birth in all previous decennial life tables. In 1999–2001, life expectancy at 1 year of age was higher than life expectancy at birth only for the total black population and for black males. In contrast, the last time this was noted for the white population was in the 1969–1971 decennial life tables (8).

Caution must be used in drawing conclusions from the figures in column 7 ( $e_x$ ). For example, in observing that the average remaining lifetime of white persons is greater than that of black persons, one should not conclude that the oldest ages reached by white persons necessarily exceed those attained by the most long-lived black persons. The difference in average length of life results from the fact that a greater proportion of black people die before reaching old age. For example, the proportion surviving to 75 years of age is greater among white persons (65.9%) than black persons (50.8%); yet, the average length of life remaining at 75 years of age is very similar for the two populations (10.54 years for black persons and 11.15 years for white persons) (Tables 4 and 7).

## Results

### Life expectancy in the United States

Tables 1–9 show complete life tables by race (white and black) and sex for the period 1999–2001. Life expectancy at birth for 1999–2001 represents the average number of years that a group of infants would live if the infants were to experience throughout life the age-specific death rates prevailing in 1999–2001. In 1999–2001, life expectancy at birth was 76.83 years for the total population, 74.10 years for males, 79.45 years for females, 77.41 years for the total white population, 74.74 years for white males, 79.97 years for white females, 71.74 years for the total black population, 68.08 years for black males, and 75.12 years for black females. In comparison, life expectancy at birth in 1900–1902 was 49.24 years for the total population, 47.88 years for males, 50.70 years for females, 49.64 years for the total white population, 48.23 years for white males, 51.08 years for white females, 33.80 years for the total black population, 32.54 years for black males, and 35.04 years for black females (Table 12).

A sex gap favoring females has existed in all decennial periods since 1900–1902 (Table 12). In 1999–2001, female life expectancy at birth was 5.35 years greater than male life expectancy. In comparison, it was 6.98 years greater in 1989–1991. From 1900–1902 to 1969–1971, the female advantage increased from 2.82 years to 7.60 years. The increasing gap during these years is attributed to increases in male mortality due to ischemic heart disease and lung cancer, both

of which increased largely as the result of men's early and widespread adoption of cigarette smoking (9,10). Since 1969–1971, the gap in favor of females has narrowed from 7.60 years to 5.35 years, reflecting proportionately greater increases in lung cancer mortality for women than for men and proportionately larger decreases in heart disease mortality among men (9,10).

Life expectancy for the white population has been greater than that of the black population in every decade since 1900–1902. At the turn of the last century, life expectancy at birth for the white population was 15.84 years greater than that of the black population. As of 1999–2001, that advantage had narrowed to 5.67 years, a historically record low level. Although the pattern was one of general decline over the past 100 years, the white population advantage did increase at some points, such as between 1979–1981 and 1989–1991. This increase was largely the result of increases in mortality among the black male population due to HIV infection and homicide (9,11).

Among the four race-sex groups in 1999–2001, white females had the highest life expectancy at birth (79.97 years), followed by black females (75.12 years), white males (74.74 years), and black males (68.08 years). Between 1999–2001 and the previous decennial period (1989–1991), life expectancy at birth increased 3.61 years for black males, 2.02 years for white males, 1.39 years for black females, and 0.52 years for white females. Between 1900–1902 and 1999–2001, black females and males experienced the greatest increases in life expectancy at birth (Figure 1). Over the 10 decades, life expectancy increased by 40.08 years for black females (from 35.04 to 75.12 years), 35.54 years for black males (from 32.54 to 68.08 years), 28.89 years for white females (from 51.08 to 79.97 years), and 26.51 years for white males (from 48.23 to 74.74 years).

Examining life expectancy at other ages is also of interest. For example, 65 years of age represents the traditional age at retirement, and 85 years of age represents the age to which, at the turn of the 21st century, 34.5% of the population survived compared with only 6.1% at the turn of the 20th century. On the basis of mortality experienced in 1999–2001, a person aged 65 years could expect to live an average of 17.77 more years for a total of 82.77 years, and a person aged 85 years could expect to live an additional 6.22 years on average for a total of 91.22 years.

### Survivorship in the United States

Table 13 shows trends in survivorship from 1900–1902 to 1999–2001. In 1999–2001, 99.3% of all infants born in the United States survived the first year of life. In contrast, only 87.6% of infants born in 1900–1902 survived the first year. Approximately 51.0% of the 1999–2001 life table cohort survived to 80 years of age, and about 1.5% survived to age 100. In contrast, in 1900–1902 only 13.5% survived to 80 years of age, and only 0.03% survived to age 100.

In 1900–1902, race differentials in survival were considerable (Figure 2). Black male and female survival at all ages was substantially lower than white male and female survival. The median age at death for the white population was approximately 60 years of age, compared with a little over 30 years of age for the black population. In other words, whereas one-half of the white population could expect to reach their 60th birthday, one-half of the black population died by about age 30. The differences in survival are particularly noticeable at age 10. For the white population, survival was about 80% at age 10. In contrast, only 63% of the black population survived to age 10. A closer look at survival

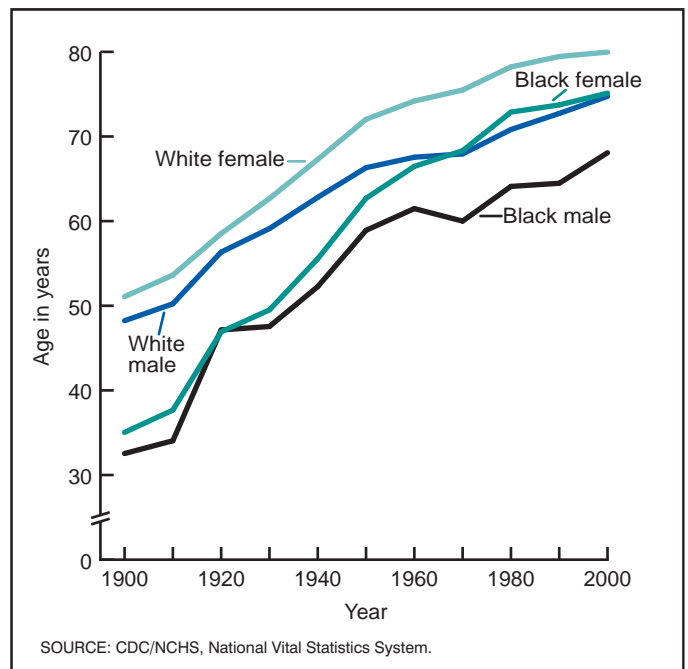


Figure 1. Life expectancy at birth by race and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001

between birth and 10 years of age for 1900–1902 shows that nearly 25% of the black population died in their first year of life compared with about 12% of the white population (9).

By 1999–2001, black population survival was still lower overall than white population survival (Figure 3). However, the clear separation between the sex-specific survival curves for the white and black populations shown in Figure 2 is no longer apparent. Figure 3 shows that

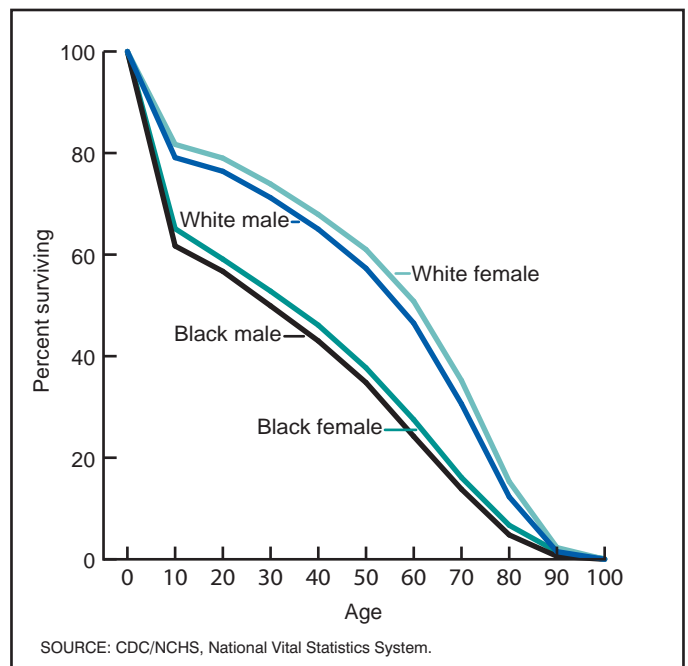
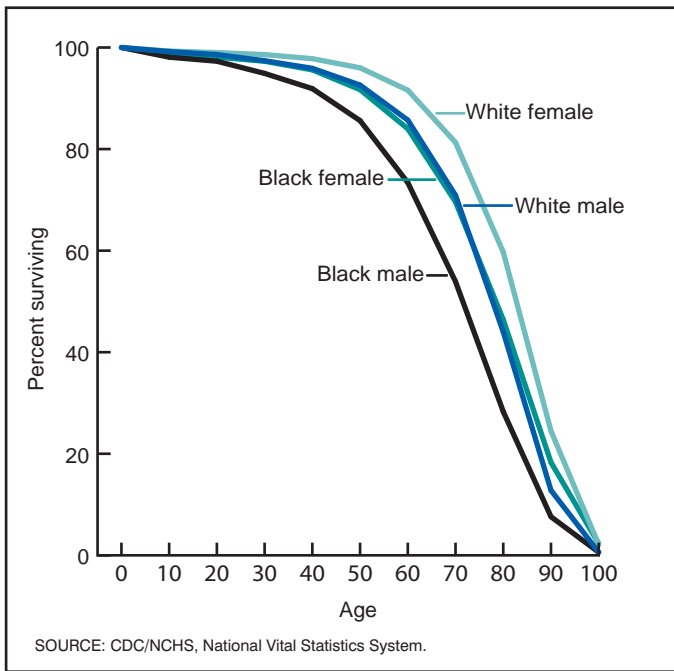


Figure 2. Percentage surviving by age, race, and sex: Death-registration states, 1900–1902



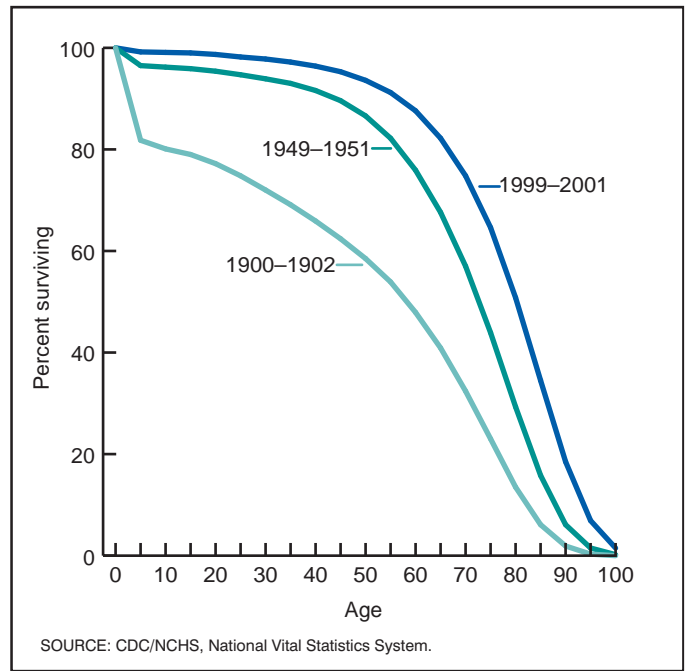
**Figure 3. Percentage surviving by age, race, and sex: United States, 1999–2001**

although black male survival still lags behind the other race-sex groups, black female survival exceeds white male survival at older ages. Black female survival at 60 years of age improved to 84.0% from 27.5% in 1900–1902. At 80 years of age, survival for black females improved from 6.7% in 1900–1902 to 46.4% in 1999–2001. A major reason for improved black population survival over the past 100 years is substantially decreased mortality at younger ages. By 1999–2001, black survival at age 10 years improved from 63.4% in 1900–1902 to 98.3%, which was only about 1% lower than survival for the white population at age 10 years.

Plotting the percentage surviving by age for the periods 1900–1902, 1949–1951, and 1999–2001 shows an increasingly rectangular survival curve (Figure 4). That is, the survival curve has become increasingly flat in response to progressively lower mortality, particularly at the younger ages, and increasingly vertical at the older ages. The survival curve for 1900–1902 shows a rapid decline in survival in the first few years of life and a relatively steady decline thereafter. In contrast, the survival curve for 1999–2001 is nearly flat until about 50 years of age, after which the decline in survival becomes more rapid. Improvements in survival between 1900–1902 and 1949–1951 occurred at all ages, although the largest improvements were among the younger population. Between 1949–1951 and 1999–2001, improvements occurred primarily for the older population.

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**Figure 4. Percentage surviving by age: Death-registration states, 1900–1902, and United States, 1949–1951 and 1999–2001**

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Table 1. Life table for the total population: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00275	100,000	275	274	7,683,447	76.83
1–7 . . . . .	0.00094	99,725	93	1,639	7,683,173	77.04
7–28 . . . . .	0.00095	99,631	94	5,729	7,681,534	77.10
28–365 . . . . .	0.00233	99,537	232	91,794	7,675,805	77.12
Years						
0–1 . . . . .	0.00696	100,000	695	99,436	7,683,447	76.83
1–2 . . . . .	0.00050	99,305	50	99,280	7,584,011	76.37
2–3 . . . . .	0.00033	99,255	33	99,239	7,484,731	75.41
3–4 . . . . .	0.00026	99,222	25	99,210	7,385,492	74.43
4–5 . . . . .	0.00021	99,197	21	99,186	7,286,282	73.45
5–6 . . . . .	0.00019	99,176	18	99,167	7,187,096	72.47
6–7 . . . . .	0.00017	99,158	17	99,149	7,087,929	71.48
7–8 . . . . .	0.00016	99,140	16	99,132	6,988,780	70.49
8–9 . . . . .	0.00015	99,124	15	99,117	6,889,648	69.51
9–10 . . . . .	0.00013	99,110	13	99,103	6,790,531	68.52
10–11 . . . . .	0.00012	99,097	12	99,091	6,691,427	67.52
11–12 . . . . .	0.00012	99,085	12	99,079	6,592,336	66.53
12–13 . . . . .	0.00016	99,073	16	99,065	6,493,257	65.54
13–14 . . . . .	0.00024	99,057	24	99,045	6,394,192	64.55
14–15 . . . . .	0.00036	99,033	35	99,016	6,295,147	63.57
15–16 . . . . .	0.00048	98,998	48	98,974	6,196,131	62.59
16–17 . . . . .	0.00060	98,950	59	98,921	6,097,157	61.62
17–18 . . . . .	0.00070	98,891	69	98,856	5,998,236	60.66
18–19 . . . . .	0.00077	98,822	76	98,783	5,899,380	59.70
19–20 . . . . .	0.00082	98,745	81	98,705	5,800,597	58.74
20–21 . . . . .	0.00088	98,664	87	98,620	5,701,892	57.79
21–22 . . . . .	0.00093	98,577	92	98,531	5,603,272	56.84
22–23 . . . . .	0.00096	98,485	95	98,438	5,504,740	55.89
23–24 . . . . .	0.00097	98,390	95	98,343	5,406,303	54.95
24–25 . . . . .	0.00095	98,295	93	98,248	5,307,960	54.00
25–26 . . . . .	0.00092	98,202	91	98,157	5,209,712	53.05
26–27 . . . . .	0.00091	98,111	89	98,067	5,111,555	52.10
27–28 . . . . .	0.00090	98,022	89	97,978	5,013,488	51.15
28–29 . . . . .	0.00092	97,934	90	97,889	4,915,510	50.19
29–30 . . . . .	0.00096	97,844	94	97,797	4,817,621	49.24
30–31 . . . . .	0.00100	97,750	98	97,701	4,719,825	48.28
31–32 . . . . .	0.00105	97,652	103	97,601	4,622,124	47.33
32–33 . . . . .	0.00111	97,549	109	97,495	4,524,523	46.38
33–34 . . . . .	0.00119	97,441	116	97,382	4,427,028	45.43
34–35 . . . . .	0.00128	97,324	125	97,262	4,329,646	44.49
35–36 . . . . .	0.00138	97,199	134	97,132	4,232,384	43.54
36–37 . . . . .	0.00148	97,065	144	96,993	4,135,252	42.60
37–38 . . . . .	0.00159	96,921	155	96,844	4,038,259	41.67
38–39 . . . . .	0.00172	96,767	167	96,683	3,941,415	40.73
39–40 . . . . .	0.00187	96,600	181	96,509	3,844,732	39.80
40–41 . . . . .	0.00203	96,419	196	96,321	3,748,222	38.87
41–42 . . . . .	0.00220	96,223	212	96,116	3,651,902	37.95
42–43 . . . . .	0.00238	96,010	229	95,896	3,555,785	37.04
43–44 . . . . .	0.00257	95,782	247	95,658	3,459,889	36.12
44–45 . . . . .	0.00278	95,535	266	95,401	3,364,231	35.21
45–46 . . . . .	0.00301	95,268	288	95,124	3,268,830	34.31
46–47 . . . . .	0.00326	94,981	311	94,825	3,173,705	33.41
47–48 . . . . .	0.00353	94,670	335	94,502	3,078,880	32.52
48–49 . . . . .	0.00380	94,335	360	94,155	2,984,378	31.64
49–50 . . . . .	0.00407	93,975	384	93,783	2,890,223	30.76
50–51 . . . . .	0.00437	93,591	410	93,385	2,796,441	29.88
51–52 . . . . .	0.00469	93,180	439	92,961	2,703,055	29.01
52–53 . . . . .	0.00505	92,741	471	92,506	2,610,095	28.14
53–54 . . . . .	0.00548	92,270	508	92,016	2,517,589	27.28
54–55 . . . . .	0.00598	91,762	552	91,486	2,425,573	26.43
55–56 . . . . .	0.00657	91,211	603	90,909	2,334,086	25.59
56–57 . . . . .	0.00724	90,607	661	90,277	2,243,177	24.76
57–58 . . . . .	0.00797	89,947	722	89,586	2,152,900	23.94
58–59 . . . . .	0.00871	89,225	784	88,833	2,063,314	23.12

**Table 1. Life table for the total population: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.00948	88,441	846	88,018	1,974,482	22.33
60–61 . . . . .	0.01033	87,595	914	87,138	1,886,464	21.54
61–62 . . . . .	0.01130	86,681	990	86,186	1,799,326	20.76
62–63 . . . . .	0.01235	85,691	1,071	85,155	1,713,141	19.99
63–64 . . . . .	0.01347	84,620	1,154	84,042	1,627,986	19.24
64–65 . . . . .	0.01466	83,465	1,241	82,845	1,543,943	18.50
65–66 . . . . .	0.01591	82,224	1,308	81,570	1,461,098	17.77
66–67 . . . . .	0.01713	80,916	1,386	80,223	1,379,528	17.05
67–68 . . . . .	0.01855	79,530	1,476	78,792	1,299,305	16.34
68–69 . . . . .	0.02019	78,054	1,576	77,266	1,220,513	15.64
69–70 . . . . .	0.02202	76,478	1,684	75,636	1,143,247	14.95
70–71 . . . . .	0.02398	74,794	1,793	73,898	1,067,611	14.27
71–72 . . . . .	0.02615	73,001	1,909	72,047	993,713	13.61
72–73 . . . . .	0.02864	71,092	2,036	70,074	921,666	12.96
73–74 . . . . .	0.03149	69,056	2,175	67,969	851,592	12.33
74–75 . . . . .	0.03470	66,882	2,321	65,721	783,623	11.72
75–76 . . . . .	0.03826	64,561	2,470	63,326	717,902	11.12
76–77 . . . . .	0.04211	62,091	2,614	60,783	654,576	10.54
77–78 . . . . .	0.04632	59,476	2,755	58,099	593,793	9.98
78–79 . . . . .	0.05093	56,721	2,889	55,277	535,694	9.44
79–80 . . . . .	0.05598	53,833	3,013	52,326	480,417	8.92
80–81 . . . . .	0.06149	50,819	3,125	49,257	428,091	8.42
81–82 . . . . .	0.06750	47,694	3,220	46,085	378,834	7.94
82–83 . . . . .	0.07406	44,475	3,294	42,828	332,750	7.48
83–84 . . . . .	0.08120	41,181	3,344	39,509	289,922	7.04
84–85 . . . . .	0.08897	37,837	3,366	36,154	250,413	6.62
85–86 . . . . .	0.09739	34,471	3,357	32,792	214,259	6.22
86–87 . . . . .	0.10652	31,114	3,314	29,456	181,467	5.83
87–88 . . . . .	0.11640	27,799	3,236	26,181	152,011	5.47
88–89 . . . . .	0.12706	24,564	3,121	23,003	125,829	5.12
89–90 . . . . .	0.13854	21,443	2,971	19,957	102,826	4.80
90–91 . . . . .	0.15088	18,472	2,787	17,078	82,869	4.49
91–92 . . . . .	0.16412	15,685	2,574	14,398	65,790	4.19
92–93 . . . . .	0.17827	13,111	2,337	11,942	51,393	3.92
93–94 . . . . .	0.19336	10,773	2,083	9,732	39,451	3.66
94–95 . . . . .	0.20940	8,690	1,820	7,780	29,719	3.42
95–96 . . . . .	0.22639	6,871	1,555	6,093	21,938	3.19
96–97 . . . . .	0.24434	5,315	1,299	4,666	15,845	2.98
97–98 . . . . .	0.26323	4,016	1,057	3,488	11,180	2.78
98–99 . . . . .	0.28303	2,959	838	2,540	7,692	2.60
99–100 . . . . .	0.30371	2,122	644	1,799	5,151	2.43
100–101 . . . . .	0.32521	1,477	480	1,237	3,352	2.27
101–102 . . . . .	0.34748	997	346	824	2,115	2.12
102–103 . . . . .	0.37043	650	241	530	1,291	1.99
103–104 . . . . .	0.39399	410	161	329	761	1.86
104–105 . . . . .	0.41805	248	104	196	432	1.74
105–106 . . . . .	0.44250	144	64	112	236	1.64
106–107 . . . . .	0.46723	81	38	62	124	1.54
107–108 . . . . .	0.49213	43	21	32	62	1.45
108–109 . . . . .	0.51707	22	11	16	30	1.36
109–110 . . . . .	0.54192	11	6	8	14	1.29



Table 2. Life table for males: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00298	100,000	298	274	7,409,579	74.10
1–7 . . . . .	0.00106	99,702	106	1,638	7,409,305	74.31
7–28 . . . . .	0.00102	99,596	101	5,727	7,407,667	74.38
28–365 . . . . .	0.00258	99,495	256	91,744	7,401,940	74.40
Years						
0–1 . . . . .	0.00763	100,000	761	99,383	7,409,579	74.10
1–2 . . . . .	0.00055	99,239	54	99,211	7,310,196	73.66
2–3 . . . . .	0.00038	99,184	38	99,165	7,210,985	72.70
3–4 . . . . .	0.00029	99,147	28	99,132	7,111,819	71.73
4–5 . . . . .	0.00023	99,118	23	99,107	7,012,687	70.75
5–6 . . . . .	0.00021	99,095	20	99,085	6,913,580	69.77
6–7 . . . . .	0.00019	99,075	19	99,065	6,814,495	68.78
7–8 . . . . .	0.00018	99,056	18	99,047	6,715,429	67.79
8–9 . . . . .	0.00016	99,038	16	99,030	6,616,382	66.81
9–10 . . . . .	0.00014	99,022	14	99,015	6,517,353	65.82
10–11 . . . . .	0.00012	99,008	12	99,002	6,418,338	64.83
11–12 . . . . .	0.00012	98,996	12	98,990	6,319,335	63.83
12–13 . . . . .	0.00018	98,984	18	98,975	6,220,345	62.84
13–14 . . . . .	0.00030	98,966	30	98,951	6,121,370	61.85
14–15 . . . . .	0.00047	98,936	46	98,913	6,022,419	60.87
15–16 . . . . .	0.00065	98,890	64	98,858	5,923,506	59.90
16–17 . . . . .	0.00082	98,826	81	98,786	5,824,648	58.94
17–18 . . . . .	0.00097	98,745	96	98,697	5,725,862	57.99
18–19 . . . . .	0.00109	98,650	107	98,596	5,627,165	57.04
19–20 . . . . .	0.00118	98,542	117	98,484	5,528,569	56.10
20–21 . . . . .	0.00128	98,426	126	98,363	5,430,085	55.17
21–22 . . . . .	0.00138	98,300	136	98,232	5,331,722	54.24
22–23 . . . . .	0.00143	98,164	141	98,093	5,233,491	53.31
23–24 . . . . .	0.00143	98,023	141	97,953	5,135,397	52.39
24–25 . . . . .	0.00139	97,882	136	97,814	5,037,445	51.46
25–26 . . . . .	0.00133	97,746	131	97,680	4,939,631	50.54
26–27 . . . . .	0.00129	97,615	126	97,552	4,841,950	49.60
27–28 . . . . .	0.00127	97,489	124	97,427	4,744,398	48.67
28–29 . . . . .	0.00128	97,365	125	97,303	4,646,971	47.73
29–30 . . . . .	0.00132	97,241	128	97,176	4,549,669	46.79
30–31 . . . . .	0.00136	97,112	133	97,046	4,452,492	45.85
31–32 . . . . .	0.00142	96,980	138	96,911	4,355,446	44.91
32–33 . . . . .	0.00149	96,842	144	96,770	4,258,536	43.97
33–34 . . . . .	0.00158	96,698	153	96,621	4,161,766	43.04
34–35 . . . . .	0.00168	96,545	163	96,463	4,065,145	42.11
35–36 . . . . .	0.00180	96,382	173	96,295	3,968,681	41.18
36–37 . . . . .	0.00192	96,209	185	96,116	3,872,386	40.25
37–38 . . . . .	0.00206	96,024	198	95,925	3,776,270	39.33
38–39 . . . . .	0.00222	95,826	213	95,720	3,680,345	38.41
39–40 . . . . .	0.00240	95,613	230	95,498	3,584,625	37.49
40–41 . . . . .	0.00259	95,384	248	95,260	3,489,127	36.58
41–42 . . . . .	0.00280	95,136	267	95,002	3,393,867	35.67
42–43 . . . . .	0.00303	94,868	288	94,724	3,298,865	34.77
43–44 . . . . .	0.00329	94,580	312	94,424	3,204,141	33.88
44–45 . . . . .	0.00357	94,268	338	94,100	3,109,717	32.99
45–46 . . . . .	0.00388	93,931	366	93,748	3,015,617	32.10
46–47 . . . . .	0.00422	93,565	397	93,366	2,921,870	31.23
47–48 . . . . .	0.00457	93,168	427	92,954	2,828,503	30.36
48–49 . . . . .	0.00490	92,741	456	92,513	2,735,549	29.50
49–50 . . . . .	0.00522	92,285	484	92,042	2,643,036	28.64
50–51 . . . . .	0.00556	91,800	513	91,544	2,550,994	27.79
51–52 . . . . .	0.00593	91,287	545	91,015	2,459,450	26.94
52–53 . . . . .	0.00636	90,743	581	90,452	2,368,435	26.10
53–54 . . . . .	0.00688	90,162	624	89,850	2,277,983	25.27
54–55 . . . . .	0.00749	89,538	676	89,200	2,188,133	24.44
55–56 . . . . .	0.00823	88,862	736	88,494	2,098,933	23.62
56–57 . . . . .	0.00905	88,125	804	87,723	2,010,440	22.81
57–58 . . . . .	0.00994	87,321	876	86,883	1,922,716	22.02
58–59 . . . . .	0.01086	86,445	948	85,971	1,835,833	21.24

**Table 2. Life table for males: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.01179	85,497	1,019	84,987	1,749,863	20.47
60–61 . . . . .	0.01282	84,478	1,096	83,929	1,664,875	19.71
61–62 . . . . .	0.01400	83,381	1,183	82,790	1,580,946	18.96
62–63 . . . . .	0.01529	82,198	1,275	81,561	1,498,156	18.23
63–64 . . . . .	0.01667	80,923	1,371	80,238	1,416,596	17.51
64–65 . . . . .	0.01816	79,553	1,470	78,818	1,336,358	16.80
65–66 . . . . .	0.01971	78,083	1,539	77,314	1,257,540	16.11
66–67 . . . . .	0.02130	76,544	1,630	75,729	1,180,226	15.42
67–68 . . . . .	0.02316	74,914	1,735	74,046	1,104,497	14.74
68–69 . . . . .	0.02531	73,179	1,852	72,253	1,030,451	14.08
69–70 . . . . .	0.02771	71,327	1,977	70,338	958,198	13.43
70–71 . . . . .	0.03026	69,350	2,098	68,301	887,859	12.80
71–72 . . . . .	0.03302	67,252	2,220	66,142	819,558	12.19
72–73 . . . . .	0.03613	65,031	2,350	63,857	753,417	11.59
73–74 . . . . .	0.03966	62,682	2,486	61,439	689,560	11.00
74–75 . . . . .	0.04359	60,196	2,624	58,884	628,122	10.43
75–76 . . . . .	0.04792	57,572	2,759	56,192	569,238	9.89
76–77 . . . . .	0.05255	54,813	2,880	53,373	513,046	9.36
77–78 . . . . .	0.05761	51,933	2,992	50,437	459,673	8.85
78–79 . . . . .	0.06312	48,941	3,089	47,396	409,236	8.36
79–80 . . . . .	0.06912	45,852	3,169	44,267	361,840	7.89
80–81 . . . . .	0.07564	42,683	3,228	41,069	317,572	7.44
81–82 . . . . .	0.08272	39,454	3,264	37,822	276,504	7.01
82–83 . . . . .	0.09040	36,191	3,272	34,555	238,681	6.60
83–84 . . . . .	0.09872	32,919	3,250	31,294	204,127	6.20
84–85 . . . . .	0.10771	29,669	3,196	28,071	172,833	5.83
85–86 . . . . .	0.11742	26,473	3,108	24,919	144,761	5.47
86–87 . . . . .	0.12787	23,365	2,988	21,871	119,842	5.13
87–88 . . . . .	0.13911	20,377	2,835	18,960	97,971	4.81
88–89 . . . . .	0.15117	17,542	2,652	16,216	79,012	4.50
89–90 . . . . .	0.16407	14,891	2,443	13,669	62,795	4.22
90–91 . . . . .	0.17784	12,447	2,214	11,341	49,126	3.95
91–92 . . . . .	0.19250	10,234	1,970	9,249	37,785	3.69
92–93 . . . . .	0.20806	8,264	1,719	7,404	28,537	3.45
93–94 . . . . .	0.22454	6,544	1,469	5,810	21,133	3.23
94–95 . . . . .	0.24191	5,075	1,228	4,461	15,323	3.02
95–96 . . . . .	0.26019	3,847	1,001	3,347	10,862	2.82
96–97 . . . . .	0.27933	2,846	795	2,449	7,515	2.64
97–98 . . . . .	0.29931	2,051	614	1,744	5,066	2.47
98–99 . . . . .	0.32009	1,437	460	1,207	3,322	2.31
99–100 . . . . .	0.34160	977	334	810	2,115	2.16
100–101 . . . . .	0.36379	643	234	526	1,305	2.03
101–102 . . . . .	0.38657	409	158	330	778	1.90
102–103 . . . . .	0.40986	251	103	200	448	1.78
103–104 . . . . .	0.43356	148	64	116	248	1.68
104–105 . . . . .	0.45757	84	38	65	132	1.58
105–106 . . . . .	0.48178	46	22	35	68	1.48
106–107 . . . . .	0.50607	24	12	18	33	1.40
107–108 . . . . .	0.53034	12	6	9	15	1.32
108–109 . . . . .	0.55446	5	3	4	7	1.25
109–110 . . . . .	0.57833	2	1	2	3	1.19

Table 3. Life table for females: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00252	100,000	252	274	7,945,500	79.45
1–7 . . . . .	0.00081	99,748	80	1,639	7,945,226	79.65
7–28 . . . . .	0.00088	99,668	87	5,732	7,943,587	79.70
28–365 . . . . .	0.00206	99,580	205	91,847	7,937,855	79.71
Years						
0–1 . . . . .	0.00626	100,000	625	99,492	7,945,500	79.45
1–2 . . . . .	0.00046	99,375	45	99,352	7,846,008	78.95
2–3 . . . . .	0.00028	99,330	28	99,316	7,746,655	77.99
3–4 . . . . .	0.00023	99,302	22	99,291	7,647,340	77.01
4–5 . . . . .	0.00019	99,279	19	99,270	7,548,049	76.03
5–6 . . . . .	0.00017	99,261	16	99,252	7,448,779	75.04
6–7 . . . . .	0.00015	99,244	15	99,236	7,349,527	74.06
7–8 . . . . .	0.00014	99,229	14	99,222	7,250,290	73.07
8–9 . . . . .	0.00013	99,215	13	99,208	7,151,068	72.08
9–10 . . . . .	0.00012	99,202	12	99,196	7,051,860	71.09
10–11 . . . . .	0.00011	99,190	11	99,184	6,952,664	70.09
11–12 . . . . .	0.00012	99,178	12	99,173	6,853,480	69.10
12–13 . . . . .	0.00014	99,167	14	99,160	6,754,307	68.11
13–14 . . . . .	0.00018	99,153	18	99,144	6,655,148	67.12
14–15 . . . . .	0.00024	99,135	24	99,123	6,556,004	66.13
15–16 . . . . .	0.00031	99,111	30	99,096	6,456,881	65.15
16–17 . . . . .	0.00037	99,081	37	99,062	6,357,785	64.17
17–18 . . . . .	0.00042	99,044	41	99,024	6,258,722	63.19
18–19 . . . . .	0.00044	99,003	44	98,981	6,159,699	62.22
19–20 . . . . .	0.00045	98,959	44	98,937	6,060,717	61.24
20–21 . . . . .	0.00045	98,915	45	98,893	5,961,780	60.27
21–22 . . . . .	0.00046	98,870	46	98,847	5,862,887	59.30
22–23 . . . . .	0.00047	98,824	47	98,801	5,764,040	58.33
23–24 . . . . .	0.00048	98,778	47	98,754	5,665,239	57.35
24–25 . . . . .	0.00049	98,730	48	98,706	5,566,485	56.38
25–26 . . . . .	0.00050	98,682	49	98,658	5,467,779	55.41
26–27 . . . . .	0.00051	98,633	50	98,608	5,369,121	54.44
27–28 . . . . .	0.00053	98,583	52	98,557	5,270,513	53.46
28–29 . . . . .	0.00056	98,531	55	98,503	5,171,956	52.49
29–30 . . . . .	0.00059	98,476	58	98,447	5,073,453	51.52
30–31 . . . . .	0.00063	98,418	62	98,387	4,975,006	50.55
31–32 . . . . .	0.00068	98,356	67	98,323	4,876,619	49.58
32–33 . . . . .	0.00073	98,289	72	98,253	4,778,297	48.61
33–34 . . . . .	0.00080	98,217	79	98,178	4,680,043	47.65
34–35 . . . . .	0.00088	98,138	86	98,095	4,581,866	46.69
35–36 . . . . .	0.00096	98,052	94	98,005	4,483,771	45.73
36–37 . . . . .	0.00104	97,957	102	97,906	4,385,766	44.77
37–38 . . . . .	0.00113	97,855	111	97,800	4,287,860	43.82
38–39 . . . . .	0.00124	97,744	121	97,684	4,190,060	42.87
39–40 . . . . .	0.00135	97,624	132	97,558	4,092,376	41.92
40–41 . . . . .	0.00147	97,492	144	97,420	3,994,819	40.98
41–42 . . . . .	0.00160	97,348	156	97,269	3,897,399	40.04
42–43 . . . . .	0.00174	97,191	169	97,107	3,800,129	39.10
43–44 . . . . .	0.00187	97,022	182	96,931	3,703,023	38.17
44–45 . . . . .	0.00201	96,840	195	96,743	3,606,092	37.24
45–46 . . . . .	0.00216	96,645	209	96,541	3,509,349	36.31
46–47 . . . . .	0.00233	96,436	225	96,323	3,412,808	35.39
47–48 . . . . .	0.00252	96,211	243	96,089	3,316,485	34.47
48–49 . . . . .	0.00273	95,968	263	95,836	3,220,395	33.56
49–50 . . . . .	0.00297	95,704	285	95,562	3,124,559	32.65
50–51 . . . . .	0.00322	95,420	308	95,266	3,028,997	31.74
51–52 . . . . .	0.00349	95,112	333	94,945	2,933,732	30.85
52–53 . . . . .	0.00379	94,778	361	94,598	2,838,787	29.95
53–54 . . . . .	0.00414	94,417	392	94,221	2,744,189	29.06
54–55 . . . . .	0.00454	94,025	428	93,811	2,649,967	28.18
55–56 . . . . .	0.00501	93,597	471	93,362	2,556,156	27.31
56–57 . . . . .	0.00554	93,126	519	92,867	2,462,795	26.45
57–58 . . . . .	0.00612	92,608	570	92,322	2,369,928	25.59
58–59 . . . . .	0.00672	92,037	622	91,726	2,277,605	24.75

**Table 3. Life table for females: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.00734	91,415	676	91,077	2,185,879	23.91
60–61 . . . . .	0.00804	90,739	735	90,372	2,094,802	23.09
61–62 . . . . .	0.00883	90,004	801	89,604	2,004,430	22.27
62–63 . . . . .	0.00969	89,203	872	88,767	1,914,827	21.47
63–64 . . . . .	0.01059	88,331	944	87,859	1,826,060	20.67
64–65 . . . . .	0.01154	87,387	1,020	86,877	1,738,201	19.89
65–66 . . . . .	0.01256	86,367	1,085	85,825	1,651,324	19.12
66–67 . . . . .	0.01353	85,283	1,154	84,706	1,565,499	18.36
67–68 . . . . .	0.01464	84,129	1,232	83,513	1,480,793	17.60
68–69 . . . . .	0.01593	82,897	1,321	82,237	1,397,280	16.86
69–70 . . . . .	0.01739	81,576	1,418	80,867	1,315,043	16.12
70–71 . . . . .	0.01898	80,158	1,521	79,398	1,234,176	15.40
71–72 . . . . .	0.02079	78,637	1,635	77,819	1,154,778	14.68
72–73 . . . . .	0.02292	77,002	1,765	76,119	1,076,959	13.99
73–74 . . . . .	0.02540	75,237	1,911	74,281	1,000,839	13.30
74–75 . . . . .	0.02822	73,326	2,069	72,291	926,558	12.64
75–76 . . . . .	0.03137	71,257	2,236	70,139	854,267	11.99
76–77 . . . . .	0.03479	69,021	2,401	67,820	784,128	11.36
77–78 . . . . .	0.03857	66,620	2,569	65,335	716,308	10.75
78–79 . . . . .	0.04274	64,050	2,737	62,682	650,973	10.16
79–80 . . . . .	0.04733	61,313	2,902	59,862	588,291	9.59
80–81 . . . . .	0.05240	58,411	3,061	56,881	528,429	9.05
81–82 . . . . .	0.05797	55,350	3,209	53,746	471,548	8.52
82–83 . . . . .	0.06409	52,142	3,342	50,471	417,802	8.01
83–84 . . . . .	0.07082	48,800	3,456	47,072	367,332	7.53
84–85 . . . . .	0.07819	45,344	3,545	43,571	320,260	7.06
85–86 . . . . .	0.08625	41,798	3,605	39,996	276,689	6.62
86–87 . . . . .	0.09507	38,193	3,631	36,378	236,693	6.20
87–88 . . . . .	0.10468	34,562	3,618	32,753	200,315	5.80
88–89 . . . . .	0.11513	30,944	3,563	29,163	167,562	5.41
89–90 . . . . .	0.12649	27,382	3,463	25,650	138,399	5.05
90–91 . . . . .	0.13878	23,918	3,320	22,259	112,748	4.71
91–92 . . . . .	0.15207	20,599	3,132	19,033	90,490	4.39
92–93 . . . . .	0.16638	17,466	2,906	16,013	71,457	4.09
93–94 . . . . .	0.18175	14,560	2,646	13,237	55,444	3.81
94–95 . . . . .	0.19821	11,914	2,361	10,733	42,207	3.54
95–96 . . . . .	0.21575	9,553	2,061	8,522	31,474	3.29
96–97 . . . . .	0.23440	7,492	1,756	6,613	22,952	3.06
97–98 . . . . .	0.25414	5,735	1,458	5,007	16,338	2.85
98–99 . . . . .	0.27494	4,278	1,176	3,690	11,332	2.65
99–100 . . . . .	0.29677	3,102	920	2,641	7,642	2.46
100–101 . . . . .	0.31957	2,181	697	1,833	5,000	2.29
101–102 . . . . .	0.34326	1,484	509	1,229	3,168	2.13
102–103 . . . . .	0.36777	975	358	795	1,938	1.99
103–104 . . . . .	0.39297	616	242	495	1,143	1.85
104–105 . . . . .	0.41876	374	157	296	648	1.73
105–106 . . . . .	0.44500	217	97	169	352	1.62
106–107 . . . . .	0.47154	121	57	92	183	1.51
107–108 . . . . .	0.49826	64	32	48	91	1.42
108–109 . . . . .	0.52498	32	17	24	43	1.33
109–110 . . . . .	0.55156	15	8	11	19	1.25

Table 4. Life table for the white population: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
<b>Days</b>						
0–1 . . . . .	0.00219	100,000	219	274	7,740,612	77.41
1–7 . . . . .	0.00083	99,781	83	1,640	7,740,338	77.57
7–28 . . . . .	0.00081	99,698	81	5,734	7,738,698	77.62
28–365 . . . . .	0.00189	99,617	188	91,889	7,732,964	77.63
<b>Years</b>						
0–1 . . . . .	0.00572	100,000	571	99,537	7,740,612	77.41
1–2 . . . . .	0.00044	99,429	44	99,407	7,641,075	76.85
2–3 . . . . .	0.00030	99,385	30	99,370	7,541,668	75.88
3–4 . . . . .	0.00023	99,355	23	99,343	7,442,298	74.91
4–5 . . . . .	0.00019	99,332	19	99,322	7,342,954	73.92
5–6 . . . . .	0.00017	99,312	17	99,304	7,243,632	72.94
6–7 . . . . .	0.00016	99,296	16	99,288	7,144,328	71.95
7–8 . . . . .	0.00015	99,280	15	99,272	7,045,041	70.96
8–9 . . . . .	0.00014	99,265	14	99,258	6,945,768	69.97
9–10 . . . . .	0.00012	99,251	12	99,245	6,846,511	68.98
10–11 . . . . .	0.00011	99,239	11	99,234	6,747,265	67.99
11–12 . . . . .	0.00011	99,228	11	99,223	6,648,032	67.00
12–13 . . . . .	0.00015	99,217	15	99,210	6,548,809	66.00
13–14 . . . . .	0.00023	99,203	23	99,191	6,449,599	65.01
14–15 . . . . .	0.00034	99,180	34	99,163	6,350,407	64.03
15–16 . . . . .	0.00047	99,146	46	99,123	6,251,245	63.05
16–17 . . . . .	0.00058	99,100	58	99,071	6,152,122	62.08
17–18 . . . . .	0.00067	99,042	67	99,009	6,053,051	61.12
18–19 . . . . .	0.00074	98,975	73	98,939	5,954,042	60.16
19–20 . . . . .	0.00077	98,902	77	98,864	5,855,103	59.20
20–21 . . . . .	0.00081	98,826	80	98,785	5,756,240	58.25
21–22 . . . . .	0.00085	98,745	84	98,703	5,657,454	57.29
22–23 . . . . .	0.00087	98,661	86	98,618	5,558,751	56.34
23–24 . . . . .	0.00087	98,575	86	98,532	5,460,133	55.39
24–25 . . . . .	0.00085	98,489	84	98,447	5,361,601	54.44
25–26 . . . . .	0.00083	98,405	82	98,364	5,263,154	53.48
26–27 . . . . .	0.00081	98,324	80	98,284	5,164,790	52.53
27–28 . . . . .	0.00081	98,244	79	98,204	5,066,506	51.57
28–29 . . . . .	0.00082	98,164	81	98,124	4,968,302	50.61
29–30 . . . . .	0.00086	98,084	84	98,042	4,870,178	49.65
30–31 . . . . .	0.00089	98,000	88	97,956	4,772,137	48.70
31–32 . . . . .	0.00094	97,912	92	97,866	4,674,181	47.74
32–33 . . . . .	0.00100	97,820	98	97,771	4,576,315	46.78
33–34 . . . . .	0.00107	97,722	105	97,670	4,478,544	45.83
34–35 . . . . .	0.00116	97,617	113	97,561	4,380,875	44.88
35–36 . . . . .	0.00124	97,504	121	97,444	4,283,314	43.93
36–37 . . . . .	0.00134	97,383	130	97,318	4,185,870	42.98
37–38 . . . . .	0.00144	97,252	140	97,182	4,088,552	42.04
38–39 . . . . .	0.00156	97,112	152	97,036	3,991,370	41.10
39–40 . . . . .	0.00169	96,961	164	96,878	3,894,334	40.16
40–41 . . . . .	0.00183	96,796	178	96,708	3,797,455	39.23
41–42 . . . . .	0.00198	96,619	192	96,523	3,700,748	38.30
42–43 . . . . .	0.00215	96,427	207	96,323	3,604,225	37.38
43–44 . . . . .	0.00232	96,219	223	96,108	3,507,902	36.46
44–45 . . . . .	0.00250	95,996	241	95,875	3,411,795	35.54
45–46 . . . . .	0.00271	95,755	260	95,625	3,315,919	34.63
46–47 . . . . .	0.00294	95,495	281	95,354	3,220,294	33.72
47–48 . . . . .	0.00318	95,214	304	95,062	3,124,940	32.82
48–49 . . . . .	0.00343	94,910	327	94,747	3,029,878	31.92
49–50 . . . . .	0.00370	94,584	351	94,408	2,935,131	31.03
50–51 . . . . .	0.00398	94,233	376	94,045	2,840,723	30.15
51–52 . . . . .	0.00429	93,856	404	93,655	2,746,678	29.26
52–53 . . . . .	0.00464	93,453	435	93,235	2,653,024	28.39
53–54 . . . . .	0.00504	93,017	471	92,782	2,559,789	27.52
54–55 . . . . .	0.00553	92,546	514	92,289	2,467,007	26.66
55–56 . . . . .	0.00610	92,032	565	91,749	2,374,718	25.80
56–57 . . . . .	0.00675	91,467	622	91,156	2,282,969	24.96
57–58 . . . . .	0.00746	90,845	682	90,504	2,191,813	24.13
58–59 . . . . .	0.00818	90,163	743	89,791	2,101,308	23.31

**Table 4. Life table for the white population: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.00894	89,420	806	89,017	2,011,517	22.50
60–61 . . . . .	0.00978	88,614	875	88,177	1,922,500	21.70
61–62 . . . . .	0.01076	87,739	953	87,263	1,834,323	20.91
62–63 . . . . .	0.01180	86,786	1,036	86,268	1,747,061	20.13
63–64 . . . . .	0.01291	85,750	1,120	85,190	1,660,793	19.37
64–65 . . . . .	0.01407	84,630	1,207	84,027	1,575,602	18.62
65–66 . . . . .	0.01529	83,423	1,276	82,785	1,491,576	17.88
66–67 . . . . .	0.01650	82,148	1,355	81,470	1,408,790	17.15
67–68 . . . . .	0.01791	80,793	1,447	80,069	1,327,320	16.43
68–69 . . . . .	0.01955	79,346	1,551	78,570	1,247,251	15.72
69–70 . . . . .	0.02137	77,795	1,663	76,963	1,168,681	15.02
70–71 . . . . .	0.02333	76,132	1,776	75,244	1,091,718	14.34
71–72 . . . . .	0.02548	74,356	1,895	73,408	1,016,474	13.67
72–73 . . . . .	0.02796	72,461	2,026	71,448	943,065	13.01
73–74 . . . . .	0.03079	70,435	2,169	69,351	871,617	12.37
74–75 . . . . .	0.03398	68,266	2,320	67,106	802,266	11.75
75–76 . . . . .	0.03753	65,946	2,475	64,709	735,160	11.15
76–77 . . . . .	0.04138	63,471	2,627	62,158	670,451	10.56
77–78 . . . . .	0.04561	60,845	2,775	59,457	608,293	10.00
78–79 . . . . .	0.05025	58,070	2,918	56,611	548,836	9.45
79–80 . . . . .	0.05533	55,152	3,052	53,626	492,225	8.92
80–81 . . . . .	0.06089	52,100	3,172	50,514	438,599	8.42
81–82 . . . . .	0.06697	48,928	3,277	47,289	388,085	7.93
82–83 . . . . .	0.07362	45,651	3,361	43,971	340,795	7.47
83–84 . . . . .	0.08086	42,290	3,420	40,580	296,825	7.02
84–85 . . . . .	0.08875	38,871	3,450	37,146	256,244	6.59
85–86 . . . . .	0.09732	35,421	3,447	33,697	219,098	6.19
86–87 . . . . .	0.10663	31,974	3,409	30,269	185,401	5.80
87–88 . . . . .	0.11672	28,564	3,334	26,897	155,132	5.43
88–89 . . . . .	0.12762	25,230	3,220	23,620	128,235	5.08
89–90 . . . . .	0.13937	22,011	3,068	20,477	104,614	4.75
90–91 . . . . .	0.15203	18,943	2,880	17,503	84,138	4.44
91–92 . . . . .	0.16561	16,063	2,660	14,733	66,635	4.15
92–93 . . . . .	0.18014	13,403	2,414	12,196	51,902	3.87
93–94 . . . . .	0.19565	10,989	2,150	9,914	39,706	3.61
94–95 . . . . .	0.21215	8,839	1,875	7,901	29,792	3.37
95–96 . . . . .	0.22965	6,963	1,599	6,164	21,891	3.14
96–97 . . . . .	0.24813	5,364	1,331	4,699	15,727	2.93
97–98 . . . . .	0.26759	4,033	1,079	3,494	11,029	2.73
98–99 . . . . .	0.28799	2,954	851	2,529	7,535	2.55
99–100 . . . . .	0.30928	2,103	651	1,778	5,006	2.38
100–101 . . . . .	0.33142	1,453	481	1,212	3,228	2.22
101–102 . . . . .	0.35433	971	344	799	2,016	2.08
102–103 . . . . .	0.37792	627	237	509	1,217	1.94
103–104 . . . . .	0.40211	390	157	312	708	1.82
104–105 . . . . .	0.42679	233	100	183	397	1.70
105–106 . . . . .	0.45183	134	60	103	213	1.60
106–107 . . . . .	0.47713	73	35	56	110	1.50
107–108 . . . . .	0.50253	38	19	29	54	1.41
108–109 . . . . .	0.52793	19	10	14	25	1.33
109–110 . . . . .	0.55318	9	5	7	11	1.25

Table 5. Life table for white males: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00236	100,000	236	274	7,474,364	74.74
1–7 . . . . .	0.00094	99,764	94	1,639	7,474,090	74.92
7–28 . . . . .	0.00087	99,670	87	5,732	7,472,451	74.97
28–365 . . . . .	0.00211	99,583	210	91,847	7,466,719	74.98
Years						
0–1 . . . . .	0.00628	100,000	627	99,492	7,474,364	74.74
1–2 . . . . .	0.00048	99,373	48	99,349	7,374,872	74.21
2–3 . . . . .	0.00035	99,326	35	99,308	7,275,522	73.25
3–4 . . . . .	0.00026	99,291	26	99,277	7,176,214	72.27
4–5 . . . . .	0.00021	99,264	21	99,254	7,076,937	71.29
5–6 . . . . .	0.00019	99,243	19	99,234	6,977,683	70.31
6–7 . . . . .	0.00018	99,225	18	99,216	6,878,449	69.32
7–8 . . . . .	0.00017	99,207	17	99,199	6,779,233	68.33
8–9 . . . . .	0.00015	99,191	15	99,183	6,680,035	67.35
9–10 . . . . .	0.00013	99,176	13	99,169	6,580,852	66.36
10–11 . . . . .	0.00011	99,163	11	99,158	6,481,682	65.36
11–12 . . . . .	0.00011	99,152	11	99,147	6,382,525	64.37
12–13 . . . . .	0.00017	99,141	17	99,133	6,283,378	63.38
13–14 . . . . .	0.00028	99,124	28	99,110	6,184,245	62.39
14–15 . . . . .	0.00044	99,096	44	99,074	6,085,135	61.41
15–16 . . . . .	0.00062	99,052	61	99,022	5,986,061	60.43
16–17 . . . . .	0.00078	98,991	77	98,953	5,887,040	59.47
17–18 . . . . .	0.00091	98,914	90	98,869	5,788,087	58.52
18–19 . . . . .	0.00102	98,824	101	98,774	5,689,218	57.57
19–20 . . . . .	0.00109	98,723	108	98,669	5,590,444	56.63
20–21 . . . . .	0.00117	98,615	115	98,558	5,491,775	55.69
21–22 . . . . .	0.00125	98,500	123	98,438	5,393,217	54.75
22–23 . . . . .	0.00129	98,377	127	98,314	5,294,779	53.82
23–24 . . . . .	0.00128	98,250	126	98,187	5,196,465	52.89
24–25 . . . . .	0.00124	98,124	122	98,063	5,098,278	51.96
25–26 . . . . .	0.00119	98,002	117	97,943	5,000,216	51.02
26–27 . . . . .	0.00115	97,885	113	97,828	4,902,272	50.08
27–28 . . . . .	0.00113	97,772	111	97,716	4,804,444	49.14
28–29 . . . . .	0.00114	97,661	112	97,605	4,706,728	48.19
29–30 . . . . .	0.00118	97,549	115	97,491	4,609,123	47.25
30–31 . . . . .	0.00123	97,434	120	97,374	4,511,632	46.30
31–32 . . . . .	0.00128	97,314	124	97,252	4,414,257	45.36
32–33 . . . . .	0.00134	97,190	131	97,125	4,317,005	44.42
33–34 . . . . .	0.00143	97,059	139	96,990	4,219,881	43.48
34–35 . . . . .	0.00153	96,920	149	96,846	4,122,891	42.54
35–36 . . . . .	0.00164	96,772	159	96,692	4,026,045	41.60
36–37 . . . . .	0.00175	96,613	170	96,528	3,929,353	40.67
37–38 . . . . .	0.00188	96,443	182	96,352	3,832,825	39.74
38–39 . . . . .	0.00203	96,261	196	96,163	3,736,473	38.82
39–40 . . . . .	0.00219	96,066	211	95,960	3,640,310	37.89
40–41 . . . . .	0.00237	95,855	228	95,741	3,544,350	36.98
41–42 . . . . .	0.00256	95,627	245	95,504	3,448,609	36.06
42–43 . . . . .	0.00277	95,381	265	95,249	3,353,105	35.15
43–44 . . . . .	0.00300	95,117	286	94,974	3,257,856	34.25
44–45 . . . . .	0.00325	94,831	309	94,676	3,162,882	33.35
45–46 . . . . .	0.00353	94,522	335	94,355	3,068,206	32.46
46–47 . . . . .	0.00383	94,187	362	94,006	2,973,851	31.57
47–48 . . . . .	0.00414	93,825	390	93,630	2,879,845	30.69
48–49 . . . . .	0.00445	93,435	417	93,226	2,786,215	29.82
49–50 . . . . .	0.00475	93,017	444	92,795	2,692,989	28.95
50–51 . . . . .	0.00507	92,573	472	92,338	2,600,194	28.09
51–52 . . . . .	0.00542	92,102	502	91,851	2,507,856	27.23
52–53 . . . . .	0.00583	91,600	537	91,331	2,416,005	26.38
53–54 . . . . .	0.00632	91,063	579	90,773	2,324,674	25.53
54–55 . . . . .	0.00692	90,483	630	90,169	2,233,901	24.69
55–56 . . . . .	0.00762	89,854	690	89,509	2,143,733	23.86
56–57 . . . . .	0.00842	89,164	756	88,786	2,054,224	23.04
57–58 . . . . .	0.00928	88,408	828	87,994	1,965,438	22.23
58–59 . . . . .	0.01017	87,580	899	87,131	1,877,443	21.44

**Table 5. Life table for white males: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60. . . . .	0.01109	86,681	971	86,195	1,790,313	20.65
60–61. . . . .	0.01212	85,710	1,051	85,184	1,704,117	19.88
61–62. . . . .	0.01331	84,659	1,141	84,089	1,618,933	19.12
62–63. . . . .	0.01460	83,519	1,236	82,901	1,534,844	18.38
63–64. . . . .	0.01597	82,283	1,334	81,616	1,451,943	17.65
64–65. . . . .	0.01743	80,949	1,434	80,232	1,370,327	16.93
65–66. . . . .	0.01894	79,515	1,506	78,762	1,290,095	16.22
66–67. . . . .	0.02051	78,008	1,600	77,209	1,211,334	15.53
67–68. . . . .	0.02235	76,409	1,708	75,555	1,134,125	14.84
68–69. . . . .	0.02449	74,701	1,830	73,786	1,058,570	14.17
69–70. . . . .	0.02689	72,871	1,959	71,892	984,784	13.51
70–71. . . . .	0.02941	70,912	2,086	69,869	912,892	12.87
71–72. . . . .	0.03215	68,826	2,213	67,720	843,023	12.25
72–73. . . . .	0.03525	66,614	2,348	65,440	775,303	11.64
73–74. . . . .	0.03876	64,266	2,491	63,020	709,864	11.05
74–75. . . . .	0.04267	61,775	2,636	60,457	646,843	10.47
75–76. . . . .	0.04700	59,139	2,779	57,749	586,387	9.92
76–77. . . . .	0.05165	56,360	2,911	54,904	528,637	9.38
77–78. . . . .	0.05674	53,448	3,033	51,932	473,733	8.86
78–79. . . . .	0.06230	50,416	3,141	48,845	421,801	8.37
79–80. . . . .	0.06837	47,275	3,232	45,659	372,956	7.89
80–81. . . . .	0.07498	44,043	3,302	42,391	327,298	7.43
81–82. . . . .	0.08217	40,740	3,347	39,067	284,906	6.99
82–83. . . . .	0.08998	37,393	3,365	35,711	245,840	6.57
83–84. . . . .	0.09846	34,028	3,350	32,353	210,129	6.18
84–85. . . . .	0.10764	30,678	3,302	29,027	177,776	5.79
85–86. . . . .	0.11756	27,376	3,218	25,767	148,749	5.43
86–87. . . . .	0.12827	24,158	3,099	22,608	122,982	5.09
87–88. . . . .	0.13980	21,059	2,944	19,587	100,374	4.77
88–89. . . . .	0.15218	18,115	2,757	16,737	80,787	4.46
89–90. . . . .	0.16545	15,358	2,541	14,088	64,050	4.17
90–91. . . . .	0.17963	12,817	2,302	11,666	49,962	3.90
91–92. . . . .	0.19475	10,515	2,048	9,491	38,296	3.64
92–93. . . . .	0.21081	8,467	1,785	7,575	28,805	3.40
93–94. . . . .	0.22782	6,682	1,522	5,921	21,231	3.18
94–95. . . . .	0.24577	5,160	1,268	4,526	15,310	2.97
95–96. . . . .	0.26465	3,892	1,030	3,377	10,784	2.77
96–97. . . . .	0.28444	2,862	814	2,455	7,407	2.59
97–98. . . . .	0.30509	2,048	625	1,735	4,952	2.42
98–99. . . . .	0.32656	1,423	465	1,191	3,217	2.26
99–100. . . . .	0.34878	958	334	791	2,026	2.11
100–101. . . . .	0.37168	624	232	508	1,235	1.98
101–102. . . . .	0.39517	392	155	315	727	1.85
102–103. . . . .	0.41915	237	99	187	412	1.74
103–104. . . . .	0.44352	138	61	107	225	1.63
104–105. . . . .	0.46817	77	36	59	118	1.53
105–106. . . . .	0.49297	41	20	31	59	1.44
106–107. . . . .	0.51781	21	11	15	28	1.36
107–108. . . . .	0.54256	10	5	7	13	1.28
108–109. . . . .	0.56710	5	3	3	6	1.21
109–110. . . . .	0.59132	2	1	1	2	1.15



Table 6. Life table for white females: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$nL_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00202	100,000	202	274	7,997,161	79.97
1–7 . . . . .	0.00071	99,798	71	1,640	7,996,887	80.13
7–28 . . . . .	0.00074	99,727	74	5,736	7,995,247	80.17
28–365 . . . . .	0.00165	99,653	165	91,932	7,989,511	80.17
Years						
0–1 . . . . .	0.00513	100,000	512	99,582	7,997,161	79.97
1–2 . . . . .	0.00041	99,488	41	99,468	7,897,579	79.38
2–3 . . . . .	0.00025	99,448	25	99,435	7,798,111	78.41
3–4 . . . . .	0.00020	99,422	20	99,412	7,698,676	77.43
4–5 . . . . .	0.00017	99,402	17	99,394	7,599,264	76.45
5–6 . . . . .	0.00015	99,385	15	99,378	7,499,870	75.46
6–7 . . . . .	0.00014	99,370	14	99,363	7,400,492	74.47
7–8 . . . . .	0.00013	99,356	13	99,349	7,301,129	73.48
8–9 . . . . .	0.00012	99,343	12	99,336	7,201,780	72.49
9–10 . . . . .	0.00011	99,330	11	99,325	7,102,444	71.50
10–11 . . . . .	0.00011	99,319	10	99,314	7,003,119	70.51
11–12 . . . . .	0.00011	99,309	11	99,303	6,903,805	69.52
12–13 . . . . .	0.00013	99,298	13	99,292	6,804,502	68.53
13–14 . . . . .	0.00017	99,285	17	99,277	6,705,210	67.53
14–15 . . . . .	0.00024	99,268	23	99,256	6,605,934	66.55
15–16 . . . . .	0.00031	99,245	31	99,229	6,506,678	65.56
16–17 . . . . .	0.00037	99,214	37	99,196	6,407,448	64.58
17–18 . . . . .	0.00042	99,177	42	99,156	6,308,253	63.61
18–19 . . . . .	0.00044	99,135	43	99,114	6,209,097	62.63
19–20 . . . . .	0.00044	99,092	43	99,070	6,109,983	61.66
20–21 . . . . .	0.00043	99,049	43	99,027	6,010,913	60.69
21–22 . . . . .	0.00043	99,006	43	98,985	5,911,885	59.71
22–23 . . . . .	0.00043	98,963	43	98,942	5,812,901	58.74
23–24 . . . . .	0.00043	98,921	43	98,900	5,713,959	57.76
24–25 . . . . .	0.00044	98,878	43	98,857	5,615,059	56.79
25–26 . . . . .	0.00044	98,835	44	98,813	5,516,202	55.81
26–27 . . . . .	0.00045	98,791	45	98,769	5,417,389	54.84
27–28 . . . . .	0.00047	98,747	46	98,724	5,318,620	53.86
28–29 . . . . .	0.00049	98,701	48	98,676	5,219,897	52.89
29–30 . . . . .	0.00052	98,652	51	98,627	5,121,220	51.91
30–31 . . . . .	0.00055	98,601	54	98,574	5,022,593	50.94
31–32 . . . . .	0.00059	98,547	58	98,518	4,924,019	49.97
32–33 . . . . .	0.00064	98,489	63	98,458	4,825,501	49.00
33–34 . . . . .	0.00070	98,426	69	98,392	4,727,043	48.03
34–35 . . . . .	0.00077	98,358	76	98,320	4,628,651	47.06
35–36 . . . . .	0.00084	98,282	83	98,240	4,530,331	46.10
36–37 . . . . .	0.00091	98,199	90	98,154	4,432,091	45.13
37–38 . . . . .	0.00099	98,109	98	98,060	4,333,937	44.17
38–39 . . . . .	0.00108	98,011	106	97,958	4,235,876	43.22
39–40 . . . . .	0.00118	97,905	116	97,847	4,137,918	42.26
40–41 . . . . .	0.00129	97,789	126	97,726	4,040,071	41.31
41–42 . . . . .	0.00140	97,663	137	97,594	3,942,344	40.37
42–43 . . . . .	0.00152	97,526	148	97,452	3,844,750	39.42
43–44 . . . . .	0.00164	97,377	160	97,298	3,747,298	38.48
44–45 . . . . .	0.00176	97,218	171	97,132	3,650,001	37.54
45–46 . . . . .	0.00189	97,047	184	96,955	3,552,869	36.61
46–47 . . . . .	0.00205	96,863	198	96,763	3,455,914	35.68
47–48 . . . . .	0.00222	96,664	215	96,556	3,359,151	34.75
48–49 . . . . .	0.00243	96,449	235	96,332	3,262,594	33.83
49–50 . . . . .	0.00265	96,214	256	96,086	3,166,263	32.91
50–51 . . . . .	0.00290	95,958	279	95,819	3,070,176	31.99
51–52 . . . . .	0.00317	95,679	304	95,527	2,974,358	31.09
52–53 . . . . .	0.00346	95,375	331	95,209	2,878,831	30.18
53–54 . . . . .	0.00380	95,043	362	94,862	2,783,622	29.29
54–55 . . . . .	0.00418	94,681	398	94,482	2,688,759	28.40
55–56 . . . . .	0.00464	94,284	439	94,064	2,594,277	27.52
56–57 . . . . .	0.00516	93,844	487	93,601	2,500,213	26.64
57–58 . . . . .	0.00572	93,358	537	93,089	2,406,612	25.78
58–59 . . . . .	0.00630	92,821	588	92,526	2,313,523	24.92

**Table 6. Life table for white females: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.00691	92,232	641	91,912	2,220,997	24.08
60–61 . . . . .	0.00759	91,591	700	91,241	2,129,085	23.25
61–62 . . . . .	0.00838	90,891	767	90,507	2,037,844	22.42
62–63 . . . . .	0.00922	90,124	838	89,704	1,947,336	21.61
63–64 . . . . .	0.01010	89,285	910	88,830	1,857,632	20.81
64–65 . . . . .	0.01102	88,375	984	87,883	1,768,802	20.01
65–66 . . . . .	0.01200	87,391	1,049	86,866	1,680,919	19.23
66–67 . . . . .	0.01295	86,342	1,118	85,783	1,594,053	18.46
67–68 . . . . .	0.01406	85,224	1,198	84,624	1,508,270	17.70
68–69 . . . . .	0.01535	84,025	1,289	83,380	1,423,645	16.94
69–70 . . . . .	0.01680	82,736	1,390	82,041	1,340,265	16.20
70–71 . . . . .	0.01838	81,346	1,495	80,598	1,258,224	15.47
71–72 . . . . .	0.02018	79,851	1,611	79,045	1,177,626	14.75
72–73 . . . . .	0.02230	78,239	1,744	77,367	1,098,581	14.04
73–74 . . . . .	0.02475	76,495	1,894	75,548	1,021,214	13.35
74–75 . . . . .	0.02754	74,601	2,055	73,574	945,666	12.68
75–76 . . . . .	0.03068	72,546	2,226	71,433	872,092	12.02
76–77 . . . . .	0.03409	70,321	2,398	69,122	800,658	11.39
77–78 . . . . .	0.03787	67,923	2,572	66,637	731,537	10.77
78–79 . . . . .	0.04205	65,351	2,748	63,977	664,900	10.17
79–80 . . . . .	0.04667	62,602	2,922	61,142	600,923	9.60
80–81 . . . . .	0.05177	59,681	3,090	58,136	539,782	9.04
81–82 . . . . .	0.05739	56,591	3,248	54,967	481,646	8.51
82–83 . . . . .	0.06358	53,343	3,392	51,648	426,678	8.00
83–84 . . . . .	0.07039	49,952	3,516	48,194	375,031	7.51
84–85 . . . . .	0.07787	46,436	3,616	44,628	326,837	7.04
85–86 . . . . .	0.08607	42,820	3,685	40,977	282,209	6.59
86–87 . . . . .	0.09504	39,135	3,719	37,275	241,232	6.16
87–88 . . . . .	0.10484	35,415	3,713	33,559	203,957	5.76
88–89 . . . . .	0.11552	31,702	3,662	29,871	170,398	5.37
89–90 . . . . .	0.12714	28,040	3,565	26,258	140,527	5.01
90–91 . . . . .	0.13974	24,475	3,420	22,765	114,270	4.67
91–92 . . . . .	0.15336	21,055	3,229	19,441	91,504	4.35
92–93 . . . . .	0.16806	17,826	2,996	16,328	72,064	4.04
93–94 . . . . .	0.18386	14,830	2,727	13,467	55,736	3.76
94–95 . . . . .	0.20079	12,103	2,430	10,888	42,269	3.49
95–96 . . . . .	0.21886	9,673	2,117	8,615	31,381	3.24
96–97 . . . . .	0.23807	7,556	1,799	6,657	22,766	3.01
97–98 . . . . .	0.25841	5,757	1,488	5,013	16,110	2.80
98–99 . . . . .	0.27985	4,269	1,195	3,672	11,096	2.60
99–100 . . . . .	0.30234	3,075	930	2,610	7,424	2.41
100–101 . . . . .	0.32582	2,145	699	1,796	4,815	2.24
101–102 . . . . .	0.35021	1,446	506	1,193	3,019	2.09
102–103 . . . . .	0.37541	940	353	763	1,826	1.94
103–104 . . . . .	0.40130	587	236	469	1,063	1.81
104–105 . . . . .	0.42775	351	150	276	593	1.69
105–106 . . . . .	0.45463	201	91	155	317	1.58
106–107 . . . . .	0.48177	110	53	83	162	1.48
107–108 . . . . .	0.50902	57	29	42	79	1.38
108–109 . . . . .	0.53621	28	15	20	36	1.30
109–110 . . . . .	0.56320	13	7	9	16	1.22

Table 7. Life table for the black population: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00607	100,000	607	273	7,174,410	71.74
1–7 . . . . .	0.00163	99,393	162	1,633	7,174,137	72.18
7–28 . . . . .	0.00179	99,232	178	5,704	7,172,504	72.28
28–365 . . . . .	0.00481	99,054	476	91,236	7,166,800	72.35
Years						
0–1 . . . . .	0.01429	100,000	1,422	98,846	7,174,410	71.74
1–2 . . . . .	0.00084	98,578	83	98,536	7,075,564	71.78
2–3 . . . . .	0.00047	98,495	46	98,472	6,977,028	70.84
3–4 . . . . .	0.00037	98,449	37	98,430	6,878,556	69.87
4–5 . . . . .	0.00031	98,412	30	98,397	6,780,126	68.90
5–6 . . . . .	0.00027	98,382	26	98,369	6,681,729	67.92
6–7 . . . . .	0.00024	98,355	24	98,343	6,583,360	66.93
7–8 . . . . .	0.00022	98,331	22	98,320	6,485,017	65.95
8–9 . . . . .	0.00020	98,309	20	98,299	6,386,696	64.97
9–10 . . . . .	0.00018	98,289	18	98,280	6,288,397	63.98
10–11 . . . . .	0.00017	98,271	17	98,263	6,190,116	62.99
11–12 . . . . .	0.00018	98,254	18	98,246	6,091,853	62.00
12–13 . . . . .	0.00023	98,237	22	98,226	5,993,608	61.01
13–14 . . . . .	0.00032	98,215	31	98,199	5,895,382	60.03
14–15 . . . . .	0.00045	98,183	44	98,161	5,797,183	59.04
15–16 . . . . .	0.00060	98,139	59	98,109	5,699,022	58.07
16–17 . . . . .	0.00075	98,080	73	98,043	5,600,913	57.11
17–18 . . . . .	0.00090	98,007	88	97,963	5,502,870	56.15
18–19 . . . . .	0.00104	97,919	102	97,868	5,404,907	55.20
19–20 . . . . .	0.00118	97,817	116	97,759	5,307,039	54.25
20–21 . . . . .	0.00134	97,701	131	97,635	5,209,280	53.32
21–22 . . . . .	0.00150	97,570	146	97,497	5,111,645	52.39
22–23 . . . . .	0.00161	97,423	157	97,345	5,014,148	51.47
23–24 . . . . .	0.00166	97,266	161	97,186	4,916,803	50.55
24–25 . . . . .	0.00165	97,105	161	97,025	4,819,618	49.63
25–26 . . . . .	0.00163	96,944	158	96,865	4,722,593	48.71
26–27 . . . . .	0.00162	96,786	157	96,708	4,625,728	47.79
27–28 . . . . .	0.00163	96,629	158	96,550	4,529,020	46.87
28–29 . . . . .	0.00168	96,471	162	96,390	4,432,470	45.95
29–30 . . . . .	0.00175	96,309	169	96,225	4,336,080	45.02
30–31 . . . . .	0.00183	96,140	176	96,052	4,239,856	44.10
31–32 . . . . .	0.00192	95,964	184	95,872	4,143,803	43.18
32–33 . . . . .	0.00202	95,780	194	95,683	4,047,931	42.26
33–34 . . . . .	0.00215	95,586	206	95,483	3,952,249	41.35
34–35 . . . . .	0.00230	95,380	220	95,270	3,856,766	40.44
35–36 . . . . .	0.00245	95,160	234	95,043	3,761,496	39.53
36–37 . . . . .	0.00262	94,926	249	94,801	3,666,454	38.62
37–38 . . . . .	0.00282	94,676	268	94,543	3,571,652	37.72
38–39 . . . . .	0.00307	94,409	291	94,264	3,477,110	36.83
39–40 . . . . .	0.00336	94,118	317	93,960	3,382,846	35.94
40–41 . . . . .	0.00367	93,801	346	93,628	3,288,887	35.06
41–42 . . . . .	0.00400	93,455	375	93,268	3,195,258	34.19
42–43 . . . . .	0.00435	93,080	407	92,877	3,101,991	33.33
43–44 . . . . .	0.00474	92,674	441	92,453	3,009,114	32.47
44–45 . . . . .	0.00516	92,232	479	91,993	2,916,661	31.62
45–46 . . . . .	0.00564	91,754	520	91,494	2,824,668	30.79
46–47 . . . . .	0.00614	91,234	564	90,952	2,733,174	29.96
47–48 . . . . .	0.00666	90,670	607	90,367	2,642,222	29.14
48–49 . . . . .	0.00715	90,063	649	89,739	2,551,856	28.33
49–50 . . . . .	0.00764	89,414	688	89,070	2,462,117	27.54
50–51 . . . . .	0.00816	88,726	730	88,361	2,373,047	26.75
51–52 . . . . .	0.00874	87,996	775	87,609	2,284,685	25.96
52–53 . . . . .	0.00936	87,221	823	86,809	2,197,077	25.19
53–54 . . . . .	0.01004	86,398	876	85,960	2,110,268	24.43
54–55 . . . . .	0.01081	85,522	934	85,055	2,024,308	23.67
55–56 . . . . .	0.01169	84,588	1,000	84,088	1,939,253	22.93
56–57 . . . . .	0.01268	83,588	1,073	83,052	1,855,165	22.19
57–58 . . . . .	0.01373	82,515	1,148	81,941	1,772,114	21.48
58–59 . . . . .	0.01475	81,367	1,217	80,759	1,690,173	20.77

**Table 7. Life table for the black population: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$n^l_x$	$T_x$	$e_x$
59–60 . . . . .	0.01574	80,150	1,281	79,510	1,609,414	20.08
60–61 . . . . .	0.01672	78,869	1,340	78,199	1,529,904	19.40
61–62 . . . . .	0.01780	77,529	1,404	76,827	1,451,705	18.72
62–63 . . . . .	0.01901	76,126	1,474	75,389	1,374,877	18.06
63–64 . . . . .	0.02044	74,652	1,556	73,874	1,299,488	17.41
64–65 . . . . .	0.02208	73,096	1,648	72,272	1,225,614	16.77
65–66 . . . . .	0.02383	71,448	1,703	70,597	1,153,342	16.14
66–67 . . . . .	0.02556	69,745	1,783	68,854	1,082,746	15.52
67–68 . . . . .	0.02743	67,963	1,864	67,031	1,013,892	14.92
68–69 . . . . .	0.02944	66,099	1,946	65,126	946,861	14.32
69–70 . . . . .	0.03159	64,153	2,027	63,140	881,735	13.74
70–71 . . . . .	0.03388	62,126	2,105	61,074	818,596	13.18
71–72 . . . . .	0.03637	60,021	2,183	58,930	757,522	12.62
72–73 . . . . .	0.03914	57,839	2,264	56,707	698,592	12.08
73–74 . . . . .	0.04222	55,575	2,346	54,402	641,885	11.55
74–75 . . . . .	0.04554	53,229	2,424	52,017	587,484	11.04
75–76 . . . . .	0.04909	50,804	2,494	49,557	535,467	10.54
76–77 . . . . .	0.05289	48,310	2,555	47,033	485,910	10.06
77–78 . . . . .	0.05697	45,755	2,606	44,452	438,877	9.59
78–79 . . . . .	0.06134	43,149	2,647	41,826	394,425	9.14
79–80 . . . . .	0.06602	40,502	2,674	39,165	352,599	8.71
80–81 . . . . .	0.07103	37,828	2,687	36,485	313,434	8.29
81–82 . . . . .	0.07639	35,142	2,684	33,799	276,949	7.88
82–83 . . . . .	0.08212	32,457	2,665	31,125	243,149	7.49
83–84 . . . . .	0.08824	29,792	2,629	28,478	212,025	7.12
84–85 . . . . .	0.09476	27,163	2,574	25,876	183,547	6.76
85–86 . . . . .	0.10172	24,589	2,501	23,338	157,671	6.41
86–87 . . . . .	0.10912	22,088	2,410	20,883	134,333	6.08
87–88 . . . . .	0.11700	19,678	2,302	18,526	113,450	5.77
88–89 . . . . .	0.12536	17,375	2,178	16,286	94,923	5.46
89–90 . . . . .	0.13423	15,197	2,040	14,177	78,637	5.17
90–91 . . . . .	0.14362	13,157	1,890	12,212	64,460	4.90
91–92 . . . . .	0.15356	11,268	1,730	10,402	52,248	4.64
92–93 . . . . .	0.16405	9,537	1,565	8,755	41,845	4.39
93–94 . . . . .	0.17511	7,973	1,396	7,275	33,090	4.15
94–95 . . . . .	0.18674	6,577	1,228	5,963	25,816	3.93
95–96 . . . . .	0.19897	5,349	1,064	4,816	19,853	3.71
96–97 . . . . .	0.21178	4,284	907	3,831	15,037	3.51
97–98 . . . . .	0.22519	3,377	760	2,997	11,206	3.32
98–99 . . . . .	0.23919	2,617	626	2,304	8,209	3.14
99–100 . . . . .	0.25378	1,991	505	1,738	5,906	2.97
100–101 . . . . .	0.26894	1,485	400	1,286	4,168	2.81
101–102 . . . . .	0.28466	1,086	309	931	2,882	2.65
102–103 . . . . .	0.30092	777	234	660	1,950	2.51
103–104 . . . . .	0.31770	543	173	457	1,290	2.38
104–105 . . . . .	0.33496	371	124	308	834	2.25
105–106 . . . . .	0.35268	246	87	203	525	2.13
106–107 . . . . .	0.37081	160	59	130	322	2.02
107–108 . . . . .	0.38932	100	39	81	192	1.92
108–109 . . . . .	0.40815	61	25	49	111	1.82
109–110 . . . . .	0.42725	36	15	29	63	1.73

Table 8. Life table for black males: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$nL_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00668	100,000	668	273	6,808,362	68.08
1–7 . . . . .	0.00186	99,332	185	1,631	6,808,089	68.54
7–28 . . . . .	0.00191	99,147	189	5,699	6,806,458	68.65
28–365 . . . . .	0.00526	98,958	521	91,126	6,800,759	68.72
Years						
0–1 . . . . .	0.01571	100,000	1,563	98,729	6,808,362	68.08
1–2 . . . . .	0.00095	98,437	93	98,390	6,709,633	68.16
2–3 . . . . .	0.00052	98,344	52	98,318	6,611,242	67.23
3–4 . . . . .	0.00041	98,292	40	98,272	6,512,924	66.26
4–5 . . . . .	0.00034	98,252	33	98,236	6,414,652	65.29
5–6 . . . . .	0.00030	98,219	30	98,204	6,316,416	64.31
6–7 . . . . .	0.00028	98,190	28	98,176	6,218,211	63.33
7–8 . . . . .	0.00026	98,162	26	98,149	6,120,036	62.35
8–9 . . . . .	0.00024	98,136	23	98,125	6,021,886	61.36
9–10 . . . . .	0.00020	98,113	20	98,103	5,923,762	60.38
10–11 . . . . .	0.00018	98,093	18	98,084	5,825,659	59.39
11–12 . . . . .	0.00019	98,075	18	98,066	5,727,574	58.40
12–13 . . . . .	0.00026	98,057	25	98,045	5,629,508	57.41
13–14 . . . . .	0.00041	98,032	40	98,012	5,531,464	56.43
14–15 . . . . .	0.00063	97,992	61	97,961	5,433,452	55.45
15–16 . . . . .	0.00087	97,930	85	97,888	5,335,491	54.48
16–17 . . . . .	0.00110	97,845	108	97,791	5,237,603	53.53
17–18 . . . . .	0.00134	97,737	131	97,672	5,139,812	52.59
18–19 . . . . .	0.00158	97,606	155	97,529	5,042,140	51.66
19–20 . . . . .	0.00182	97,451	178	97,362	4,944,612	50.74
20–21 . . . . .	0.00208	97,274	203	97,172	4,847,249	49.83
21–22 . . . . .	0.00235	97,071	228	96,956	4,750,077	48.93
22–23 . . . . .	0.00253	96,842	246	96,719	4,653,121	48.05
23–24 . . . . .	0.00259	96,596	251	96,471	4,556,402	47.17
24–25 . . . . .	0.00255	96,345	246	96,222	4,459,931	46.29
25–26 . . . . .	0.00247	96,099	238	95,980	4,363,709	45.41
26–27 . . . . .	0.00242	95,861	232	95,745	4,267,729	44.52
27–28 . . . . .	0.00239	95,628	229	95,514	4,171,984	43.63
28–29 . . . . .	0.00241	95,400	230	95,285	4,076,470	42.73
29–30 . . . . .	0.00247	95,169	236	95,052	3,981,186	41.83
30–31 . . . . .	0.00255	94,934	242	94,813	3,886,134	40.94
31–32 . . . . .	0.00262	94,691	249	94,567	3,791,322	40.04
32–33 . . . . .	0.00273	94,442	258	94,313	3,696,755	39.14
33–34 . . . . .	0.00286	94,184	270	94,049	3,602,442	38.25
34–35 . . . . .	0.00301	93,914	283	93,773	3,508,393	37.36
35–36 . . . . .	0.00317	93,631	298	93,482	3,414,620	36.47
36–37 . . . . .	0.00336	93,333	315	93,175	3,321,138	35.58
37–38 . . . . .	0.00359	93,018	335	92,850	3,227,963	34.70
38–39 . . . . .	0.00388	92,683	361	92,502	3,135,113	33.83
39–40 . . . . .	0.00423	92,322	392	92,126	3,042,610	32.96
40–41 . . . . .	0.00460	91,930	425	91,717	2,950,485	32.10
41–42 . . . . .	0.00499	91,505	459	91,275	2,858,768	31.24
42–43 . . . . .	0.00544	91,046	498	90,797	2,767,492	30.40
43–44 . . . . .	0.00596	90,548	543	90,276	2,676,696	29.56
44–45 . . . . .	0.00655	90,005	593	89,708	2,586,419	28.74
45–46 . . . . .	0.00722	89,411	650	89,086	2,496,711	27.92
46–47 . . . . .	0.00793	88,761	709	88,407	2,407,625	27.12
47–48 . . . . .	0.00864	88,052	767	87,668	2,319,218	26.34
48–49 . . . . .	0.00931	87,285	820	86,875	2,231,550	25.57
49–50 . . . . .	0.00995	86,465	869	86,030	2,144,675	24.80
50–51 . . . . .	0.01062	85,596	918	85,137	2,058,645	24.05
51–52 . . . . .	0.01137	84,677	973	84,191	1,973,508	23.31
52–53 . . . . .	0.01217	83,705	1,030	83,189	1,889,317	22.57
53–54 . . . . .	0.01307	82,674	1,094	82,127	1,806,128	21.85
54–55 . . . . .	0.01408	81,581	1,164	80,999	1,724,000	21.13
55–56 . . . . .	0.01525	80,417	1,244	79,795	1,643,002	20.43
56–57 . . . . .	0.01656	79,173	1,332	78,507	1,563,207	19.74
57–58 . . . . .	0.01791	77,841	1,418	77,132	1,484,700	19.07
58–59 . . . . .	0.01920	76,423	1,495	75,675	1,407,569	18.42

**Table 8. Life table for black males: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.02039	74,928	1,559	74,149	1,331,893	17.78
60–61 . . . . .	0.02156	73,369	1,615	72,562	1,257,745	17.14
61–62 . . . . .	0.02283	71,754	1,675	70,917	1,185,183	16.52
62–63 . . . . .	0.02429	70,079	1,743	69,207	1,114,266	15.90
63–64 . . . . .	0.02606	68,336	1,826	67,423	1,045,059	15.29
64–65 . . . . .	0.02812	66,510	1,921	65,549	977,636	14.70
65–66 . . . . .	0.03032	64,588	1,959	63,609	912,087	14.12
66–67 . . . . .	0.03267	62,630	2,046	61,607	848,478	13.55
67–68 . . . . .	0.03522	60,584	2,134	59,517	786,871	12.99
68–69 . . . . .	0.03799	58,450	2,221	57,339	727,354	12.44
69–70 . . . . .	0.04096	56,229	2,303	55,077	670,015	11.92
70–71 . . . . .	0.04409	53,926	2,378	52,737	614,937	11.40
71–72 . . . . .	0.04742	51,548	2,444	50,326	562,201	10.91
72–73 . . . . .	0.05101	49,104	2,505	47,851	511,875	10.42
73–74 . . . . .	0.05489	46,599	2,558	45,320	464,024	9.96
74–75 . . . . .	0.05903	44,041	2,600	42,741	418,704	9.51
75–76 . . . . .	0.06341	41,441	2,628	40,127	375,963	9.07
76–77 . . . . .	0.06801	38,814	2,640	37,494	335,836	8.65
77–78 . . . . .	0.07293	36,174	2,638	34,855	298,342	8.25
78–79 . . . . .	0.07816	33,536	2,621	32,225	263,487	7.86
79–80 . . . . .	0.08374	30,914	2,589	29,620	231,262	7.48
80–81 . . . . .	0.08968	28,326	2,540	27,055	201,642	7.12
81–82 . . . . .	0.09600	25,785	2,475	24,548	174,587	6.77
82–83 . . . . .	0.10271	23,310	2,394	22,113	150,039	6.44
83–84 . . . . .	0.10984	20,916	2,297	19,767	127,927	6.12
84–85 . . . . .	0.11739	18,618	2,186	17,525	108,160	5.81
85–86 . . . . .	0.12539	16,433	2,061	15,402	90,634	5.52
86–87 . . . . .	0.13385	14,372	1,924	13,410	75,232	5.23
87–88 . . . . .	0.14279	12,448	1,778	11,560	61,821	4.97
88–89 . . . . .	0.15223	10,671	1,624	9,859	50,262	4.71
89–90 . . . . .	0.16216	9,046	1,467	8,313	40,403	4.47
90–91 . . . . .	0.17262	7,579	1,308	6,925	32,090	4.23
91–92 . . . . .	0.18360	6,271	1,151	5,695	25,165	4.01
92–93 . . . . .	0.19511	5,120	999	4,620	19,469	3.80
93–94 . . . . .	0.20717	4,121	854	3,694	14,849	3.60
94–95 . . . . .	0.21976	3,267	718	2,908	11,155	3.41
95–96 . . . . .	0.23290	2,549	594	2,252	8,247	3.24
96–97 . . . . .	0.24657	1,955	482	1,714	5,995	3.07
97–98 . . . . .	0.26077	1,473	384	1,281	4,280	2.91
98–99 . . . . .	0.27549	1,089	300	939	2,999	2.75
99–100 . . . . .	0.29072	789	229	674	2,060	2.61
100–101 . . . . .	0.30643	560	172	474	1,385	2.48
101–102 . . . . .	0.32260	388	125	326	912	2.35
102–103 . . . . .	0.33921	263	89	218	586	2.23
103–104 . . . . .	0.35623	174	62	143	368	2.12
104–105 . . . . .	0.37361	112	42	91	225	2.01
105–106 . . . . .	0.39133	70	27	56	134	1.91
106–107 . . . . .	0.40934	43	17	34	77	1.82
107–108 . . . . .	0.42760	25	11	20	44	1.73
108–109 . . . . .	0.44605	14	6	11	24	1.65
109–110 . . . . .	0.46466	8	4	6	13	1.57

Table 9. Life table for black females: United States, 1999–2001

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	$nq_x$	$l_x$	$n^d_x$	$nL_x$	$T_x$	$e_x$
Days						
0–1 . . . . .	0.00543	100,000	543	273	7,511,791	75.12
1–7 . . . . .	0.00138	99,457	138	1,634	7,511,518	75.53
7–28 . . . . .	0.00167	99,319	166	5,709	7,509,884	75.61
28–365 . . . . .	0.00434	99,154	430	91,349	7,504,175	75.68
Years						
0–1 . . . . .	0.01282	100,000	1,277	98,965	7,511,791	75.12
1–2 . . . . .	0.00074	98,723	73	98,687	7,412,826	75.09
2–3 . . . . .	0.00041	98,651	41	98,630	7,314,139	74.14
3–4 . . . . .	0.00034	98,610	33	98,593	7,215,509	73.17
4–5 . . . . .	0.00028	98,577	27	98,563	7,116,916	72.20
5–6 . . . . .	0.00023	98,550	23	98,538	7,018,352	71.22
6–7 . . . . .	0.00020	98,526	20	98,516	6,919,814	70.23
7–8 . . . . .	0.00018	98,506	18	98,497	6,821,298	69.25
8–9 . . . . .	0.00017	98,488	17	98,480	6,722,801	68.26
9–10 . . . . .	0.00016	98,472	16	98,464	6,624,321	67.27
10–11 . . . . .	0.00016	98,455	16	98,447	6,525,857	66.28
11–12 . . . . .	0.00017	98,439	17	98,431	6,427,410	65.29
12–13 . . . . .	0.00019	98,422	19	98,413	6,328,979	64.30
13–14 . . . . .	0.00023	98,403	22	98,392	6,230,566	63.32
14–15 . . . . .	0.00027	98,381	27	98,367	6,132,175	62.33
15–16 . . . . .	0.00032	98,354	32	98,338	6,033,807	61.35
16–17 . . . . .	0.00038	98,322	37	98,304	5,935,469	60.37
17–18 . . . . .	0.00043	98,285	43	98,264	5,837,165	59.39
18–19 . . . . .	0.00049	98,243	48	98,219	5,738,901	58.42
19–20 . . . . .	0.00055	98,194	54	98,168	5,640,683	57.44
20–21 . . . . .	0.00061	98,141	60	98,111	5,542,515	56.48
21–22 . . . . .	0.00068	98,080	67	98,047	5,444,405	55.51
22–23 . . . . .	0.00074	98,014	72	97,977	5,346,358	54.55
23–24 . . . . .	0.00078	97,941	77	97,903	5,248,380	53.59
24–25 . . . . .	0.00082	97,864	80	97,824	5,150,478	52.63
25–26 . . . . .	0.00085	97,784	84	97,742	5,052,653	51.67
26–27 . . . . .	0.00090	97,701	88	97,657	4,954,911	50.72
27–28 . . . . .	0.00095	97,613	93	97,566	4,857,254	49.76
28–29 . . . . .	0.00102	97,520	99	97,470	4,759,688	48.81
29–30 . . . . .	0.00110	97,420	107	97,367	4,662,218	47.86
30–31 . . . . .	0.00118	97,313	115	97,256	4,564,852	46.91
31–32 . . . . .	0.00128	97,198	124	97,136	4,467,596	45.96
32–33 . . . . .	0.00139	97,074	135	97,006	4,370,460	45.02
33–34 . . . . .	0.00152	96,939	148	96,865	4,273,454	44.08
34–35 . . . . .	0.00167	96,791	161	96,711	4,176,589	43.15
35–36 . . . . .	0.00181	96,630	175	96,542	4,079,878	42.22
36–37 . . . . .	0.00196	96,455	189	96,360	3,983,336	41.30
37–38 . . . . .	0.00214	96,265	206	96,162	3,886,976	40.38
38–39 . . . . .	0.00235	96,059	226	95,946	3,790,814	39.46
39–40 . . . . .	0.00259	95,833	249	95,709	3,694,867	38.56
40–41 . . . . .	0.00285	95,585	273	95,448	3,599,159	37.65
41–42 . . . . .	0.00312	95,311	298	95,163	3,503,710	36.76
42–43 . . . . .	0.00339	95,014	323	94,852	3,408,548	35.87
43–44 . . . . .	0.00366	94,691	348	94,517	3,313,696	34.99
44–45 . . . . .	0.00394	94,343	373	94,156	3,219,179	34.12
45–46 . . . . .	0.00425	93,970	401	93,769	3,125,022	33.26
46–47 . . . . .	0.00458	93,569	431	93,354	3,031,253	32.40
47–48 . . . . .	0.00493	93,138	461	92,908	2,937,900	31.54
48–49 . . . . .	0.00528	92,677	492	92,431	2,844,992	30.70
49–50 . . . . .	0.00565	92,185	524	91,923	2,752,561	29.86
50–51 . . . . .	0.00605	91,661	557	91,383	2,660,638	29.03
51–52 . . . . .	0.00648	91,104	594	90,807	2,569,255	28.20
52–53 . . . . .	0.00695	90,510	633	90,193	2,478,449	27.38
53–54 . . . . .	0.00747	89,877	676	89,539	2,388,255	26.57
54–55 . . . . .	0.00805	89,201	723	88,839	2,298,717	25.77
55–56 . . . . .	0.00871	88,478	777	88,089	2,209,877	24.98
56–57 . . . . .	0.00948	87,700	838	87,281	2,121,788	24.19
57–58 . . . . .	0.01030	86,862	903	86,410	2,034,507	23.42
58–59 . . . . .	0.01113	85,959	967	85,475	1,948,097	22.66

**Table 9. Life table for black females: United States, 1999–2001—Con.**

Age	Probability of dying between ages $x$ to $x + n$	Number surviving to age $x$	Number dying between ages $x$ to $x + n$	Person-years lived between ages $x$ to $x + n$	Total number of person-years lived above age $x$	Expectation of life at age $x$
$x$ to $x + n$	${}_nq_x$	$l_x$	${}_nd_x$	${}_nL_x$	$T_x$	$e_x$
59–60 . . . . .	0.01197	84,992	1,029	84,478	1,862,621	21.92
60–61 . . . . .	0.01282	83,963	1,090	83,418	1,778,144	21.18
61–62 . . . . .	0.01376	82,873	1,156	82,295	1,694,725	20.45
62–63 . . . . .	0.01481	81,718	1,227	81,104	1,612,430	19.73
63–64 . . . . .	0.01602	80,490	1,309	79,836	1,531,326	19.03
64–65 . . . . .	0.01739	79,181	1,400	78,481	1,451,490	18.33
65–66 . . . . .	0.01885	77,781	1,467	77,048	1,373,009	17.65
66–67 . . . . .	0.02026	76,315	1,546	75,542	1,295,961	16.98
67–68 . . . . .	0.02177	74,769	1,628	73,955	1,220,419	16.32
68–69 . . . . .	0.02339	73,141	1,711	72,286	1,146,464	15.67
69–70 . . . . .	0.02515	71,431	1,796	70,533	1,074,178	15.04
70–71 . . . . .	0.02703	69,634	1,882	68,693	1,003,645	14.41
71–72 . . . . .	0.02912	67,752	1,973	66,766	934,952	13.80
72–73 . . . . .	0.03151	65,780	2,073	64,743	868,186	13.20
73–74 . . . . .	0.03422	63,707	2,180	62,617	803,442	12.61
74–75 . . . . .	0.03719	61,527	2,288	60,383	740,825	12.04
75–76 . . . . .	0.04038	59,239	2,392	58,043	680,442	11.49
76–77 . . . . .	0.04382	56,847	2,491	55,602	622,399	10.95
77–78 . . . . .	0.04754	54,356	2,584	53,064	566,797	10.43
78–79 . . . . .	0.05156	51,772	2,670	50,437	513,733	9.92
79–80 . . . . .	0.05590	49,103	2,745	47,730	463,296	9.44
80–81 . . . . .	0.06059	46,358	2,809	44,953	415,566	8.96
81–82 . . . . .	0.06564	43,549	2,858	42,120	370,612	8.51
82–83 . . . . .	0.07108	40,690	2,892	39,244	328,493	8.07
83–84 . . . . .	0.07693	37,798	2,908	36,345	289,248	7.65
84–85 . . . . .	0.08322	34,891	2,903	33,439	252,904	7.25
85–86 . . . . .	0.08997	31,987	2,878	30,548	219,465	6.86
86–87 . . . . .	0.09721	29,109	2,830	27,694	188,916	6.49
87–88 . . . . .	0.10497	26,279	2,759	24,900	161,222	6.13
88–89 . . . . .	0.11328	23,521	2,664	22,189	136,322	5.80
89–90 . . . . .	0.12215	20,856	2,548	19,583	114,133	5.47
90–91 . . . . .	0.13161	18,309	2,410	17,104	94,550	5.16
91–92 . . . . .	0.14168	15,899	2,253	14,773	77,446	4.87
92–93 . . . . .	0.15239	13,647	2,080	12,607	62,673	4.59
93–94 . . . . .	0.16376	11,567	1,894	10,620	50,066	4.33
94–95 . . . . .	0.17579	9,673	1,700	8,823	39,446	4.08
95–96 . . . . .	0.18852	7,972	1,503	7,221	30,624	3.84
96–97 . . . . .	0.20194	6,470	1,306	5,816	23,403	3.62
97–98 . . . . .	0.21605	5,163	1,116	4,605	17,586	3.41
98–99 . . . . .	0.23087	4,048	934	3,580	12,981	3.21
99–100 . . . . .	0.24639	3,113	767	2,730	9,401	3.02
100–101 . . . . .	0.26260	2,346	616	2,038	6,671	2.84
101–102 . . . . .	0.27947	1,730	483	1,488	4,633	2.68
102–103 . . . . .	0.29699	1,247	370	1,061	3,145	2.52
103–104 . . . . .	0.31514	876	276	738	2,083	2.38
104–105 . . . . .	0.33386	600	200	500	1,345	2.24
105–106 . . . . .	0.35312	400	141	329	845	2.11
106–107 . . . . .	0.37287	259	96	210	516	2.00
107–108 . . . . .	0.39305	162	64	130	306	1.88
108–109 . . . . .	0.41361	98	41	78	175	1.78
109–110 . . . . .	0.43447	58	25	45	97	1.69



Table 10. Standard errors of the probability of dying: United States, 1999–2001

Age	Total			White			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
0–1	0.000024	0.000035	0.000033	0.000024	0.000036	0.000033	0.000088	0.000129	0.000119
1–2	0.000007	0.000010	0.000009	0.000007	0.000010	0.000009	0.000022	0.000032	0.000029
2–3	0.000005	0.000008	0.000007	0.000006	0.000009	0.000008	0.000016	0.000023	0.000021
3–4	0.000005	0.000007	0.000006	0.000005	0.000008	0.000007	0.000014	0.000020	0.000019
4–5	0.000004	0.000006	0.000006	0.000005	0.000007	0.000006	0.000012	0.000018	0.000017
5–6	0.000004	0.000006	0.000005	0.000004	0.000006	0.000006	0.000011	0.000017	0.000015
6–7	0.000004	0.000006	0.000005	0.000004	0.000006	0.000006	0.000011	0.000016	0.000014
7–8	0.000004	0.000005	0.000005	0.000004	0.000006	0.000005	0.000010	0.000016	0.000013
8–9	0.000003	0.000005	0.000005	0.000004	0.000006	0.000005	0.000010	0.000015	0.000013
9–10	0.000003	0.000005	0.000004	0.000004	0.000005	0.000005	0.000009	0.000014	0.000013
10–11	0.000003	0.000004	0.000004	0.000003	0.000005	0.000005	0.000009	0.000013	0.000013
11–12	0.000003	0.000004	0.000004	0.000003	0.000005	0.000005	0.000009	0.000013	0.000013
12–13	0.000004	0.000005	0.000005	0.000004	0.000006	0.000005	0.000011	0.000016	0.000014
13–14	0.000004	0.000007	0.000006	0.000005	0.000008	0.000006	0.000013	0.000020	0.000015
14–15	0.000005	0.000009	0.000006	0.000006	0.000009	0.000007	0.000015	0.000025	0.000017
15–16	0.000006	0.000010	0.000007	0.000007	0.000011	0.000008	0.000018	0.000030	0.000018
16–17	0.000007	0.000011	0.000008	0.000008	0.000012	0.000009	0.000020	0.000034	0.000020
17–18	0.000008	0.000012	0.000008	0.000008	0.000014	0.000009	0.000022	0.000038	0.000022
18–19	0.000008	0.000013	0.000009	0.000009	0.000014	0.000010	0.000024	0.000041	0.000023
19–20	0.000008	0.000014	0.000009	0.000009	0.000015	0.000010	0.000026	0.000045	0.000025
20–21	0.000009	0.000015	0.000009	0.000009	0.000016	0.000010	0.000028	0.000049	0.000026
21–22	0.000009	0.000015	0.000009	0.000010	0.000016	0.000010	0.000030	0.000053	0.000028
22–23	0.000009	0.000016	0.000009	0.000010	0.000017	0.000010	0.000031	0.000056	0.000029
23–24	0.000009	0.000016	0.000009	0.000010	0.000017	0.000010	0.000032	0.000057	0.000030
24–25	0.000009	0.000016	0.000009	0.000010	0.000016	0.000010	0.000032	0.000057	0.000031
25–26	0.000009	0.000015	0.000009	0.000010	0.000016	0.000010	0.000032	0.000056	0.000032
26–27	0.000009	0.000015	0.000009	0.000009	0.000016	0.000010	0.000032	0.000056	0.000033
27–28	0.000009	0.000015	0.000010	0.000009	0.000016	0.000010	0.000032	0.000056	0.000033
28–29	0.000009	0.000015	0.000010	0.000009	0.000016	0.000010	0.000032	0.000056	0.000035
29–30	0.000009	0.000015	0.000010	0.000010	0.000016	0.000011	0.000033	0.000057	0.000036
30–31	0.000009	0.000015	0.000010	0.000010	0.000016	0.000011	0.000034	0.000057	0.000037
31–32	0.000009	0.000015	0.000011	0.000010	0.000016	0.000011	0.000034	0.000058	0.000039
32–33	0.000010	0.000016	0.000011	0.000010	0.000016	0.000012	0.000035	0.000059	0.000040
33–34	0.000010	0.000016	0.000011	0.000010	0.000017	0.000012	0.000036	0.000060	0.000042
34–35	0.000010	0.000016	0.000012	0.000011	0.000017	0.000012	0.000037	0.000061	0.000043
35–36	0.000010	0.000016	0.000012	0.000011	0.000017	0.000013	0.000037	0.000062	0.000044
36–37	0.000010	0.000017	0.000012	0.000011	0.000018	0.000013	0.000038	0.000063	0.000046
37–38	0.000011	0.000017	0.000013	0.000011	0.000018	0.000013	0.000040	0.000065	0.000047
38–39	0.000011	0.000018	0.000013	0.000012	0.000019	0.000014	0.000041	0.000068	0.000050
39–40	0.000012	0.000019	0.000014	0.000012	0.000020	0.000014	0.000043	0.000071	0.000052
40–41	0.000012	0.000019	0.000015	0.000013	0.000020	0.000015	0.000046	0.000075	0.000055
41–42	0.000013	0.000020	0.000015	0.000013	0.000021	0.000016	0.000048	0.000078	0.000058
42–43	0.000013	0.000021	0.000016	0.000014	0.000022	0.000017	0.000050	0.000082	0.000061
43–44	0.000014	0.000022	0.000017	0.000015	0.000023	0.000017	0.000053	0.000087	0.000064
44–45	0.000015	0.000023	0.000017	0.000015	0.000025	0.000018	0.000057	0.000093	0.000068
45–46	0.000015	0.000025	0.000018	0.000016	0.000026	0.000019	0.000060	0.000100	0.000072
46–47	0.000016	0.000026	0.000019	0.000017	0.000027	0.000020	0.000064	0.000107	0.000076
47–48	0.000017	0.000028	0.000020	0.000018	0.000029	0.000021	0.000068	0.000114	0.000080
48–49	0.000018	0.000029	0.000021	0.000019	0.000030	0.000022	0.000072	0.000121	0.000085
49–50	0.000019	0.000030	0.000022	0.000020	0.000031	0.000023	0.000076	0.000128	0.000090
50–51	0.000020	0.000032	0.000024	0.000020	0.000033	0.000025	0.000080	0.000135	0.000095
51–52	0.000021	0.000033	0.000025	0.000021	0.000034	0.000026	0.000085	0.000143	0.000100
52–53	0.000022	0.000035	0.000026	0.000023	0.000036	0.000027	0.000090	0.000152	0.000106
53–54	0.000023	0.000037	0.000028	0.000024	0.000038	0.000029	0.000097	0.000162	0.000113
54–55	0.000025	0.000040	0.000030	0.000026	0.000041	0.000032	0.000104	0.000175	0.000122
55–56	0.000027	0.000043	0.000033	0.000028	0.000045	0.000034	0.000112	0.000189	0.000131
56–57	0.000029	0.000047	0.000035	0.000030	0.000048	0.000037	0.000121	0.000205	0.000142
57–58	0.000031	0.000050	0.000038	0.000033	0.000052	0.000040	0.000130	0.000221	0.000152
58–59	0.000034	0.000054	0.000041	0.000035	0.000056	0.000043	0.000138	0.000235	0.000162
59–60	0.000036	0.000058	0.000044	0.000038	0.000060	0.000046	0.000145	0.000247	0.000171
60–61	0.000038	0.000061	0.000047	0.000040	0.000064	0.000049	0.000152	0.000258	0.000179
61–62	0.000041	0.000066	0.000050	0.000043	0.000069	0.000053	0.000159	0.000270	0.000189
62–63	0.000043	0.000070	0.000053	0.000046	0.000073	0.000056	0.000168	0.000284	0.000199
63–64	0.000046	0.000074	0.000056	0.000049	0.000078	0.000060	0.000177	0.000300	0.000210
64–65	0.000049	0.000079	0.000059	0.000051	0.000083	0.000063	0.000187	0.000319	0.000222
65–66	0.000051	0.000083	0.000062	0.000054	0.000087	0.000066	0.000197	0.000336	0.000233
66–67	0.000053	0.000087	0.000065	0.000056	0.000091	0.000069	0.000206	0.000353	0.000244
67–68	0.000056	0.000091	0.000068	0.000059	0.000096	0.000072	0.000216	0.000372	0.000255
68–69	0.000059	0.000096	0.000071	0.000062	0.000102	0.000076	0.000227	0.000393	0.000267

**Table 10. Standard errors of the probability of dying: United States, 1999–2001—Con.**

Age	Total			White			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
69–70 . . . . .	0.000062	0.000102	0.000075	0.000066	0.000108	0.000080	0.000238	0.000416	0.000280
70–71 . . . . .	0.000065	0.000108	0.000079	0.000069	0.000114	0.000084	0.000250	0.000440	0.000294
71–72 . . . . .	0.000069	0.000114	0.000084	0.000073	0.000121	0.000089	0.000263	0.000466	0.000309
72–73 . . . . .	0.000073	0.000122	0.000089	0.000078	0.000128	0.000095	0.000278	0.000494	0.000326
73–74 . . . . .	0.000078	0.000129	0.000094	0.000083	0.000137	0.000101	0.000294	0.000525	0.000344
74–75 . . . . .	0.000083	0.000138	0.000101	0.000088	0.000146	0.000107	0.000312	0.000559	0.000365
75–76 . . . . .	0.000088	0.000148	0.000107	0.000094	0.000157	0.000115	0.000330	0.000595	0.000387
76–77 . . . . .	0.000094	0.000158	0.000115	0.000100	0.000168	0.000123	0.000351	0.000636	0.000411
77–78 . . . . .	0.000101	0.000170	0.000123	0.000107	0.000180	0.000131	0.000374	0.000680	0.000437
78–79 . . . . .	0.000108	0.000182	0.000131	0.000115	0.000194	0.000141	0.000398	0.000729	0.000465
79–80 . . . . .	0.000116	0.000197	0.000141	0.000124	0.000209	0.000151	0.000425	0.000784	0.000496
80–81 . . . . .	0.000124	0.000212	0.000152	0.000133	0.000226	0.000162	0.000455	0.000844	0.000530
81–82 . . . . .	0.000134	0.000230	0.000163	0.000143	0.000245	0.000175	0.000488	0.000912	0.000568
82–83 . . . . .	0.000145	0.000250	0.000176	0.000155	0.000266	0.000189	0.000525	0.000989	0.000609
83–84 . . . . .	0.000157	0.000273	0.000191	0.000168	0.000290	0.000205	0.000567	0.001075	0.000656
84–85 . . . . .	0.000171	0.000299	0.000207	0.000183	0.000318	0.000223	0.000613	0.001173	0.000707
85–86 . . . . .	0.000187	0.000328	0.000226	0.000200	0.000350	0.000243	0.000665	0.001285	0.000765
86–87 . . . . .	0.000204	0.000363	0.000247	0.000219	0.000387	0.000266	0.000723	0.001413	0.000830
87–88 . . . . .	0.000225	0.000402	0.000271	0.000241	0.000430	0.000292	0.000790	0.001560	0.000904
88–89 . . . . .	0.000248	0.000449	0.000298	0.000267	0.000480	0.000322	0.000866	0.001730	0.000988
89–90 . . . . .	0.000276	0.000504	0.000330	0.000296	0.000539	0.000356	0.000953	0.001927	0.001084
90–91 . . . . .	0.000308	0.000569	0.000368	0.000331	0.000610	0.000397	0.001054	0.002159	0.001195
91–92 . . . . .	0.000345	0.000647	0.000411	0.000372	0.000695	0.000445	0.001171	0.002431	0.001323
92–93 . . . . .	0.000390	0.000741	0.000463	0.000421	0.000797	0.000502	0.001307	0.002754	0.001471
93–94 . . . . .	0.000444	0.000856	0.000525	0.000480	0.000923	0.000570	0.001467	0.003140	0.001646
94–95 . . . . .	0.000510	0.000998	0.000600	0.000552	0.001078	0.000652	0.001657	0.003603	0.001851
95–96 . . . . .	0.000590	0.001174	0.000692	0.000640	0.001272	0.000753	0.001882	0.004163	0.002095
96–97 . . . . .	0.000688	0.001396	0.000805	0.000748	0.001517	0.000878	0.002152	0.004847	0.002387
97–98 . . . . .	0.000812	0.001679	0.000945	0.000884	0.001830	0.001034	0.002478	0.005689	0.002739
98–99 . . . . .	0.000967	0.002043	0.001122	0.001057	0.002236	0.001231	0.002875	0.006733	0.003168
99–100 . . . . .	0.001166	0.002519	0.001349	0.001279	0.002769	0.001484	0.003362	0.008040	0.003694
100–101 . . . . .	0.001423	0.003149	0.001642	0.001567	0.003479	0.001813	0.003966	0.009691	0.004345
101–102 . . . . .	0.001761	0.003996	0.002026	0.001947	0.004440	0.002247	0.004721	0.011800	0.005160
102–103 . . . . .	0.002211	0.005153	0.002539	0.002457	0.005762	0.002830	0.005673	0.014520	0.006190
103–104 . . . . .	0.002820	0.006759	0.003235	0.003150	0.007612	0.003624	0.006887	0.018068	0.007506
104–105 . . . . .	0.003657	0.009028	0.004194	0.004109	0.010249	0.004728	0.008453	0.022748	0.009207
105–106 . . . . .	0.004827	0.012295	0.005541	0.005461	0.014081	0.006290	0.010493	0.028997	0.011432
106–107 . . . . .	0.006494	0.017089	0.007471	0.007403	0.019765	0.008547	0.013184	0.037446	0.014381
107–108 . . . . .	0.008915	0.024273	0.010294	0.010248	0.028378	0.011879	0.016779	0.049023	0.018343
108–109 . . . . .	0.012504	0.035272	0.014514	0.014507	0.041730	0.016912	0.021643	0.065104	0.023740
109–110 . . . . .	0.017940	0.052503	0.020973	0.021027	0.062926	0.024698	0.028315	0.087766	0.031204

Table 11. Standard errors of the average remaining lifetime: United States, 1999–2001

Age	Total			White			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
0–1	0.005	0.007	0.007	0.006	0.008	0.008	0.016	0.023	0.022
1–2	0.005	0.007	0.007	0.005	0.008	0.007	0.015	0.022	0.021
2–3	0.005	0.007	0.007	0.005	0.008	0.007	0.015	0.022	0.021
3–4	0.005	0.007	0.007	0.005	0.007	0.007	0.015	0.022	0.021
4–5	0.005	0.007	0.007	0.005	0.007	0.007	0.015	0.022	0.021
5–6	0.005	0.007	0.007	0.005	0.007	0.007	0.015	0.022	0.021
6–7	0.005	0.007	0.007	0.005	0.007	0.007	0.015	0.022	0.020
7–8	0.005	0.007	0.007	0.005	0.007	0.007	0.015	0.022	0.020
8–9	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.022	0.020
9–10	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
10–11	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
11–12	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
12–13	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
13–14	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
14–15	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
15–16	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
16–17	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
17–18	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
18–19	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
19–20	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
20–21	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
21–22	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
22–23	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
23–24	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
24–25	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
25–26	0.005	0.007	0.006	0.005	0.007	0.007	0.015	0.021	0.020
26–27	0.005	0.006	0.006	0.005	0.007	0.007	0.015	0.020	0.020
27–28	0.005	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
28–29	0.005	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
29–30	0.005	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
30–31	0.005	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
31–32	0.004	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
32–33	0.004	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
33–34	0.004	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.020
34–35	0.004	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.019
35–36	0.004	0.006	0.006	0.005	0.007	0.007	0.014	0.020	0.019
36–37	0.004	0.006	0.006	0.005	0.007	0.006	0.014	0.020	0.019
37–38	0.004	0.006	0.006	0.005	0.007	0.006	0.014	0.020	0.019
38–39	0.004	0.006	0.006	0.005	0.007	0.006	0.014	0.019	0.019
39–40	0.004	0.006	0.006	0.005	0.007	0.006	0.014	0.019	0.019
40–41	0.004	0.006	0.006	0.005	0.007	0.006	0.014	0.019	0.019
41–42	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
42–43	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
43–44	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
44–45	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
45–46	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
46–47	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
47–48	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
48–49	0.004	0.006	0.006	0.005	0.006	0.006	0.014	0.019	0.019
49–50	0.004	0.006	0.006	0.004	0.006	0.006	0.014	0.019	0.019
50–51	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.019	0.018
51–52	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.019	0.018
52–53	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.019	0.018
53–54	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.018	0.018
54–55	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.018	0.018
55–56	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.018	0.018
56–57	0.004	0.006	0.006	0.004	0.006	0.006	0.013	0.018	0.018
57–58	0.004	0.006	0.005	0.004	0.006	0.006	0.013	0.018	0.018
58–59	0.004	0.005	0.005	0.004	0.006	0.006	0.013	0.018	0.017
59–60	0.004	0.005	0.005	0.004	0.006	0.006	0.013	0.018	0.017
60–61	0.004	0.005	0.005	0.004	0.006	0.006	0.013	0.018	0.017
61–62	0.004	0.005	0.005	0.004	0.006	0.006	0.012	0.017	0.017
62–63	0.004	0.005	0.005	0.004	0.006	0.006	0.012	0.017	0.017
63–64	0.004	0.005	0.005	0.004	0.005	0.005	0.012	0.017	0.016
64–65	0.004	0.005	0.005	0.004	0.005	0.005	0.012	0.017	0.016
65–66	0.004	0.005	0.005	0.004	0.005	0.005	0.012	0.017	0.016
66–67	0.004	0.005	0.005	0.004	0.005	0.005	0.012	0.016	0.016
67–68	0.003	0.005	0.005	0.004	0.005	0.005	0.012	0.016	0.016
68–69	0.003	0.005	0.005	0.004	0.005	0.005	0.011	0.016	0.015

**Table 11. Standard errors of the average remaining lifetime: United States, 1999–2001—Con.**

Age	Total			White			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
69–70 . . . . .	0.003	0.005	0.005	0.004	0.005	0.005	0.011	0.016	0.015
70–71 . . . . .	0.003	0.005	0.005	0.004	0.005	0.005	0.011	0.016	0.015
71–72 . . . . .	0.003	0.005	0.004	0.003	0.005	0.005	0.011	0.016	0.015
72–73 . . . . .	0.003	0.004	0.004	0.003	0.005	0.005	0.011	0.016	0.015
73–74 . . . . .	0.003	0.004	0.004	0.003	0.005	0.005	0.011	0.015	0.014
74–75 . . . . .	0.003	0.004	0.004	0.003	0.005	0.005	0.011	0.015	0.014
75–76 . . . . .	0.003	0.004	0.004	0.003	0.005	0.004	0.011	0.015	0.014
76–77 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.015	0.014
77–78 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.015	0.014
78–79 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.015	0.014
79–80 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.015	0.013
80–81 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.015	0.013
81–82 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.016	0.013
82–83 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.016	0.013
83–84 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.016	0.013
84–85 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.010	0.016	0.013
85–86 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.011	0.017	0.013
86–87 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.011	0.017	0.013
87–88 . . . . .	0.003	0.004	0.004	0.003	0.004	0.004	0.011	0.018	0.013
88–89 . . . . .	0.003	0.004	0.004	0.003	0.005	0.004	0.011	0.018	0.014
89–90 . . . . .	0.003	0.004	0.004	0.003	0.005	0.004	0.011	0.019	0.014
90–91 . . . . .	0.003	0.005	0.004	0.003	0.005	0.004	0.012	0.020	0.014
91–92 . . . . .	0.003	0.005	0.004	0.003	0.005	0.004	0.012	0.021	0.014
92–93 . . . . .	0.003	0.005	0.004	0.003	0.005	0.004	0.012	0.022	0.015
93–94 . . . . .	0.003	0.005	0.004	0.003	0.006	0.004	0.013	0.023	0.015
94–95 . . . . .	0.003	0.006	0.004	0.004	0.006	0.005	0.014	0.025	0.016
95–96 . . . . .	0.004	0.006	0.004	0.004	0.007	0.005	0.014	0.027	0.017
96–97 . . . . .	0.004	0.007	0.005	0.004	0.007	0.005	0.015	0.029	0.018
97–98 . . . . .	0.004	0.008	0.005	0.005	0.008	0.005	0.017	0.032	0.019
98–99 . . . . .	0.005	0.009	0.006	0.005	0.009	0.006	0.018	0.036	0.020
99–100 . . . . .	0.005	0.010	0.006	0.006	0.011	0.007	0.020	0.040	0.022
100–101 . . . . .	0.006	0.011	0.007	0.006	0.012	0.007	0.022	0.045	0.024
101–102 . . . . .	0.007	0.014	0.008	0.007	0.015	0.008	0.024	0.052	0.026
102–103 . . . . .	0.008	0.016	0.009	0.008	0.018	0.010	0.027	0.060	0.029
103–104 . . . . .	0.009	0.020	0.011	0.010	0.022	0.012	0.031	0.070	0.033
104–105 . . . . .	0.011	0.025	0.013	0.012	0.028	0.014	0.035	0.084	0.038
105–106 . . . . .	0.014	0.032	0.016	0.015	0.036	0.017	0.041	0.101	0.044
106–107 . . . . .	0.017	0.042	0.020	0.019	0.049	0.022	0.049	0.124	0.052
107–108 . . . . .	0.023	0.058	0.025	0.026	0.071	0.029	0.058	0.156	0.062
108–109 . . . . .	0.030	0.085	0.034	0.035	0.113	0.039	0.072	0.200	0.076
109–110 . . . . .	0.042	0.137	0.047	0.051	0.113	0.057	0.089	0.267	0.094

**Table 12. Life expectancy by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Average number of years of life remaining (e <sub>x</sub> )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>All races</b>											
0	76.83	75.37	73.88	70.75	69.89	68.07	63.62	59.20	56.40	51.49	49.24
1	76.37	75.08	73.82	71.19	70.75	69.16	65.76	61.94	59.94	57.11	55.20
5	72.47	71.22	70.00	67.43	67.04	65.54	62.49	59.29	57.99	56.21	54.98
10	67.52	66.29	65.10	62.57	62.19	60.74	57.82	54.84	53.79	52.15	51.14
15	62.59	61.38	60.19	57.69	57.33	55.91	53.10	50.25	49.37	47.73	46.81
20	57.79	56.63	55.46	53.00	52.58	51.20	48.54	45.94	45.30	43.53	42.79
25	53.05	51.93	50.81	48.37	47.89	46.56	44.09	41.85	41.47	39.60	39.12
30	48.28	47.23	46.12	43.71	43.18	41.91	39.67	37.75	37.68	35.70	35.51
35	43.54	42.58	41.43	39.07	38.51	37.31	35.30	33.68	33.89	31.90	31.92
40	38.87	37.98	36.79	34.52	33.92	32.81	31.03	29.67	30.08	28.20	28.34
45	34.31	33.44	32.27	30.12	29.50	28.49	26.90	25.79	26.25	24.54	24.77
50	29.88	29.03	27.94	25.93	25.29	24.40	22.98	22.06	22.50	20.98	21.26
55	25.59	24.83	23.85	21.99	21.37	20.57	19.31	18.53	18.90	17.55	17.88
60	21.54	20.90	20.02	18.34	17.71	17.04	15.91	15.24	15.54	14.42	14.76
65	17.77	17.28	16.51	15.00	14.39	13.83	12.80	12.23	12.47	11.60	11.86
70	14.27	13.96	13.32	12.00	11.38	10.92	10.00	9.58	9.74	9.11	9.30
75	11.12	11.00	10.48	9.32	8.71	8.40	7.62	7.32	7.49	6.99	7.08
80	8.42	8.40	7.98	7.10	6.39	6.34	5.73	5.50	5.63	5.25	5.30
85	6.22	6.23	5.96	5.28	4.58	4.69	4.31	4.19	4.21	4.00	3.96
90	4.49	4.50	4.43	3.94	3.22	3.44	3.30	3.15	3.22	3.03	2.95
95	3.19	3.29	3.34	3.06	2.43	2.54	2.61	2.26	2.32	2.35	2.18
100	2.27	2.46	2.73	2.62	1.91	1.92	2.13	1.51	1.53	1.85	1.58
<b>Male, all races</b>											
0	74.10	71.83	70.11	67.04	66.80	65.47	61.60	57.71	55.50	49.86	47.88
1	73.66	71.58	70.10	67.58	67.80	66.73	64.00	60.75	59.47	55.95	54.35
5	69.77	67.73	66.29	63.82	64.10	63.12	60.76	58.14	57.60	55.11	54.22
10	64.83	62.81	61.41	58.98	59.27	58.35	56.12	53.75	53.44	51.07	50.39
15	59.90	57.91	56.52	54.12	54.43	53.56	51.43	49.18	49.05	46.66	46.06
20	55.17	53.25	51.88	49.54	49.77	48.92	46.91	44.88	44.99	42.48	42.03
25	50.54	48.67	47.37	45.07	45.19	44.36	42.51	40.79	41.11	38.59	38.38
30	45.85	44.10	42.81	40.51	40.56	39.78	38.13	36.71	37.26	34.70	34.76
35	41.18	39.57	38.20	35.95	35.94	35.23	33.79	32.65	33.43	30.94	31.19
40	36.58	35.09	33.64	31.48	31.42	30.79	29.57	28.68	29.63	27.32	27.65
45	32.10	30.66	29.22	27.18	27.09	26.55	25.52	24.87	25.84	23.77	24.14
50	27.79	26.37	25.00	23.12	23.02	22.59	21.72	21.25	22.11	20.32	20.70
55	23.62	22.30	21.08	19.36	19.32	18.96	18.20	17.79	18.53	16.98	17.38
60	19.71	18.53	17.46	15.99	15.94	15.68	14.99	14.62	15.22	13.95	14.33
65	16.11	15.12	14.21	12.99	12.95	12.74	12.07	11.72	12.20	11.24	11.50
70	12.80	12.05	11.35	10.39	10.33	10.11	9.46	9.18	9.52	8.83	9.02
75	9.89	9.39	8.90	8.13	7.99	7.83	7.22	7.02	7.31	6.75	6.84
80	7.44	7.12	6.80	6.27	5.95	5.94	5.44	5.27	5.49	5.10	5.11
85	5.47	5.31	5.13	4.73	4.39	4.41	4.11	4.02	4.10	3.90	3.82
90	3.95	3.89	3.89	3.60	3.18	3.30	3.17	3.06	3.21	3.01	2.86
95	2.82	2.92	2.98	2.82	2.43	2.49	2.52	2.21	2.38	2.36	2.13
100	2.03	2.25	2.49	2.43	1.91	1.92	2.05	1.50	1.58	1.81	1.55
<b>Female, all races</b>											
0	79.45	78.81	77.62	74.64	73.24	70.96	65.89	60.90	57.40	53.24	50.70
1	78.95	78.47	77.50	74.97	73.93	71.84	67.73	65.37	60.45	58.37	56.10
5	75.04	74.60	73.67	71.19	70.21	68.21	64.43	60.66	58.41	57.39	55.80
10	70.09	69.67	68.75	66.31	65.35	63.38	59.73	56.16	54.16	53.31	51.94
15	65.15	64.73	63.83	61.41	60.45	58.52	54.97	51.54	49.71	48.87	47.60
20	60.27	59.87	58.98	56.59	55.60	53.73	50.37	47.21	45.63	44.66	43.60
25	55.41	55.03	54.16	51.80	50.79	48.99	45.87	43.11	41.86	40.69	39.92
30	50.55	50.19	49.33	47.01	46.00	44.28	41.41	39.02	38.15	36.79	36.30
35	45.73	45.40	44.53	42.28	41.27	39.63	37.01	34.92	34.40	32.95	32.71
40	40.98	40.65	39.80	37.64	36.61	35.06	32.68	30.86	30.58	29.15	29.08
45	36.31	35.97	35.17	33.13	32.09	30.64	28.46	26.89	26.71	25.36	25.44
50	31.74	31.42	30.69	28.77	27.71	26.40	24.40	23.05	22.92	21.67	21.84
55	27.31	27.05	26.39	24.59	23.53	22.33	20.54	19.38	19.28	18.13	18.39

**Table 12. Life expectancy by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001—Con.**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Average number of years of life remaining (e <sub>x</sub> )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>Female, all races—Con.</b>											
60	23.09	22.90	22.29	20.60	19.52	18.50	16.92	15.94	15.87	14.90	15.21
65	19.12	19.02	18.44	16.83	15.80	14.95	13.57	12.78	12.73	11.96	12.22
70	15.40	15.38	14.84	13.35	12.37	11.71	10.56	9.99	9.96	9.38	9.59
75	11.99	12.08	11.58	10.26	9.33	8.94	8.01	7.61	7.65	7.20	7.34
80	9.05	9.13	8.69	7.68	6.72	6.67	5.99	5.70	5.75	5.37	5.51
85	6.62	6.66	6.38	5.63	4.71	4.90	4.47	4.32	4.30	4.08	4.12
90	4.71	4.73	4.66	4.14	3.25	3.54	3.39	3.24	3.23	3.05	3.04
95	3.29	3.40	3.48	3.18	2.43	2.57	2.67	2.30	2.27	2.34	2.24
100	2.29	2.52	2.81	2.69	1.91	1.93	2.17	1.52	1.48	1.91	1.61
<b>White, both sexes</b>											
0	77.41	76.13	74.53	71.62	70.73	69.02	64.92	60.86	57.42	51.90	49.64
1	76.85	75.72	74.35	71.91	71.38	69.95	66.84	63.46	60.87	57.46	55.47
5	72.94	71.84	70.52	68.12	67.64	66.29	63.52	60.75	58.86	56.51	55.18
10	67.99	66.92	65.62	63.26	62.79	61.48	58.83	56.29	54.65	52.43	51.34
15	63.05	61.99	60.71	58.37	57.92	56.65	54.09	51.69	50.21	48.01	47.01
20	58.25	57.23	55.98	53.66	53.16	51.91	49.47	47.28	46.04	43.77	43.17
25	53.48	52.50	51.30	49.00	48.44	47.22	44.92	43.02	42.07	39.79	39.26
30	48.70	47.76	46.59	44.28	43.69	42.52	40.40	38.76	38.17	35.86	35.51
35	43.93	43.06	41.86	39.58	38.97	37.86	35.93	34.50	34.27	32.03	32.01
40	39.23	38.41	37.17	34.95	34.33	33.29	31.54	30.33	30.38	28.29	28.28
45	34.63	33.81	32.60	30.48	29.84	28.88	27.29	26.29	26.45	24.60	24.82
50	30.15	29.34	28.21	26.21	25.57	24.70	23.26	22.42	22.64	21.01	21.18
55	25.80	25.08	24.05	22.19	21.58	20.77	19.47	18.75	18.97	17.57	17.91
60	21.70	21.08	20.16	18.48	17.84	17.15	15.98	15.37	15.57	14.43	14.73
65	17.88	17.40	16.59	15.08	14.44	13.86	12.80	12.28	12.47	11.60	11.87
70	14.34	14.02	13.35	12.01	11.37	10.89	9.96	9.58	9.72	9.10	9.31
75	11.15	11.03	10.47	9.27	8.65	8.34	7.55	7.30	7.47	6.98	7.08
80	8.42	8.39	7.95	7.01	6.33	6.27	5.64	5.45	5.59	5.22	5.30
85	6.19	6.20	5.90	5.19	4.53	4.62	4.20	4.12	4.15	3.97	3.95
90	4.44	4.46	4.36	3.84	3.20	3.41	3.16	3.10	3.17	3.00	2.93
95	3.14	3.25	3.25	2.92	2.43	2.53	2.45	2.22	2.28	2.29	2.16
100	2.22	2.43	2.62	2.41	1.91	1.92	1.95	1.48	1.50	1.71	1.56
<b>White male</b>											
0	74.74	72.72	70.82	67.94	67.55	66.31	62.81	59.12	56.34	50.23	48.23
1	74.21	72.35	70.70	68.33	68.34	67.41	64.98	62.04	60.24	56.26	54.61
5	70.31	68.48	66.87	64.55	64.61	63.77	61.68	59.38	58.31	55.37	54.43
10	65.36	63.55	61.98	59.69	59.78	58.98	57.03	54.96	54.15	51.32	50.59
15	60.43	58.65	57.09	54.83	54.93	54.18	52.33	50.39	49.74	46.91	46.25
20	55.69	53.96	52.45	50.22	50.25	49.52	47.76	46.02	45.60	42.71	42.19
25	51.02	49.33	47.92	45.70	45.65	44.93	43.28	41.78	41.60	38.79	38.52
30	46.30	44.71	43.31	41.07	40.97	40.29	38.80	37.54	37.65	34.87	34.88
35	41.60	40.12	38.66	36.43	36.31	35.68	34.36	33.33	33.74	31.08	31.29
40	36.98	35.57	34.04	31.87	31.73	31.17	30.03	29.22	29.86	27.43	27.74
45	32.46	31.07	29.55	27.48	27.34	26.87	25.87	25.28	26.00	23.86	24.21
50	28.09	26.71	25.26	23.34	23.22	22.83	21.96	21.51	22.22	20.39	20.76
55	23.86	22.56	21.25	19.51	19.45	19.11	18.34	17.97	18.59	17.03	17.42
60	19.88	18.71	17.56	16.07	16.01	15.76	15.05	14.72	15.25	13.98	14.35
65	16.22	15.24	14.26	13.02	12.97	12.75	12.07	11.77	12.21	11.25	11.51
70	12.87	12.11	11.35	10.38	10.29	10.07	9.42	9.20	9.51	8.83	9.03
75	9.92	9.40	8.87	8.06	7.92	7.77	7.17	7.02	7.30	6.75	6.84
80	7.43	7.11	6.76	6.18	5.89	5.88	5.38	5.26	5.47	5.09	5.10
85	5.43	5.28	5.09	4.63	4.34	4.35	4.02	3.99	4.06	3.88	3.81
90	3.90	3.85	3.83	3.49	3.16	3.27	3.06	3.03	3.18	2.99	2.85
95	2.77	2.88	2.91	2.67	2.43	2.48	2.40	2.19	2.36	2.31	2.12
100	1.98	2.21	2.41	2.20	1.91	1.92	1.96	1.49	1.58	1.68	1.55

**Table 12. Life expectancy by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001—Con.**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Average number of years of life remaining (e <sub>x</sub> )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>White female</b>											
0	79.97	79.45	78.22	75.49	74.19	72.03	67.29	62.67	58.53	53.62	51.08
1	79.38	78.99	77.98	75.66	74.68	72.77	68.93	64.93	61.51	58.69	56.39
5	75.46	75.10	74.13	71.86	70.92	69.09	65.57	62.17	59.43	57.67	56.03
10	70.51	70.16	69.21	66.97	66.05	64.26	60.85	57.65	55.17	53.57	52.15
15	65.56	65.23	64.29	62.07	61.15	59.39	56.07	53.00	50.67	49.12	47.79
20	60.69	60.36	59.44	57.24	56.29	54.56	51.38	48.52	46.46	44.88	43.77
25	55.81	55.51	54.60	52.42	51.45	49.77	46.78	44.25	42.55	40.88	40.05
30	50.94	50.65	49.76	47.60	46.63	45.00	42.21	39.99	38.72	36.96	36.42
35	46.10	45.82	44.93	42.82	41.84	40.28	37.70	35.73	34.86	33.09	32.82
40	41.31	41.03	40.16	38.12	37.13	35.64	33.25	31.52	30.94	29.26	29.17
45	36.61	36.30	35.49	33.54	32.53	31.12	28.90	27.39	26.98	25.45	25.51
50	31.99	31.71	30.96	29.11	28.08	26.76	24.72	23.41	23.12	21.74	21.89
55	27.52	27.29	26.61	24.85	23.81	22.58	20.73	19.60	19.40	18.18	18.43
60	23.25	23.09	22.45	20.79	19.69	18.64	17.00	16.05	15.93	14.92	15.23
65	19.23	19.14	18.55	16.93	15.88	15.00	13.56	12.81	12.75	11.97	12.23
70	15.47	15.46	14.89	13.37	12.38	11.68	10.50	9.98	9.94	9.38	9.59
75	12.02	12.11	11.58	10.21	9.28	8.87	7.92	7.56	7.62	7.20	7.33
80	9.04	9.12	8.65	7.59	6.67	6.59	5.88	5.63	5.70	5.35	5.50
85	6.59	6.62	6.32	5.54	4.66	4.83	4.34	4.24	4.24	4.06	4.10
90	4.67	4.69	4.59	4.05	3.23	3.51	3.24	3.17	3.16	3.00	3.02
95	3.24	3.36	3.39	3.04	2.43	2.56	2.47	2.24	2.20	2.27	2.21
100	2.24	2.49	2.70	2.49	1.91	1.92	1.95	1.48	1.42	1.74	1.58
<b>Black, both sexes<sup>1</sup></b>											
0	71.74	69.16	68.52	64.11	63.91	60.73	53.85	48.53	47.03	35.87	33.80
1	71.78	69.43	68.99	65.27	65.75	62.65	57.15	51.71	51.01	43.84	43.00
5	67.92	65.64	65.25	61.62	62.21	59.25	54.13	49.25	49.44	45.34	45.55
10	62.99	60.75	60.38	56.79	57.41	54.50	49.50	44.80	45.26	41.74	42.46
15	58.07	55.86	55.49	51.94	52.57	49.73	44.89	40.37	41.02	38.02	39.04
20	53.32	51.19	50.75	47.34	47.88	45.19	40.73	36.62	37.72	34.86	36.03
25	48.71	46.67	46.18	43.00	43.35	40.85	36.91	33.32	34.91	31.72	33.04
30	44.10	42.22	41.69	38.70	38.89	36.59	33.17	30.07	31.98	28.43	29.96
35	39.53	37.87	37.28	34.48	34.56	32.44	29.53	26.94	29.07	25.39	26.82
40	35.06	33.65	32.98	30.46	30.39	28.48	26.06	23.82	26.07	22.41	23.73
45	30.79	29.55	28.87	26.65	26.46	24.75	22.82	20.97	23.17	19.58	20.67
50	26.75	25.62	25.03	23.11	22.74	21.38	19.94	18.22	20.17	16.84	17.95
55	22.93	21.95	21.50	19.83	19.45	18.41	17.43	15.80	17.33	14.33	15.23
60	19.40	18.59	18.29	16.83	16.53	15.87	15.18	13.62	14.72	12.16	13.06
65	16.14	15.56	15.37	14.16	13.96	13.59	13.02	11.49	12.22	10.22	10.87
70	13.18	12.87	12.67	11.77	11.63	11.48	10.93	9.54	9.90	8.59	8.96
75	10.54	10.48	10.32	9.89	9.52	9.48	8.97	7.84	8.00	7.08	7.24
80	8.29	8.30	8.17	8.20	7.28	7.62	7.31	6.19	6.22	5.80	5.79
85	6.41	6.51	6.54	6.54	5.27	5.79	5.91	4.92	4.88	4.80	4.56
90	4.90	4.94	5.13	5.09	3.48	3.97	4.64	3.83	3.84	4.26	3.60
95	3.71	3.82	4.08	4.28	2.43	2.70	3.51	2.83	2.90	3.31	2.82
100	2.81	2.91	3.58	3.93	1.91	1.94	2.57	1.87	1.94	2.27	2.18
<b>Black male<sup>1</sup></b>											
0	68.08	64.47	64.10	60.00	61.48	58.91	52.26	47.55	47.14	34.05	32.54
1	68.16	64.76	64.60	61.24	63.50	61.06	55.93	51.08	51.63	42.53	42.46
5	64.31	60.98	60.86	57.60	59.98	57.69	52.95	48.69	50.18	44.25	45.06
10	59.39	56.09	56.01	52.79	55.19	52.96	48.34	44.27	45.99	40.65	41.90
15	54.48	51.22	51.14	47.96	50.39	48.23	43.74	39.83	41.75	36.77	38.26
20	49.83	46.71	46.48	43.49	45.78	43.73	39.52	35.95	38.36	33.46	35.11
25	45.41	42.40	42.09	39.45	41.38	39.49	35.72	32.67	35.54	30.44	32.21
30	40.94	38.14	37.81	35.40	37.05	35.31	32.05	29.45	32.51	27.33	29.25
35	36.47	34.02	33.60	31.42	32.81	31.21	28.48	26.39	29.54	24.42	26.16
40	32.10	30.05	29.51	27.61	28.72	27.29	25.06	23.36	26.53	21.57	23.12
45	27.92	26.18	25.61	24.03	24.89	23.59	21.88	20.59	23.55	18.85	20.09
50	24.05	22.50	22.03	20.69	21.28	20.25	19.06	17.92	20.47	16.21	17.34
55	20.43	19.08	18.79	17.66	18.11	17.36	16.60	15.46	17.50	13.82	14.69

See footnote at end of table.

**Table 12. Life expectancy by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001—Con.**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Average number of years of life remaining ( $e_x$ )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>Black male<sup>1</sup>—Con.</b>											
60 .....	17.14	16.01	15.89	14.93	15.29	14.91	14.37	13.15	14.74	11.67	12.62
65 .....	14.12	13.27	13.29	12.53	12.84	12.75	12.21	10.87	12.07	9.74	10.38
70 .....	11.40	10.88	10.94	10.40	10.81	10.74	10.11	8.78	9.58	8.00	8.33
75 .....	9.07	8.84	8.90	8.76	8.93	8.83	8.17	6.99	7.61	6.58	6.60
80 .....	7.12	7.01	7.03	7.35	6.87	7.07	6.58	5.42	5.83	5.53	5.12
85 .....	5.52	5.58	5.61	5.92	5.08	5.38	5.34	4.30	4.53	4.48	4.04
90 .....	4.23	4.24	4.47	4.68	3.42	3.78	4.23	3.42	3.60	4.01	3.21
95 .....	3.24	3.37	3.62	3.92	2.43	2.64	3.20	2.54	2.61	3.15	2.50
100 .....	2.48	2.63	3.24	3.61	1.91	1.93	2.29	1.68	1.64	2.14	1.89
<b>Black female<sup>1</sup></b>											
0 .....	75.12	73.73	72.88	68.32	66.47	62.70	55.56	49.51	46.92	37.67	35.04
1 .....	75.09	73.96	73.31	69.37	68.10	64.37	58.46	52.33	50.39	45.15	43.54
5 .....	71.22	70.16	69.54	65.70	64.54	60.93	55.40	49.81	48.70	46.42	46.04
10 .....	66.28	65.26	64.65	60.85	59.72	56.17	50.75	45.33	44.54	42.84	43.02
15 .....	61.35	60.34	59.74	55.97	54.85	51.36	46.13	40.87	40.36	39.18	39.79
20 .....	56.48	55.49	54.90	51.22	50.07	46.77	42.04	37.22	37.15	36.14	36.89
25 .....	51.67	50.72	50.13	46.57	45.40	42.35	38.20	33.93	34.35	32.97	33.90
30 .....	46.91	46.03	45.43	42.00	40.83	38.02	34.40	30.67	31.48	29.61	30.70
35 .....	42.22	41.45	40.79	37.56	36.41	33.82	30.83	27.47	28.58	26.44	27.52
40 .....	37.65	36.96	36.28	33.32	32.16	29.82	27.19	24.30	25.60	23.34	24.37
45 .....	33.26	32.58	31.94	29.31	28.14	26.07	23.89	21.39	22.61	20.43	21.36
50 .....	29.03	28.38	27.84	25.52	24.31	22.67	20.95	18.60	19.76	17.65	18.67
55 .....	24.98	24.41	24.00	21.97	20.89	19.62	18.38	16.27	17.09	14.98	15.88
60 .....	21.18	20.71	20.42	18.66	17.83	16.95	16.10	14.22	14.69	12.78	13.60
65 .....	17.65	17.37	17.13	15.67	15.12	14.54	13.95	12.24	12.41	10.82	11.38
70 .....	14.41	14.32	14.05	13.02	12.46	12.29	11.82	10.38	10.25	9.22	9.62
75 .....	11.49	11.56	11.37	10.85	10.10	10.15	9.81	8.62	8.37	7.55	7.90
80 .....	8.96	9.05	8.95	8.87	7.66	8.15	8.02	6.90	6.58	6.05	6.48
85 .....	6.86	6.99	7.09	7.00	5.44	6.15	6.41	5.48	5.22	5.09	5.10
90 .....	5.16	5.24	5.47	5.41	3.52	4.13	4.96	4.20	4.07	4.50	4.01
95 .....	3.84	3.97	4.30	4.58	2.43	2.74	3.71	3.09	3.18	3.45	3.15
100 .....	2.84	2.97	3.69	4.20	1.91	1.94	2.70	2.04	2.23	2.39	2.49

<sup>1</sup>For 1939–1941 and 1949–1951, data shown are for the entire population excluding the white population. During these periods, life tables were not constructed for the black population.



**Table 13. Survivorship by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Number of survivors out of 100,000 born alive ( <i>I<sub>x</sub></i> )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>All races</b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	99,305	99,064	98,740	97,998	97,407	97,024	95,290	94,028	92,515	88,538	87,552
5 . . . . .	99,176	98,877	98,495	97,668	96,998	96,482	94,220	91,978	83,389	83,887	81,804
10 . . . . .	99,097	98,766	98,347	97,460	96,765	96,177	93,710	91,106	88,129	82,458	80,052
15 . . . . .	98,998	98,635	98,196	97,261	96,551	95,885	93,235	90,385	87,144	81,506	78,963
20 . . . . .	98,664	98,215	97,741	96,716	96,111	95,366	92,435	89,089	85,441	80,074	77,239
25 . . . . .	98,202	97,671	97,110	96,000	95,517	94,676	91,335	87,269	83,146	78,046	74,768
30 . . . . .	97,750	97,070	96,477	95,307	94,905	93,919	90,078	85,302	80,642	75,779	72,043
35 . . . . .	97,199	96,322	95,808	94,482	94,144	92,976	88,573	83,118	77,961	73,127	69,078
40 . . . . .	96,419	95,373	94,926	93,322	93,064	91,648	86,650	80,557	75,114	70,042	65,890
45 . . . . .	95,268	94,154	93,599	91,587	91,378	89,634	84,069	77,343	72,036	66,561	62,436
50 . . . . .	93,591	92,370	91,526	88,972	88,756	86,591	80,487	73,321	68,429	62,460	58,514
55 . . . . .	91,211	89,658	88,348	85,110	84,711	82,176	75,557	68,182	63,947	57,555	53,852
60 . . . . .	87,595	85,537	83,726	79,529	79,067	75,921	68,924	61,563	58,079	51,138	47,946
65 . . . . .	82,224	79,519	77,107	71,933	71,147	67,555	60,366	53,195	50,560	43,194	40,911
70 . . . . .	74,794	71,357	68,248	61,984	60,857	56,987	49,655	42,768	41,090	33,816	32,390
75 . . . . .	64,561	60,449	56,799	49,705	48,170	43,903	36,735	30,789	29,729	23,552	22,960
80 . . . . .	50,819	47,084	43,180	35,285	33,576	29,313	22,883	18,580	18,298	13,712	13,529
85 . . . . .	34,471	31,770	27,960	20,908	18,542	15,785	11,073	8,542	8,683	6,001	6,053
90 . . . . .	18,472	17,046	14,154	9,297	7,080	6,144	3,796	2,998	2,941	1,868	1,867
95 . . . . .	6,871	6,282	5,043	2,786	1,524	1,511	857	636	646	361	344
100 . . . . .	1,477	1,424	1,150	542	183	199	123	62	67	40	31
<b>Male, all races</b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	99,239	98,961	98,607	97,755	97,087	96,661	94,762	93,440	91,745	87,505	86,426
5 . . . . .	99,095	98,754	98,333	97,395	96,643	96,077	93,624	91,294	88,505	82,718	80,548
10 . . . . .	99,008	98,627	98,160	97,151	96,375	95,726	93,054	90,346	87,184	81,249	78,775
15 . . . . .	98,890	98,464	97,972	96,904	96,107	95,366	92,508	89,561	86,156	80,261	77,681
20 . . . . .	98,426	97,854	97,316	96,126	95,491	94,695	91,617	88,220	84,440	78,792	75,984
25 . . . . .	97,746	97,049	96,361	95,040	94,631	93,791	90,385	86,359	82,252	76,675	73,472
30 . . . . .	97,112	96,166	95,430	94,072	93,826	92,861	89,009	84,346	79,890	74,378	70,747
35 . . . . .	96,382	95,091	94,501	92,997	92,889	91,760	87,371	82,075	77,514	71,614	67,752
40 . . . . .	95,384	93,761	93,345	91,541	91,572	90,207	85,246	79,357	74,432	68,297	64,447
45 . . . . .	93,931	92,139	91,649	89,369	89,492	87,819	82,336	75,882	71,244	64,518	60,849
50 . . . . .	91,800	89,865	89,007	86,070	86,199	84,158	78,254	71,518	67,553	60,118	56,736
55 . . . . .	88,862	86,492	84,936	81,139	81,039	78,781	72,627	65,981	62,965	54,970	51,939
60 . . . . .	84,478	81,378	79,012	73,958	73,887	71,246	65,142	58,909	56,917	48,343	45,895
65 . . . . .	78,083	73,971	70,646	64,318	64,177	61,566	55,776	50,154	49,218	40,264	38,736
70 . . . . .	69,350	64,107	59,681	52,296	52,244	49,950	44,588	39,516	39,668	31,023	30,217
75 . . . . .	57,572	51,385	46,272	38,797	38,950	36,756	31,864	27,718	28,316	21,213	21,076
80 . . . . .	42,683	36,749	31,810	24,921	25,300	25,237	18,995	16,172	17,128	11,942	12,084
85 . . . . .	26,473	21,815	18,020	13,168	12,845	11,750	8,693	7,107	7,920	5,059	5,179
90 . . . . .	12,447	9,878	7,732	5,107	4,609	4,197	2,787	2,283	2,527	1,502	1,508
95 . . . . .	3,847	2,927	2,279	1,326	970	955	586	451	556	289	262
100 . . . . .	643	529	423	222	117	121	78	40	62	33	22
<b>Female, all races</b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	99,375	99,172	98,880	98,254	97,744	97,406	95,848	94,728	93,383	89,623	88,733
5 . . . . .	99,261	99,006	98,666	97,955	97,371	96,908	94,848	92,789	90,380	85,117	83,119
10 . . . . .	99,190	98,911	98,544	97,784	97,173	96,652	94,402	92,008	89,186	83,728	81,390
15 . . . . .	99,111	98,814	98,432	97,636	97,016	96,431	94,000	91,364	88,247	82,813	80,307
20 . . . . .	98,915	98,597	98,184	97,331	96,756	96,066	93,293	90,116	86,556	81,418	78,555
25 . . . . .	98,682	98,325	97,883	96,966	96,418	95,583	92,322	88,328	84,135	79,481	76,119
30 . . . . .	98,418	98,013	97,551	96,544	95,996	94,933	91,182	86,398	81,463	77,247	73,394
35 . . . . .	98,052	97,596	97,140	95,966	95,409	94,206	89,810	84,304	78,713	74,719	70,463
40 . . . . .	97,492	97,033	96,531	95,097	94,560	93,101	88,092	81,927	75,907	71,894	67,407
45 . . . . .	96,645	96,222	95,570	93,793	93,265	91,469	85,856	79,041	72,954	68,755	64,121
50 . . . . .	95,420	94,932	94,060	91,852	91,327	89,075	82,828	75,456	69,452	65,001	60,415
55 . . . . .	93,597	92,881	91,760	89,066	88,451	85,694	78,708	70,832	65,099	60,392	55,908

**Table 13. Survivorship by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001—Con.**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Number of survivors out of 100,000 born alive ( $l_x$ )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>Female, all races—Con.</b>											
60 . . . . .	90,739	89,742	88,414	85,139	84,430	80,890	73,093	64,795	59,438	54,226	50,155
65 . . . . .	86,367	85,075	83,520	79,698	78,462	74,119	65,523	56,924	52,126	46,438	43,246
70 . . . . .	80,158	78,522	76,720	71,955	70,100	64,873	55,449	46,774	42,741	36,916	34,721
75 . . . . .	71,257	69,287	67,186	61,107	58,394	52,111	42,425	34,600	31,344	26,155	24,994
80 . . . . .	58,411	56,986	54,372	46,445	43,063	36,486	27,524	21,578	19,613	15,682	15,129
85 . . . . .	41,798	41,115	37,772	29,538	25,269	20,668	13,972	10,322	9,515	7,051	7,063
90 . . . . .	23,918	23,666	20,578	14,160	10,056	8,548	5,044	3,656	3,314	2,269	2,306
95 . . . . .	9,553	9,346	7,862	4,565	2,193	2,207	1,195	807	728	441	452
100 . . . . .	2,181	2,251	1,927	954	264	298	179	82	72	49	43
<b>White, both sexes</b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	99,429	99,233	98,898	98,224	97,714	97,278	95,685	94,392	92,780	88,709	87,762
5 . . . . .	99,312	99,068	98,675	97,930	97,353	96,790	94,713	92,466	89,771	84,147	82,071
10 . . . . .	99,239	98,966	98,536	97,733	97,131	96,502	94,228	91,627	88,536	82,734	80,371
15 . . . . .	99,146	98,843	98,391	97,546	96,928	96,228	93,792	90,982	87,633	81,816	79,344
20 . . . . .	98,826	98,455	97,939	97,036	96,508	95,763	93,117	89,933	86,159	80,407	77,998
25 . . . . .	98,405	97,972	97,340	96,406	95,965	95,169	92,213	88,454	84,106	78,392	75,202
30 . . . . .	98,000	97,451	96,774	95,824	95,440	94,536	91,185	86,836	81,787	76,167	72,317
35 . . . . .	97,504	96,810	96,192	95,152	94,798	93,750	89,941	85,004	79,277	73,568	69,522
40 . . . . .	96,796	96,000	95,427	94,190	93,870	92,616	88,318	82,803	76,642	70,525	66,082
45 . . . . .	95,755	94,932	94,257	92,681	92,374	90,847	86,069	79,989	73,705	67,090	62,920
50 . . . . .	94,233	93,326	92,384	90,306	89,958	88,110	82,833	76,340	70,250	62,994	58,647
55 . . . . .	92,032	90,833	89,427	86,688	86,173	84,027	78,218	71,551	65,875	58,163	54,450
60 . . . . .	88,614	86,943	85,031	81,323	80,811	78,066	71,785	65,100	60,013	51,822	48,288
65 . . . . .	83,423	81,123	78,585	73,889	73,102	69,850	63,201	56,655	52,411	43,904	41,505
70 . . . . .	76,132	73,106	69,801	63,991	62,834	59,189	52,165	45,841	42,736	34,484	32,902
75 . . . . .	65,946	62,175	58,299	51,586	49,895	45,688	38,610	33,406	31,086	24,151	23,356
80 . . . . .	52,100	48,583	44,409	36,659	34,697	30,438	23,976	20,260	19,149	14,100	13,794
85 . . . . .	35,421	32,850	28,768	21,578	19,017	16,239	11,483	9,325	9,078	6,178	6,192
90 . . . . .	18,943	17,571	14,471	9,433	7,149	6,201	3,819	3,066	2,991	1,918	1,919
95 . . . . .	6,963	6,416	5,067	2,743	1,521	1,500	801	636	643	364	355
100 . . . . .	1,453	1,423	1,105	487	183	196	98	58	62	38	31
<b>White male</b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	99,373	99,138	98,769	97,994	97,408	96,931	95,188	93,768	91,975	87,674	86,655
5 . . . . .	99,243	98,956	98,519	97,671	97,015	96,403	94,150	91,738	88,842	82,972	80,864
10 . . . . .	99,163	98,839	98,357	97,441	96,758	96,069	93,601	90,810	87,530	81,519	79,109
15 . . . . .	99,052	98,686	98,176	97,208	96,503	95,728	93,089	90,074	86,546	80,549	78,037
20 . . . . .	98,615	98,134	97,525	96,480	95,908	95,104	92,293	88,904	84,997	79,116	76,376
25 . . . . .	98,002	97,430	96,616	95,524	95,106	94,294	91,241	87,371	83,061	77,047	73,907
30 . . . . .	97,434	96,662	95,783	94,716	94,401	93,489	90,092	85,707	80,888	74,810	71,219
35 . . . . .	96,772	95,731	94,980	93,843	93,589	92,543	88,713	83,812	78,441	72,108	68,245
40 . . . . .	95,855	94,588	93,984	92,631	92,427	91,173	86,880	81,457	75,733	68,848	64,954
45 . . . . .	94,522	93,167	92,494	90,725	90,533	89,002	84,285	78,345	72,696	65,115	61,369
50 . . . . .	92,573	91,124	90,105	87,690	87,424	85,601	80,521	74,288	69,107	60,741	57,274
55 . . . . .	89,854	88,022	86,303	83,001	82,463	80,496	75,156	68,981	64,574	55,622	52,491
60 . . . . .	85,710	83,182	80,625	75,969	75,485	73,172	67,787	61,933	58,498	48,987	46,452
65 . . . . .	79,515	75,962	72,393	66,343	65,834	63,541	58,305	52,964	50,663	40,862	39,245
70 . . . . .	70,912	66,181	61,384	54,138	53,825	51,735	46,739	41,880	40,873	31,527	30,640
75 . . . . .	59,139	53,308	47,712	40,324	40,207	38,104	33,404	29,471	29,205	21,585	21,387
80 . . . . .	44,043	38,245	32,788	25,885	25,993	24,005	19,860	17,221	17,655	12,160	12,266
85 . . . . .	27,376	22,720	18,538	13,527	13,065	12,015	9,013	7,572	8,154	5,145	5,252
90 . . . . .	12,817	10,214	7,891	5,125	4,600	4,209	2,812	2,356	2,568	1,523	1,523
95 . . . . .	3,892	2,988	2,279	1,274	956	942	552	461	556	289	263
100 . . . . .	624	523	404	189	115	118	65	40	61	31	22

**Table 13. Survivorship by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001—Con.**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Number of survivors out of 100,000 born alive ( <i>I<sub>x</sub></i> )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>White female</b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	99,488	99,333	99,035	98,468	98,036	97,645	96,211	95,037	93,608	89,774	88,939
5 . . . . .	99,385	99,187	98,841	98,203	97,709	97,199	95,309	93,216	90,721	85,349	83,426
10 . . . . .	99,319	99,099	98,725	98,042	97,525	96,960	94,890	92,466	89,564	83,979	81,723
15 . . . . .	99,245	99,007	98,618	97,902	97,375	96,756	94,534	91,894	88,712	83,093	80,680
20 . . . . .	99,049	98,795	98,374	97,618	97,135	96,454	93,984	90,939	87,281	81,750	78,978
25 . . . . .	98,835	98,547	98,093	97,299	96,844	96,072	93,228	89,524	85,163	79,865	76,588
30 . . . . .	98,601	98,283	97,802	96,945	96,499	95,605	92,320	87,972	82,740	77,676	73,887
35 . . . . .	98,282	97,939	97,445	96,474	96,026	94,977	91,211	86,248	80,206	75,200	70,971
40 . . . . .	97,789	97,472	96,913	95,762	95,326	94,080	89,805	84,256	77,624	72,425	67,935
45 . . . . .	97,047	96,768	96,065	94,649	94,228	92,725	87,920	81,780	74,871	69,341	64,677
50 . . . . .	95,958	95,608	94,710	92,924	92,522	90,685	85,267	78,572	71,547	65,629	61,005
55 . . . . .	94,284	93,730	92,594	90,383	89,967	87,699	81,520	74,321	67,323	61,053	56,509
60 . . . . .	91,591	90,789	89,451	86,726	86,339	83,279	76,200	68,462	61,704	54,900	50,752
65 . . . . .	87,391	86,339	84,764	81,579	80,739	76,773	68,701	60,499	54,299	47,086	43,806
70 . . . . .	81,346	79,984	78,139	74,101	72,507	67,545	58,363	49,932	44,638	37,482	35,206
75 . . . . .	72,546	70,834	68,712	63,290	60,461	54,397	44,685	37,024	32,777	26,569	25,362
80 . . . . .	59,681	58,454	55,770	48,182	44,676	38,026	28,882	23,053	20,492	15,929	15,349
85 . . . . .	42,820	42,274	38,774	30,490	26,046	21,348	14,487	10,937	9,909	7,152	7,149
90 . . . . .	24,475	24,270	20,996	14,406	10,219	8,662	5,061	3,719	3,372	2,291	2,322
95 . . . . .	9,673	9,495	7,900	4,526	2,203	2,200	1,109	797	721	434	448
100 . . . . .	2,145	2,239	1,858	872	265	294	139	74	63	44	41
<b>Black, both sexes<sup>1</sup></b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	98,578	98,187	97,885	96,731	95,732	95,407	92,584	92,035	90,379	79,784	76,609
5 . . . . .	98,382	97,884	97,522	96,207	95,051	94,482	90,983	89,303	86,174	70,691	66,222
10 . . . . .	98,271	97,720	97,322	95,928	94,745	94,060	90,339	88,258	84,690	68,437	63,410
15 . . . . .	98,139	97,539	97,134	95,661	94,460	93,646	89,591	87,156	83,180	66,410	61,060
20 . . . . .	97,701	96,925	96,652	94,887	93,880	92,738	87,839	84,386	79,641	63,165	57,931
25 . . . . .	96,944	95,972	95,804	93,513	92,925	91,321	85,210	80,320	74,973	59,608	54,512
30 . . . . .	96,140	94,809	94,680	91,934	91,699	89,584	82,194	75,962	70,492	56,112	51,287
35 . . . . .	95,160	93,260	93,288	89,977	90,046	87,402	78,683	71,141	65,865	52,125	48,007
40 . . . . .	93,801	91,239	91,439	87,304	87,766	84,478	74,466	65,974	61,244	47,866	44,518
45 . . . . .	91,754	88,689	88,834	83,700	84,501	80,507	69,284	59,827	56,442	43,054	40,628
50 . . . . .	88,726	85,285	85,044	78,938	80,172	74,976	62,702	53,141	51,422	37,800	36,103
55 . . . . .	84,588	80,635	79,816	72,826	73,893	67,660	54,846	45,558	45,803	32,233	31,404
60 . . . . .	78,869	74,335	72,913	65,250	65,795	58,593	46,318	37,654	39,418	26,046	25,698
65 . . . . .	71,448	66,154	64,391	56,102	56,038	48,649	37,838	30,015	32,738	19,806	20,474
70 . . . . .	62,126	56,192	54,617	45,785	45,434	38,616	29,654	22,505	25,585	14,021	14,960
75 . . . . .	50,804	44,872	43,274	34,262	34,531	28,968	21,798	15,546	18,011	9,139	9,956
80 . . . . .	37,828	33,149	31,711	23,710	24,815	20,003	14,408	9,589	11,376	5,158	5,750
85 . . . . .	24,589	21,352	19,939	15,044	15,337	12,433	8,326	4,900	5,794	2,414	2,782
90 . . . . .	13,157	11,646	10,713	8,087	7,195	6,394	4,077	2,044	2,317	913	1,054
95 . . . . .	5,349	4,729	4,463	3,252	1,777	2,010	1,557	638	689	324	296
100 . . . . .	1,485	1,376	1,360	1,036	214	301	399	120	129	77	57
<b>Black males<sup>1</sup></b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	98,437	98,023	97,703	96,394	95,301	94,911	91,772	91,268	89,499	78,065	74,674
5 . . . . .	98,219	97,688	97,300	95,826	94,570	93,921	90,082	88,412	85,195	68,589	64,385
10 . . . . .	98,093	97,501	97,061	95,497	94,234	93,453	89,393	87,311	83,768	66,377	61,730
15 . . . . .	97,930	97,268	96,826	95,161	93,874	92,965	88,610	86,152	82,332	64,478	59,667
20 . . . . .	97,274	96,301	96,132	94,053	93,108	91,941	86,968	83,621	79,057	61,426	56,733
25 . . . . .	96,099	94,809	94,827	91,904	91,825	90,285	84,227	79,516	74,540	57,736	53,285
30 . . . . .	94,934	93,070	93,125	89,584	90,270	88,327	80,979	75,083	70,344	54,073	49,867
35 . . . . .	93,631	90,827	91,080	86,885	88,331	85,940	77,221	70,049	65,873	49,865	46,541
40 . . . . .	91,930	87,948	88,490	83,441	85,744	82,832	72,780	64,710	61,353	45,414	42,989
45 . . . . .	89,411	84,467	84,997	78,976	82,075	78,686	67,346	58,432	56,589	40,563	39,230
50 . . . . .	85,596	79,984	80,065	73,282	77,239	72,891	60,495	51,748	51,880	35,427	34,766

See footnotes at end of table.

**Table 13. Survivorship by age, race, and sex: Death registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 1999–2001—Con.**

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929–1931, data are for groups of registration states as follows: 1900–1902 and 1909–1911, 10 states and the District of Columbia; 1919–1921, 34 states and the District of Columbia. Beginning in 1970, data excludes deaths of nonresidents of the United States]

Age, race, and sex	Number of survivors out of 100,000 born alive ( $l_x$ )										
	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
<b>Black males<sup>1</sup>—Con.</b>											
55 . . . . .	80,417	74,095	73,413	66,101	70,351	65,122	52,426	44,436	46,581	29,754	29,987
60 . . . . .	73,369	66,334	64,980	57,457	61,669	55,535	43,833	36,790	40,506	23,750	24,194
65 . . . . .	64,588	56,795	55,061	47,485	51,392	45,198	35,371	29,314	34,042	17,806	19,015
70 . . . . .	53,926	45,690	44,213	36,925	39,914	35,018	27,236	21,741	26,923	12,295	13,829
75 . . . . .	41,441	33,755	32,717	25,921	29,064	25,472	19,456	14,419	18,854	7,494	8,892
80 . . . . .	28,326	22,549	22,017	16,560	19,994	16,904	12,186	8,239	11,615	3,894	4,831
85 . . . . .	16,433	12,709	12,383	9,648	11,620	9,898	6,444	3,660	5,605	1,747	2,030
90 . . . . .	7,579	5,972	5,708	4,696	5,174	4,642	2,836	1,246	2,040	595	634
95 . . . . .	2,549	1,971	2,009	1,721	1,240	1,342	961	307	552	189	137
100 . . . . .	560	466	513	489	149	192	209	41	77	40	18
<b>Black female<sup>1</sup></b>											
0 . . . . .	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1 . . . . .	98,723	98,356	98,073	97,076	96,172	95,913	93,416	92,796	91,251	81,493	78,525
5 . . . . .	98,550	98,087	97,751	96,598	95,543	95,055	91,906	90,185	87,149	72,768	68,056
10 . . . . .	98,455	97,946	97,590	96,369	95,265	94,679	91,308	89,201	85,607	70,508	65,111
15 . . . . .	98,354	97,818	97,450	96,172	95,057	94,343	90,594	88,088	83,954	68,218	62,384
20 . . . . .	98,141	97,566	97,180	95,729	94,660	93,544	88,736	85,078	80,154	64,764	59,053
25 . . . . .	97,784	97,140	96,754	95,035	94,005	92,336	86,198	81,067	75,359	61,430	55,795
30 . . . . .	97,313	96,514	96,150	94,114	93,070	90,799	83,384	76,816	70,633	58,281	52,773
35 . . . . .	96,630	95,599	95,338	92,807	91,670	88,805	80,092	72,192	65,857	54,595	49,567
40 . . . . .	95,585	94,364	94,137	90,817	89,676	86,052	76,084	67,271	61,130	50,568	46,146
45 . . . . .	93,970	92,676	92,322	88,001	86,793	82,257	71,157	61,365	56,230	45,947	42,279
50 . . . . .	91,661	90,277	89,563	84,168	82,979	77,007	64,885	54,920	50,780	40,886	37,681
55 . . . . .	88,478	86,793	85,653	79,177	77,362	70,196	57,314	47,074	44,742	35,415	33,124
60 . . . . .	83,963	81,886	80,293	72,820	69,941	61,758	48,928	38,761	37,954	28,908	27,524
65 . . . . .	77,781	75,031	73,266	64,716	60,825	52,358	40,504	30,852	31,044	22,302	21,995
70 . . . . .	69,634	66,278	64,729	54,873	51,274	42,612	32,354	23,341	24,107	15,871	16,140
75 . . . . .	59,239	55,684	53,831	43,193	40,540	32,981	24,502	16,576	17,216	10,657	11,066
80 . . . . .	46,358	43,622	41,686	31,756	30,315	23,712	17,039	10,822	11,151	6,324	6,708
85 . . . . .	31,987	30,089	28,004	21,358	19,744	15,550	10,622	6,033	5,972	3,029	3,567
90 . . . . .	18,309	17,536	16,260	12,210	9,675	8,590	5,652	2,774	2,579	1,206	1,492
95 . . . . .	7,972	7,687	7,312	5,217	2,438	2,875	2,345	941	818	448	462
100 . . . . .	2,346	2,364	2,398	1,803	293	445	659	193	179	112	97

<sup>1</sup>For 1939–1941 and 1949–1951, data shown are for the entire population excluding the white population. During these periods, life tables were not constructed for the black population.

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