

VITAL STATISTICS

of the

UNITED STATES

1970

VOLUME II—SECTION 5

Life Tables



**U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE**
Public Health Service
Health Resources Administration
National Center for Health Statistics
Rockville, Maryland

VITAL STATISTICS OF THE UNITED STATES, 1970
VOLUME II - SECTION 5

Life Tables

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Health Resources Administration
National Center for Health Statistics

NATIONAL CENTER FOR HEALTH STATISTICS

EDWARD B. PERRIN, Ph.D., *Acting Director*

PHILIP S. LAWRENCE, Sc.D., *Deputy Director*

GAIL F. FISHER, *Assistant Director for Health Statistics Development*

WALT R. SIMMONS, M.A., *Assistant Director for Research and Scientific Development*

JOHN J. HANLON, M.D., *Medical Advisor*

JAMES E. KELLY, D.D.S., *Dental Advisor*

EDWARD M. MINTY, *Executive Officer*

ALICE HAYWOOD, *Information Officer*

DIVISION OF VITAL STATISTICS

ROBERT A. ISRAEL, M.S., *Director*

JOHN E. PATTERSON, *Assistant Director for Demographic Affairs*

ROBERT J. ARMSTRONG, M.S., *Chief, Mortality Statistics Branch*

ROBERT L. HEUSER, M.A., *Chief, Natality Statistics Branch*

LOREN E. CHANCELLOR, *Chief, Registration Methods Branch*

ALICE M. HETZEL, *Chief, Marriage and Divorce Statistics Branch*

ARNE B. NELSON, M.A., *Chief, Vital Records Survey Branch*

MICHAEL J. ZUGZDA, *Chief, Statistical Resources Section*

Guide to tables in Section 5

TABLE: 5	-1	-2	-3	-4	-5
	-7	-10	-11	-12	-14
Years:					
1900-1970-----					5 ¹
1970 only-----	1	2	3		
Specified years and 1970-----				4 ²	
Type of entry:					
Proportion of dying ($_nq_x$)-----	1				
Number surviving (I_x)-----	1	2		4	
Number dying ($_nd_x$)-----	1				
Stationary population ($_nL_x$ and T_x)---	1				
Average remaining lifetime (\bar{e}_x)-----	1		3	4	
Estimated average length of life (\bar{e}_x)-----					5
Characteristics:					
Age by:					
Single years-----		2	3		
5-year intervals-----	1			4	
Sex-color specific-----	1	2	3	4	5 ³
Sex specific-----	1	2	3		5
Color specific-----	1	2	3		5 ³
Total population-----	1	2	3		5

¹Entire United States for 1929-70; death-registration States for 1900-1928.

²Entire United States for specified years from 1929 to 1970; death-registration States for specified years from 1900 to 1921.

³New Jersey did not require the reporting of color or race in 1962 and 1963.

Section 5. Life Tables

	Page
The life table program-----	5-3
Life table values for 1970-----	5-3
Trends and comparisons-----	5-4
Technical appendix-----	5-5
Explanation of the columns of the life tables-----	5-6
Text table	
5-A. Selected life table values, by age, color, and sex: United States, 1970-----	5-4
5-B. Selected life table values, by color and sex: Death-registration areas, 1970, 1969, 1960, 1950, 1900-1902-----	5-4
Table	
5-1. Abridged life tables by color and sex: United State, 1970-----	5-7
5-2. Number of survivors at single years of age, out of 100,000 born alive, by color and sex: United States, 1970-----	5-10
5-3. Expectation of life at single years of age, by color and sex: United States, 1970-----	5-11
5-4. Life table values by color and sex: Death-registration States, 1900- 1902 to 1919-21, and United States, 1929-31 to 1970-----	5-12
5-5. Estimated average length of life in years, by color and sex: Death- registration States, 1900-1928, and United States, 1929-70-----	5-14
	5-1

SECTION 5. LIFE TABLES

The 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 generation or cohort life table and the current life table. The generation life table provides a "longitudinal" perspective in that it follows the mortality experience of a particular cohort, all persons born in the year 1900 for example, from the moment of birth through consecutive ages in successive calendar years. Based on age-specific death rates observed during consecutive calendar years, the generation life table reflects the mortality experience of a cohort from birth until no lives remain in the group.

The better known current life table may, by contrast, be characterized as "cross-sectional." Unlike the generation life table, the current life table does not represent the mortality experience of an actual cohort. Rather, the current life table considers a hypothetical cohort and assumes that it is subject to the age-specific mortality rates observed for an actual population during a particular period. Thus, for example, a current life table for 1970 assumes a hypothetical cohort subject throughout its lifetime to the age-specific mortality rates prevailing for the actual population in 1970. The current life table may thus be characterized as rendering a "snapshot" of current mortality experience. In this section, the term "life table" refers to the current life table only and not to the generation life table.

The life table program

There are three series of life tables prepared in the National Center for Health Statistics—complete, provisional abridged, and final abridged life tables. The complete life tables for the U.S. population contain life table values for single years of age and are based on decennial census data and deaths for a 3-year period about the census year and have been prepared since 1900. The provisional abridged life tables contain values by age groups and are based on a 10-percent sample of deaths. The final abridged life tables (referred to in this section as "abridged life tables") also contain values by age groups but are based on a complete count of all reported deaths.

In response to a growing number of requests for postcensal life table values, a series of abridged life tables was initiated in 1945. Available annually since that year, the abridged life tables are based on deaths occurring during the calendar year and on midyear postcensal population estimates provided by the U.S. Bureau of the Census. Refinements in both the techniques for estimating population and the methods for constructing abridged life tables permit the preparation of abridged life tables which provides reasonably accurate data on current trends in expectation of life and survivorship. Abridged life tables for 1945 to 1952 were

constructed by the Greville method;¹ since 1953, a modified method has been employed.² The 1945 abridged life tables were prepared for white and all other males and females. Since 1946, abridged life tables for the total population have also been available, and since 1957, abridged life tables have been calculated for total males and total females, regardless of color. Starting with 1959, additional abridged life tables have been published for the total white and "all other" population, regardless of sex.

Numerous requests have been received annually for current life table statistics that are more detailed than those available in the abridged life tables. Therefore tables showing I_x and e_x values by single years of age interpolated from the abridged life tables have been published since 1960.

The demand for information regarding up-to-date life table values has been responsible for the introduction of a third series, provisional abridged life tables. Starting with 1958, provisional abridged life tables have been published, for the total population only, in the "Annual Summary for the United States," *Monthly Vital Statistics Report*. Values in these life tables are based on population estimates provided by the Bureau of the Census and on the estimated number of deaths derived from the "Current Mortality Sample" (CMS). The CMS consists of one-tenth of the death certificates filed in the vital statistics registration offices (50 States and the cities of Washington, D.C., Baltimore, New Orleans, and New York). The sample is taken by selecting one certificate out of every 10 death certificates received between two dates a month apart.

Life table values for 1970

The data used to prepare the abridged U.S. life tables for 1970 are the final mortality statistics and the midyear estimates of the population by age, color, and sex prepared by the U.S. Bureau of the Census.³ Sample life table statistics for 1970 are shown in table 5-A. The text will refer to values for the total U.S. population; however, the same type of statistics may be applied to each color-sex group.

¹National Office of Vital Statistics: Method of constructing the abridged life tables for the United States, 1949, by T. N. E. Greville. *Vital Statistics-Special Reports*, Vol. 33, No. 15. Public Health Service. Washington, D.C., 1953.

²National Center for Health Statistics: Comparison of two methods of constructing abridged life tables by reference to a "standard" table, by M.G. Sirken. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 4. Public Health Service. Washington. U.S. Government Printing Office, 1966.

³U.S. Bureau of the Census: United States Summary, Final Report PC(1)-B1. *Census of Population, 1970, General Population Characteristics*. Washington. U.S. Government Printing Office, 1972.

SECTION 5 - LIFE TABLES

Expectation of life.—The most frequently used life table statistic is the expectation of life (e_x), i.e., the average remaining lifetime in years for persons who have attained a given age (x). Expectation of life at specified ages in 1970 is shown for the total population and by color and sex in table 5-1. In addition, expectations of life by single years of age, by color and sex, are shown in table 5-3.

Table 5-A. Selected life table values, by age, color, and sex:
United States, 1970

Life table value and age	Total	White		All other	
		Male	Female	Male	Female
Expectation of life:					
At birth-----	70.9	68.0	75.6	61.3	69.4
At age 1-----	71.3	68.4	75.8	62.5	70.4
At age 21-----	52.2	49.4	56.4	43.9	51.2
At age 65-----	15.2	13.1	17.1	13.3	16.4
Percent surviving from birth:					
To age 1-----	98.0	98.0	98.4	96.5	97.2
To age 21-----	96.6	96.3	97.5	94.0	95.8
To age 65-----	71.9	66.2	81.5	49.9	66.3
Median age at death-	74.9	71.5	79.4	64.9	72.9

Life expectancy at birth (e_0) is 70.9 years, which represents the average number of years that the members of the life table cohort may expect to live at the time of birth. Text table 5-A shows the higher life expectancy of females as compared with males within each color group, and of whites as compared with those in the all other category. At age 1, life expectancy is 71.3 years, which is higher than at birth. This is a result of surviving the first year, when the mortality rate is very high. Remaining years of expected lifetime are also shown in table 5-A for ages 21 and 65 years.

Survivors to specified ages.—Another way of assessing longevity of the life table cohort is by determining the proportion of it that lives to specified ages. The I_x column provides the data for computing the proportion. For instance, 71,858 out of the original 100,000 (or 71.9 percent) were alive at exact age 65 (table 5-2). Survivorship to other ages, by color and sex, is shown as percentage in table 5-A.

Median length of life.—Instead of determining the proportion alive at a specified age, one can compute the age at which a specified proportion of the cohort is still alive. For example, one can determine the age at which exactly half the cohort (50,000 persons) still remain alive, and half have died. This value, known as the median age at death, is shown at the bottom of table 5-A, by color and sex. For example, the median age for white males is 7.9 years less than for white females.

Trends and comparisons

The geographic areas covered in life tables prior to 1929-31 were limited to the death-registration areas. Life tables for 1919-21 were constructed using mortality data from the 1920 death-registration States—34 States and the District of Columbia—and for 1900-1902 and 1909-11 from the 1900 death-registration States—10 States and the District of Columbia. The tables for 1929-31 through 1958 cover the conterminous United States. Decennial life table values for the 3-year period 1959-61 are derived from data which include both Alaska and Hawaii for each year (table 5-4). Data for each year shown in table 5-5 include Alaska for 1959 and both Alaska and Hawaii beginning with 1960. However, it is not believed that the inclusion of these two States materially affects life table values.

Table 5-B. Selected life table values, by color and sex: Death-registration areas, 1970, 1969, 1960, 1950, 1900-1902

Life table value and year	Total	White		All other	
		Male	Female	Male	Female
Life expectancy (e_x) at birth:					
1970-----	70.9	68.0	75.6	61.3	69.4
1969-----	70.4	67.8	75.1	60.5	68.4
1960-----	69.7	67.4	74.1	61.1	66.3
1950-----	68.2	66.5	72.2	59.1	62.9
1900-----	47.3	46.6	48.7	32.5	33.5
At age 20:					
1970-----	53.1	50.3	57.4	44.7	52.2
1900-1902-----	---	42.2	43.8	35.1	36.9
Percent reaching age 65:					
1970-----	71.9	66.2	81.5	49.9	66.3
1900-1902-----	---	39.2	43.8	19.0	22.0

Trends in life table values are shown in tables 5-4 and 5-5. Table 5-4 shows the expectation of life, and the number of cohort survivors at specified ages around census years since 1900, and for 1969 and 1970. Life expectancy among white males exactly 20 years old, for instance, has increased from 42.2 years in 1900-1902 to 50.3 years in 1970 (text table 5-B). Where 39.2 percent of white males survived to age 65 in 1900-1902, now 66.2 percent survive to this age.

There has been an increasing interest in data on average length of life (e_0) for single calendar years prior to the initiation of the annual abridged life table series in 1945. The estimated figures in table 5-5 were computed to meet these

needs.⁴ For example, life expectancy has increased by 3.4 years among white females since 1950, or an average increase of 0.17 year of life per calendar year. Values for other years, by color and sex, are shown in table 5-B.

Technical appendix

New Jersey data, 1962-64.--The life tables for 1962 and 1963 for the six population groups involving color do not include data from the State of New Jersey. This State omitted the item on color or race from its certificates of

⁴For estimating procedure, see National Office of Vital Statistics, "Estimated Average Length of Life in the Death-Registration States," by T. N. E. Greville and G. A. Carlson, *Vital Statistics-Special Reports*, Vol. 33, No. 9. Public Health Service, Washington, D.C., 1951.

live birth, death, and fetal death in use at the beginning of 1962. The item was restored during the latter part of 1962. However, the certificate revision without this item was used for most of 1962 as well as for 1963. For computing vital rates, populations by age, color, and sex excluding New Jersey were estimated to obtain comparable denominators. Approximately 7 percent of the New Jersey death records for 1964 did not contain the race designation; when the records were being electronically processed, the "race not stated" deaths were allocated to white or Negro.

Standard table.--U.S. life tables for the decennial period 1959-61 are used as the standard table in constructing the 1970 abridged life tables.

Nonresidents, 1970.--Beginning in 1970, the deaths of nonresidents of the United States have been excluded from the life table statistics.

Explanation of the Columns of the Life Table

Column 1—Age interval (x to $x+n$).—The age interval shown in column 1 is the interval between the two exact ages indicated. For instance, "20-25" means the 5-year interval between the 20th birthday and the 25th.

Column 2—Proportion dying (\mathbf{q}_x).—This column shows the proportion of the cohort who are alive at the beginning of an indicated age interval and who will die before reaching the end of that age interval. For example, for males in the age interval 20-25, the proportion dying is 0.0112—out of every 1,000 males alive and exactly 20 years old at the beginning of the period 11 will die before reaching their 25th birthday. In other words, the \mathbf{q}_x values represent *probabilities* that persons who are alive at the beginning of a specific age interval will die before reaching the beginning of the next age interval. The "proportion dying" column forms the basis of the life table; the life table is so constructed that all other columns are derived from it.

Column 3—Number surviving (\mathbf{l}_x).—This column shows the number of persons, starting with a cohort of 100,000 live births, who survive to the exact age marking the beginning of each age interval. The \mathbf{l}_x values are computed from the \mathbf{q}_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 male babies born alive, 97,745 will complete the first year of life and enter the second; 97,298 will begin the sixth year; 96,128 will reach age 20; and 13,256 will live to age 85.

Column 4—Number dying (\mathbf{d}_x).—This column shows the number dying in each successive age interval out of 100,000 live births. Out of 100,000 males born alive, 2,255 die in the first year of life, 364 in the succeeding 4 years, 1,079 in the 5-year period between exact ages 20 and 25, and 13,256 die after reaching age 85. Each figure in column 4 is the difference between two successive figures in column 3.

Columns 5 and 6—Stationary population (\mathbf{l}_x and \mathbf{T}_x).—Suppose that a group of 100,000 individuals like that assumed in columns 3 and 4 is born every year and that the proportions dying in each such group in each age interval throughout the lives of the members are exactly those shown in column 2. If there were no migration and if the births were evenly distributed over the calendar year, the survivors of these births would make up what is called a stationary population—stationary because in such a population the number of persons living in any given age group would never change. When an individual left the group, either by death or by growing older and entering the next higher age group, his place would immediately be taken by someone entering from the next lower age group. Thus a census taken at any time in such a stationary community would always show the same total population and the same numerical distribution of that population among the various age groups. In such a stationary population supported by 100,000 annual births, column 3 shows the number of persons who, each year,

reach the birthday which marks the beginning of the age interval indicated in column 1, and column 4 shows the number of persons who die each year in the indicated age interval.

Column 5 shows the number of persons in the stationary population in the indicated age interval. For example, the figure given for males in the age interval 20-25 is 477,977. This means that in a stationary population of males supported by 100,000 annual births and with proportions dying in each age group always in accordance with column 2, a census taken on any date would show 477,977 persons between exact ages 20 and 25.

Column 6 shows the total number of persons in the stationary population (column 5) in the indicated age interval and all subsequent age intervals. For example, in the stationary population of males referred to in the last illustration, column 6 shows that there would be at any given moment a total of 4,769,722 persons who have passed their 20th birthday. The population at all ages 0 and above (in other words, the total population of the stationary community) would be 6,711,932.

Column 7—Average remaining lifetime ($\mathbf{\bar{e}}_x$).—The average remaining lifetime (also called 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. In order to arrive at this value, it is first necessary to observe that the figures in column 5 of the life table can also be interpreted in terms of a single life table cohort without introducing the concept of the stationary population. From this point of view, each figure in column 5 represents the total time (in years) lived between two indicated birthdays by all those reaching the earlier birthday among the survivors of a cohort of 100,000 live births. Thus the figure 477,977 for males in the age interval 20-25 is the total number of years lived between the 20th and 25th birthdays by the 96,128 (column 3) who reached the 20th birthday out of 100,000 males born alive. The corresponding figure (4,769,722) in column 6 is the total number of years lived after attaining age 20 by the 96,128 reaching that age. This number of years divided by the number of persons (4,769,722 divided by 96,128) gives 49.6 years as the average remaining lifetime of males at age 20.

Care must be exercised in drawing conclusions from the figures in column 7. Thus in observing that the average remaining lifetime of white persons is greater than for those in the all other category, one should not conclude that the oldest ages reached by white persons necessarily exceed those attained by the most long-lived of the all other group. The difference in the average length of life results from the fact that a greater proportion of all other persons die before reaching old age. For example, the number surviving to age 65 out of 100,000 born alive is far greater among white persons than among all other persons; yet the average length of life remaining at age 65 is nearly the same for both groups.

SECTION 5 - LIFE TABLES

5-7

Table 5-1. Abridged Life Tables by Color and Sex: United States, 1970

AGE INTERVAL PERIOD OF LIFE BETWEEN TWO EXACT AGES STATED IN YEARS (1)	PROPORTION DYING PROPORTION OF PERSONS ALIVE AT BEGINNING OF AGE INTERVAL DYING DURING INTERVAL (2)	OF 100,000 BORN ALIVE		STATIONARY POPULATION		AVERAGE REMAIN- ING LIFETIME AVERAGE NUMBER OF YEARS OF LIFE REMAINING AT BEGINNING OF AGE INTERVAL (7)
		NUMBER LIVING AT BEGINNING OF AGE INTERVAL (3)	NUMBER DYING DURING AGE INTERVAL (4)	IN THE AGE INTERVAL (5)	IN THIS AND ALL SUBSEQUENT AGE INTERVALS (6)	
		x to $x+n$	$n\bar{q}_x$	\bar{I}_x	$n\bar{d}_x$	\bar{T}_x
TOTAL						
0-1-----	.0202	100,000	2,016	98,189	7,085,472	70.9
1-5-----	.0054	97,984	331	391,144	6,987,283	71.3
5-10-----	.0021	97,653	205	487,712	6,596,139	67.5
10-15-----	.0020	97,448	198	486,793	6,108,427	62.7
15-20-----	.0055	97,250	535	485,022	5,621,634	57.8
20-25-----	.0074	96,715	713	481,825	5,136,612	53.1
25-30-----	.0072	96,002	690	478,310	4,654,787	48.5
30-35-----	.0066	95,312	821	474,602	4,176,477	43.8
35-40-----	.0123	94,491	1,161	469,745	3,701,875	39.2
40-45-----	.0187	93,330	1,745	462,599	3,232,130	34.6
45-50-----	.0288	91,585	2,640	451,806	2,769,531	30.2
50-55-----	.0436	88,945	3,876	435,607	2,317,725	26.1
55-60-----	.0660	85,069	5,611	412,091	1,882,118	22.1
60-65-----	.0956	79,458	7,600	379,204	1,470,027	18.5
65-70-----	.1386	71,858	9,960	335,334	1,090,823	15.2
70-75-----	.1976	61,898	12,234	279,788	755,489	12.2
75-80-----	.2885	49,664	14,330	213,104	475,701	9.6
80-85-----	.4035	35,334	14,257	140,305	262,597	7.4
85 AND OVER-----	1.0000	21,077	21,077	122,292	122,292	5.8
MALE						
0-1-----	.0225	100,000	2,255	97,968	6,711,932	67.1
1-5-----	.0037	97,745	364	390,113	6,613,964	67.7
5-10-----	.0025	97,381	242	486,259	6,223,851	63.9
10-15-----	.0026	97,139	249	485,149	5,737,592	59.1
15-20-----	.0079	96,890	762	482,721	5,252,443	54.2
20-25-----	.0112	96,128	1,079	477,977	4,769,722	49.6
25-30-----	.0101	95,049	959	472,842	4,291,745	45.2
30-35-----	.0114	94,090	1,077	467,867	3,818,903	40.6
35-40-----	.0156	93,013	1,451	461,681	3,351,036	36.0
40-45-----	.0240	91,562	2,196	452,727	2,889,355	31.6
45-50-----	.0372	89,366	3,324	439,154	2,436,628	27.3
50-55-----	.0574	86,042	4,939	418,604	1,997,474	23.2
55-60-----	.0890	81,103	7,217	388,408	1,578,870	19.5
60-65-----	.1306	73,886	9,653	346,300	1,190,462	16.1
65-70-----	.1872	64,233	12,023	291,854	844,162	13.1
70-75-----	.2573	52,210	13,433	227,840	552,308	10.6
75-80-----	.3565	38,777	13,823	159,243	324,468	8.4
80-85-----	.4688	24,954	11,698	94,394	165,225	6.6
85 AND OVER-----	1.0000	13,256	13,256	70,831	70,831	5.3
FEMALE						
0-1-----	.0176	100,000	1,764	98,421	7,477,741	74.8
1-5-----	.0030	98,236	296	392,227	7,379,320	75.1
5-10-----	.0017	97,940	167	489,242	6,987,093	71.3
10-15-----	.0015	97,773	144	488,524	6,497,851	66.5
15-20-----	.0031	97,629	301	487,440	6,009,327	61.6
20-25-----	.0038	97,328	366	485,756	5,521,887	56.7
25-30-----	.0044	96,962	424	483,797	5,036,131	51.9
30-35-----	.0059	96,538	568	481,349	4,552,334	47.2
35-40-----	.0091	95,970	877	477,800	4,070,985	42.4
40-45-----	.0137	95,093	1,300	472,430	3,593,185	37.8
45-50-----	.0209	93,793	1,964	464,375	3,120,755	33.3
50-55-----	.0306	91,829	2,806	452,518	2,656,380	28.9
55-60-----	.0444	89,023	3,954	435,829	2,203,862	24.8
60-65-----	.0639	85,069	5,434	412,546	1,768,033	20.8
65-70-----	.0974	79,635	7,760	379,846	1,355,487	17.0
70-75-----	.1506	71,875	10,828	333,666	975,641	13.6
75-80-----	.2382	61,047	14,544	270,249	641,975	10.5
80-85-----	.3596	46,503	16,721	190,550	371,726	8.0
85 AND OVER-----	1.0000	29,782	29,782	181,176	181,176	6.1

SECTION 5 - LIFE TABLES

Table 5-1. Abridged Life Tables by Color and Sex: United States, 1970-Con.

AGE INTERVAL PERIOD OF LIFE BETWEEN TWO EXACT AGES STATED IN YEARS (1)	PROPORTION DYING PROPORTION OF PERSONS ALIVE AT BEGINNING OF AGE INTERVAL DYING DURING INTERVAL (2)	OF 100,000 BORN ALIVE		STATIONARY POPULATION		AVERAGE REMAIN- ING LIFETIME (7)
		NUMBER LIVING AT BEGINNING OF AGE INTERVAL (3)	NUMBER DYING DURING AGE INTERVAL (4)	IN THE AGE INTERVAL (5)	IN THIS AND ALL SUBSEQUENT AGE INTERVALS (6)	
		$x to x+na_x^n$	I_x	n^d_x	nL_x	T_x
WHITE						
0-1-----	0.0179	100,000	1,788	98,373	7,170,645	71.7
1-5-----	.0030	98,212	294	392,153	7,072,272	72.0
5-10-----	.0020	97,918	195	489,066	6,680,119	68.2
10-15-----	.0019	97,723	188	488,192	6,191,053	63.4
15-20-----	.0051	97,535	502	486,518	5,702,861	58.5
20-25-----	.0065	97,033	631	483,602	5,216,343	53.8
25-30-----	.0060	96,402	580	480,569	4,732,761	49.1
30-35-----	.0070	95,822	672	477,509	4,252,172	44.4
35-40-----	.0102	95,150	970	473,497	3,774,663	39.7
40-45-----	.0161	94,180	1,515	467,407	3,301,166	35.1
45-50-----	.0259	92,665	2,401	457,783	2,833,759	30.6
50-55-----	.0402	90,264	3,632	442,794	2,375,976	26.3
55-60-----	.0623	86,632	5,394	420,464	1,933,182	22.3
60-65-----	.0917	81,238	7,451	388,535	1,512,718	18.6
65-70-----	.1343	73,787	9,911	345,189	1,124,183	15.2
70-75-----	.1937	63,876	12,374	289,453	778,994	12.2
75-80-----	.2879	51,502	14,827	221,136	489,541	9.5
80-85-----	.4076	36,675	14,949	145,242	268,405	7.3
85 AND OVER-----	1.0000	21,726	21,726	123,163	123,163	5.7
WHITE, MALE						
0-1-----	0.0201	100,000	2,010	98,167	6,799,319	68.0
1-5-----	.0033	97,990	327	391,195	6,701,152	68.4
5-10-----	.0024	97,663	232	487,697	6,309,957	64.6
10-15-----	.0024	97,431	236	486,640	5,822,260	59.8
15-20-----	.0073	97,195	713	484,352	5,335,620	54.9
20-25-----	.0099	96,482	956	480,031	4,851,268	50.3
25-30-----	.0084	95,526	805	475,597	4,371,237	45.8
30-35-----	.0092	94,721	874	471,511	3,895,640	41.1
35-40-----	.0129	93,847	1,215	466,415	3,424,129	36.5
40-45-----	.0208	92,632	1,927	458,729	2,957,714	31.9
45-50-----	.0337	90,705	3,058	446,495	2,498,985	27.6
50-55-----	.0536	87,647	4,695	427,229	2,052,490	23.4
55-60-----	.0852	82,952	7,066	398,063	1,625,261	19.6
60-65-----	.1272	75,886	9,655	356,351	1,227,198	16.2
65-70-----	.1842	66,231	12,202	301,482	870,847	13.1
70-75-----	.2549	54,029	13,771	236,206	569,365	10.5
75-80-----	.3571	40,258	14,375	165,302	333,159	8.3
80-85-----	.4749	25,883	12,292	97,473	167,857	6.5
85 AND OVER-----	1.0000	13,591	13,591	70,384	70,384	5.2
WHITE, FEMALE						
0-1-----	0.0155	100,000	1,553	98,591	7,560,626	75.6
1-5-----	.0026	98,447	260	393,166	7,462,035	75.8
5-10-----	.0016	98,187	157	490,507	7,068,869	72.0
10-15-----	.0014	98,030	137	489,825	6,578,362	67.1
15-20-----	.0029	97,893	283	488,796	6,088,537	62.2
20-25-----	.0033	97,610	320	487,268	5,599,741	57.4
25-30-----	.0037	97,290	355	485,596	5,112,473	52.5
30-35-----	.0048	96,935	470	483,567	4,626,877	47.7
35-40-----	.0075	96,465	725	480,638	4,143,310	43.0
40-45-----	.0115	95,740	1,105	476,138	3,662,672	38.3
45-50-----	.0185	94,635	1,753	469,091	3,186,534	33.7
50-55-----	.0276	92,882	2,565	458,359	2,717,443	29.3
55-60-----	.0408	90,317	3,681	442,984	2,259,084	25.0
60-65-----	.0595	86,636	5,151	421,146	1,816,100	21.0
65-70-----	.0921	81,485	7,504	389,814	1,394,954	17.1
70-75-----	.1459	73,981	10,796	344,404	1,005,140	13.6
75-80-----	.2371	63,185	14,981	279,978	660,736	10.5
80-85-----	.3628	48,204	17,489	197,142	380,758	7.9
85 AND OVER-----	1.0000	30,715	30,715	183,616	183,616	6.0

SECTION 5 - LIFE TABLES

5.9

Table 5-1. Abridged Life Tables by Color and Sex: United States, 1970-Con.

AGE INTERVAL PERIOD OF LIFE BETWEEN TWO EXACT AGES STATED IN YEARS (1)	PROPORTION DYING PROPORTION OF PERSONS ALIVE AT BEGINNING OF AGE INTERVAL DYING DURING INTERVAL (2)	OF 100,000 BORN ALIVE		STATIONARY POPULATION		AVERAGE REMAIN- ING LIFETIME OF YEARS OF LIFE REMAINING AT BEGINNING OF AGE INTERVAL (7)
		NUMBER LIVING AT BEGINNING OF AGE INTERVAL (3)	NUMBER DYING DURING AGE INTERVAL (4)	IN THE AGE INTERVAL (5)	IN THIS AND ALL SUBSEQUENT AGE INTERVALS (6)	
x to x+n	nq_x	I_x	nd_x	nL_x	T_x	\bar{e}_x
ALL OTHER						
0-1	0.0312	100,000	3,117	97,300	6,528,792	65.3
1-5	.0054	96,883	518	386,240	6,431,492	62.4
5-10	.0027	96,365	261	481,110	6,045,252	62.7
10-15	.0027	96,104	256	479,938	5,364,142	57.9
15-20	.0077	95,848	736	477,589	5,084,204	53.0
20-25	.0133	95,112	1,267	472,561	4,406,615	48.4
25-30	.0155	93,845	1,450	465,752	4,134,054	44.1
30-35	.0194	92,395	1,794	457,710	3,666,302	39.7
35-40	.0269	90,601	2,437	447,262	3,210,592	35.4
40-45	.0386	88,164	3,402	432,722	2,763,330	31.3
45-50	.0533	84,762	4,522	413,143	2,330,608	27.5
50-55	.0734	80,240	5,888	387,223	1,917,465	23.9
55-60	.0997	74,352	7,413	353,887	1,530,242	20.6
60-65	.1326	66,939	8,879	312,966	1,176,355	17.6
65-70	.1767	58,060	10,259	264,899	863,389	14.9
70-75	.2386	47,801	11,404	210,252	598,490	12.5
75-80	.2962	36,397	10,781	154,751	388,238	10.7
80-85	.3480	25,616	8,913	105,274	233,487	9.1
85 AND OVER	1.0000	16,703	16,703	128,213	128,213	7.7
ALL OTHER, MALE						
0-1	0.0346	100,000	3,456	96,996	6,131,897	61.3
1-5	.0058	96,544	558	384,780	6,034,901	62.5
5-10	.0031	95,986	298	479,128	5,650,121	58.9
10-15	.0034	95,688	324	477,717	5,170,993	54.0
15-20	.0112	95,364	1,064	474,449	4,693,276	49.2
20-25	.0206	94,300	1,942	466,884	4,218,827	44.7
25-30	.0226	92,358	2,088	456,721	3,751,943	40.6
30-35	.0276	90,270	2,492	445,370	3,295,222	36.5
35-40	.0356	87,778	3,126	431,501	2,849,852	32.5
40-45	.0501	84,652	4,237	413,168	2,418,351	28.6
45-50	.0676	80,415	5,436	389,223	2,005,183	24.9
50-55	.0926	74,979	6,943	358,353	1,615,960	21.6
55-60	.1242	68,036	8,449	319,722	1,257,607	18.5
60-65	.1629	59,587	9,704	274,260	937,885	15.7
65-70	.2130	49,883	10,624	222,987	663,625	13.3
70-75	.2811	39,259	11,036	168,106	440,638	11.2
75-80	.3490	28,223	9,850	115,987	272,532	9.7
80-85	.3932	18,373	7,225	73,220	156,545	8.5
85 AND OVER	1.0000	11,148	11,148	83,325	83,325	7.5
ALL OTHER, FEMALE						
0-1	0.0277	100,000	2,770	97,611	6,938,026	69.4
1-5	.0049	97,230	479	387,730	6,840,415	70.4
5-10	.0023	96,751	223	483,132	6,452,685	66.7
10-15	.0019	96,528	186	482,204	5,969,553	61.8
15-20	.0042	96,342	408	480,791	5,487,349	57.0
20-25	.0069	95,934	661	478,122	5,006,558	52.2
25-30	.0092	95,273	879	474,304	4,528,436	47.5
30-35	.0124	94,394	1,174	469,209	4,054,132	42.9
35-40	.0196	93,220	1,829	461,802	3,584,923	38.5
40-45	.0289	91,391	2,645	450,657	3,123,121	34.2
45-50	.0407	88,746	3,612	435,219	2,672,464	30.1
50-55	.0562	85,134	4,782	414,360	2,237,245	26.3
55-60	.0774	80,352	6,221	386,833	1,822,885	22.7
60-65	.1053	74,131	7,807	351,476	1,436,052	19.4
65-70	.1454	66,324	9,644	307,853	1,084,576	16.4
70-75	.2021	56,680	11,453	254,907	776,723	13.7
75-80	.2528	45,227	11,434	197,555	521,816	11.5
80-85	.3125	33,793	10,562	142,167	324,261	9.8
85 AND OVER	1.0000	23,231	23,231	182,094	182,094	7.8

FILE

VITAL STATISTICS OF THE UNITED STATES, 1970—VOLUME II—MORTALITY

Part A

Section 1. General Mortality

Summary tables containing crude, age-specific, and age-adjusted death rates; death rates by cause; maternal mortality. Detailed tabulations of deaths by cause for the United States and each State. Data shown by age, sex, color and race, cause of death, and month.

Section 2. Infant Mortality

Tabulations of infant deaths and infant mortality rates by age, color, sex, cause of death, and by State. Additional frequency tables by month of death and by population-size groups in metropolitan and nonmetropolitan counties.

Section 3. Fetal Mortality

Tabulations of numbers of deaths and ratios by age of mother, legitimacy, geographic areas; fetal death rates by plurality. Numbers of deaths by additional characteristics—month, birth order, attendant, period of gestation, birth weight.

Section 4. Accident Mortality

Deaths from motor vehicle accidents by type of vehicle and from nontransport accidents by place of accident. Figures tabulated by age, color, and sex for the United States and by color and sex for each State.

Section 5. Life Tables (Separate release)

Abridged life tables and interpolated values of the l_x and ℓ_x by single years of age for the national population by color and sex.

Section 6. Technical Appendix

Text discussion of factors affecting the collection, classification, and interpretation of the mortality statistics published in Volume II. Includes population tables for computing vital rates.

Part B

Section 7. Geographic Detail for Mortality

Total number of deaths, deaths from selected causes, infant deaths, neonatal death, fetal deaths, and selected rates and ratios. Tabulations shown by each State, county, specified urban places, metropolitan and nonmetropolitan counties, population-size groups, and standard metropolitan statistical areas.

Section 8. Puerto Rico and Virgin Islands

Trend of the crude death rate. Frequency tabulations for most characteristics shown in other sections of Volume II.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Health Resources Administration
5600 Fishers Lane
Rockville, Maryland 20852

OFFICIAL BUSINESS
Penalty for Private Use \$300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF HEW

HEW 390



THIRD CLASS
BLK. RT.

FILE