

U.S. Department of Health and Human Services: Life table for the black population: United States, 2008. In: National Vital Statistics Reports, Vol. 61, No. 3, 2012, p. 22-27, URL: <http://www.cdc.gov> (01.07.2013).

## United States Life Tables, 2008

by Elizabeth Arias, Ph.D., Division of Vital Statistics

The **Technical Notes** section of this report has been updated (see page 60, left column, last paragraph) to facilitate replication of this work.

### Abstract

**Objectives**—This report presents complete period life tables for the United States by race, Hispanic origin, and sex, based on age-specific death rates in 2008.

**Methods**—Data used to prepare the 2008 life tables are 2008 final mortality statistics; July 1, 2008, population estimates based on the 2000 decennial census; and 2008 Medicare data for persons aged 66–99. The methodology used to estimate the 2008 life tables has been revised from that used for data years 2000–2007. The methodology was refined in two important ways. First, a logistic model rather than a nonlinear least squares model was used to smooth and extrapolate the vital statistics and Medicare blended death rates at the oldest ages. Second, the age at which smoothing is begun was raised from 66 to 85 or so, depending on the population. This modification applies to the life tables for the total population and for the white, black, non-Hispanic white, and non-Hispanic black populations. The methodology used to estimate the life tables for the Hispanic population remains unchanged from that developed for the publication of life tables by Hispanic origin for data year 2006.

**Results**—In 2008, the overall expectation of life at birth was 78.1 years. Between 2007 and 2008, life expectancy at birth increased for all groups considered, although approximately 0.1 years of the increase is due to the change in methodology. Life expectancy increased for both males (from 75.4 to 75.6) and females (80.4 to 80.6) and for the white population (78.4 to 78.5), the black population (73.6 to 74.0), the Hispanic population (80.9 to 81.0), the non-Hispanic white population (78.2 to 78.4), and the non-Hispanic black population (73.2 to 73.7).

**Keywords:** life expectancy • survival • death rates • race

### Introduction

There are two types of U.S. life tables: the cohort (or generation) life table and the period (or current) life table. The cohort life table presents the mortality experience of a particular birth 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 through consecutive calendar years, the cohort life table reflects the mortality experience of an actual cohort from birth until no lives remain in the group. To prepare just a single complete cohort life table requires data over many years. It is usually not feasible to construct cohort life tables entirely on the basis of observed data for real cohorts due to data unavailability or incompleteness (1). For example, a life table representation of the mortality experience of a cohort of persons born in 1970 would require the use of data projection techniques to estimate deaths into the future (2,3).

Unlike the cohort life table, 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 in time. For example, a period life table for 2008 assumes a hypothetical cohort that is subject throughout its lifetime to the age-specific death rates prevailing for the actual population in 2008. The period life table may thus 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 in a given year. In this report the term “life table” refers only to the period life table and not to the cohort life table.

Life tables can be classified in two ways according to the length of the age interval in which data are presented. A *complete* life table contains data for every single year of age. An *abridged* life table typically contains data by 5- or 10-year age intervals. A complete life table, of course, can easily be aggregated into 5- or 10-year age groups (refer to the Technical Notes at the end of this report for instructions). Other than the decennial life tables, U.S. life tables based on data prior to 1997 are abridged life tables constructed by reference to a standard table (4). This report presents complete period life tables by race, Hispanic origin, race for the non-Hispanic population, and sex.

### Data and Methods

The data used to prepare the U.S. life tables for 2008 are final numbers of deaths for the year 2008, postcensal population estimates for the year 2008, and age-specific death and population



**Table 7. Life table for the black population: United States, 2008**Spreadsheet version available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/NVSR/61\\_03/Table07.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/61_03/Table07.xls).

Age (years)	Probability of dying between ages $x$ and $x + 1$	Number surviving to age $x$	Number dying between ages $x$ and $x + 1$	Person-years lived between ages $x$ and $x + 1$	Total number of person-years lived above age $x$	Expectation of life at age $x$
	$q_x$	$l_x$	$d_x$	$L_x$	$T_x$	$e_x$
0-1	0.012725	100,000	1,272	98,889	7,402,691	74.0
1-2	0.000658	98,728	65	98,695	7,303,802	74.0
2-3	0.000407	98,663	40	98,642	7,205,107	73.0
3-4	0.000335	98,622	33	98,606	7,106,464	72.1
4-5	0.000260	98,589	26	98,577	7,007,858	71.1
5-6	0.000230	98,564	23	98,552	6,909,282	70.1
6-7	0.000206	98,541	20	98,531	6,810,730	69.1
7-8	0.000185	98,521	18	98,512	6,712,199	68.1
8-9	0.000159	98,502	16	98,495	6,613,687	67.1
9-10	0.000132	98,487	13	98,480	6,515,193	66.2
10-11	0.000111	98,474	11	98,468	6,416,712	65.2
11-12	0.000117	98,463	11	98,457	6,318,244	64.2
12-13	0.000167	98,451	16	98,443	6,219,787	63.2
13-14	0.000271	98,435	27	98,422	6,121,344	62.2
14-15	0.000408	98,408	40	98,388	6,022,922	61.2
15-16	0.000550	98,368	54	98,341	5,924,534	60.2
16-17	0.000679	98,314	67	98,281	5,826,193	59.3
17-18	0.000801	98,247	79	98,208	5,727,912	58.3
18-19	0.000917	98,169	90	98,124	5,629,704	57.3
19-20	0.001032	98,078	101	98,028	5,531,581	56.4
20-21	0.001161	97,977	114	97,920	5,433,553	55.5
21-22	0.001291	97,863	126	97,800	5,335,632	54.5
22-23	0.001390	97,737	136	97,669	5,237,832	53.6
23-24	0.001435	97,601	140	97,531	5,140,163	52.7
24-25	0.001440	97,461	140	97,391	5,042,632	51.7
25-26	0.001430	97,321	139	97,251	4,945,241	50.8
26-27	0.001431	97,182	139	97,112	4,847,989	49.9
27-28	0.001442	97,043	140	96,973	4,750,877	49.0
28-29	0.001476	96,903	143	96,831	4,653,905	48.0
29-30	0.001531	96,760	148	96,686	4,557,074	47.1
30-31	0.001600	96,611	155	96,534	4,460,388	46.2
31-32	0.001676	96,457	162	96,376	4,363,854	45.2
32-33	0.001765	96,295	170	96,210	4,267,478	44.3
33-34	0.001824	96,125	175	96,038	4,171,267	43.4
34-35	0.001893	95,950	182	95,859	4,075,230	42.5
35-36	0.001969	95,768	189	95,674	3,979,371	41.6
36-37	0.002067	95,580	198	95,481	3,883,697	40.6
37-38	0.002195	95,382	209	95,278	3,788,216	39.7
38-39	0.002362	95,173	225	95,060	3,692,938	38.8
39-40	0.002568	94,948	244	94,826	3,597,878	37.9
40-41	0.002799	94,704	265	94,572	3,503,052	37.0
41-42	0.003050	94,439	288	94,295	3,408,480	36.1
42-43	0.003334	94,151	314	93,994	3,314,185	35.2
43-44	0.003650	93,837	343	93,666	3,220,190	34.3
44-45	0.003992	93,495	373	93,308	3,126,524	33.4
45-46	0.004339	93,122	404	92,920	3,033,216	32.6
46-47	0.004706	92,718	436	92,499	2,940,297	31.7
47-48	0.005135	92,281	474	92,044	2,847,797	30.9
48-49	0.005652	91,807	519	91,548	2,755,753	30.0
49-50	0.006251	91,288	571	91,003	2,664,205	29.2
50-51	0.006904	90,718	626	90,405	2,573,202	28.4
51-52	0.007575	90,092	682	89,750	2,482,797	27.6
52-53	0.008261	89,409	739	89,040	2,393,047	26.8
53-54	0.008943	88,670	793	88,274	2,304,007	26.0
54-55	0.009628	87,877	846	87,454	2,215,733	25.2
55-56	0.010369	87,031	902	86,580	2,128,279	24.5
56-57	0.011165	86,129	962	85,648	2,041,699	23.7
57-58	0.011957	85,167	1,018	84,658	1,956,051	23.0
58-59	0.012731	84,149	1,071	83,613	1,871,393	22.2
59-60	0.013520	83,078	1,123	82,516	1,787,780	21.5
60-61	0.014375	81,954	1,178	81,365	1,705,264	20.8
61-62	0.015349	80,776	1,240	80,156	1,623,898	20.1
62-63	0.016445	79,537	1,308	78,883	1,543,742	19.4

See footnote at end of table.

**Table 7. Life table for the black population: United States, 2008—Con.**Spreadsheet version available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/NVSR/61\\_03/Table07.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/61_03/Table07.xls).

Age (years)	Probability of dying between ages $x$ and $x + 1$	Number surviving to age $x$	Number dying between ages $x$ and $x + 1$	Person-years lived between ages $x$ and $x + 1$	Total number of person-years lived above age $x$	Expectation of life at age $x$
	$q_x$	$l_x$	$d_x$	$L_x$	$T_x$	$e_x$
63-64	0.017664	78,229	1,382	77,538	1,464,859	18.7
64-65	0.018980	76,847	1,459	76,117	1,387,322	18.1
65-66	0.020419	75,388	1,539	74,618	1,311,204	17.4
66-67	0.021954	73,849	1,621	73,038	1,236,586	16.7
67-68	0.023492	72,227	1,697	71,379	1,163,548	16.1
68-69	0.025020	70,531	1,765	69,648	1,092,169	15.5
69-70	0.026587	68,766	1,828	67,852	1,022,520	14.9
70-71	0.028118	66,938	1,882	65,997	954,668	14.3
71-72	0.029760	65,056	1,936	64,088	888,672	13.7
72-73	0.031875	63,119	2,012	62,114	824,584	13.1
73-74	0.034383	61,108	2,101	60,057	762,471	12.5
74-75	0.037350	59,006	2,204	57,905	702,414	11.9
75-76	0.040705	56,803	2,312	55,646	644,509	11.3
76-77	0.044039	54,490	2,400	53,291	588,863	10.8
77-78	0.047854	52,091	2,493	50,844	535,572	10.3
78-79	0.052133	49,598	2,586	48,305	484,728	9.8
79-80	0.056188	47,012	2,642	45,691	436,423	9.3
80-81	0.060737	44,371	2,695	43,023	390,731	8.8
81-82	0.065515	41,676	2,730	40,311	347,708	8.3
82-83	0.070880	38,945	2,760	37,565	307,398	7.9
83-84	0.077834	36,185	2,816	34,777	269,832	7.5
84-85	0.084582	33,368	2,822	31,957	235,056	7.0
85-86	0.092079	30,546	2,813	29,140	203,098	6.6
86-87	0.100126	27,733	2,777	26,345	173,959	6.3
87-88	0.108743	24,957	2,714	23,600	147,614	5.9
88-89	0.117947	22,243	2,623	20,931	124,014	5.6
89-90	0.127752	19,619	2,506	18,366	103,083	5.3
90-91	0.138167	17,113	2,364	15,931	84,717	5.0
91-92	0.149196	14,748	2,200	13,648	68,786	4.7
92-93	0.160837	12,548	2,018	11,539	55,138	4.4
93-94	0.173083	10,530	1,823	9,619	43,599	4.1
94-95	0.185919	8,707	1,619	7,898	33,980	3.9
95-96	0.199322	7,088	1,413	6,382	26,082	3.7
96-97	0.213263	5,676	1,210	5,070	19,700	3.5
97-98	0.227703	4,465	1,017	3,957	14,630	3.3
98-99	0.242598	3,448	837	3,030	10,673	3.1
99-100	0.257896	2,612	674	2,275	7,643	2.9
100 and over	1.000000	1,938	1,938	5,368	5,368	2.8

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 8. Life table for black males: United States, 2008**Spreadsheet version available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/NVSR/61\\_03/Table08.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/61_03/Table08.xls).

Age (years)	Probability of dying between ages $x$ and $x + 1$	Number surviving to age $x$	Number dying between ages $x$ and $x + 1$	Person-years lived between ages $x$ and $x + 1$	Total number of person-years lived above age $x$	Expectation of life at age $x$
	$q_x$	$l_x$	$d_x$	$L_x$	$T_x$	$e_x$
0-1	0.013918	100,000	1,392	98,784	7,056,211	70.6
1-2	0.000764	98,608	75	98,571	6,957,428	70.6
2-3	0.000463	98,533	46	98,510	6,858,857	69.6
3-4	0.000347	98,487	34	98,470	6,760,347	68.6
4-5	0.000311	98,453	31	98,438	6,661,877	67.7
5-6	0.000270	98,422	27	98,409	6,563,439	66.7
6-7	0.000252	98,396	25	98,384	6,465,030	65.7
7-8	0.000230	98,371	23	98,360	6,366,646	64.7
8-9	0.000191	98,349	19	98,339	6,268,287	63.7
9-10	0.000140	98,330	14	98,323	6,169,947	62.7
10-11	0.000095	98,316	9	98,311	6,071,624	61.8
11-12	0.000090	98,307	9	98,302	5,973,313	60.8
12-13	0.000165	98,298	16	98,290	5,875,011	59.8
13-14	0.000334	98,282	33	98,265	5,776,721	58.8
14-15	0.000562	98,249	55	98,221	5,678,456	57.8
15-16	0.000798	98,194	78	98,154	5,580,235	56.8
16-17	0.001010	98,115	99	98,066	5,482,080	55.9
17-18	0.001207	98,016	118	97,957	5,384,014	54.9
18-19	0.001391	97,898	136	97,830	5,286,057	54.0
19-20	0.001568	97,762	153	97,685	5,188,228	53.1
20-21	0.001767	97,608	172	97,522	5,090,543	52.2
21-22	0.001965	97,436	191	97,340	4,993,020	51.2
22-23	0.002109	97,245	205	97,142	4,895,680	50.3
23-24	0.002165	97,039	210	96,934	4,798,538	49.4
24-25	0.002153	96,829	209	96,725	4,701,604	48.6
25-26	0.002115	96,621	204	96,519	4,604,879	47.7
26-27	0.002090	96,416	202	96,316	4,508,360	46.8
27-28	0.002083	96,215	200	96,115	4,412,044	45.9
28-29	0.002114	96,014	203	95,913	4,315,930	45.0
29-30	0.002178	95,811	209	95,707	4,220,017	44.0
30-31	0.002260	95,603	216	95,495	4,124,309	43.1
31-32	0.002342	95,387	223	95,275	4,028,815	42.2
32-33	0.002448	95,163	233	95,047	3,933,539	41.3
33-34	0.002482	94,930	236	94,813	3,838,493	40.4
34-35	0.002534	94,695	240	94,575	3,743,680	39.5
35-36	0.002595	94,455	245	94,332	3,649,105	38.6
36-37	0.002685	94,210	253	94,083	3,554,773	37.7
37-38	0.002808	93,957	264	93,825	3,460,689	36.8
38-39	0.002978	93,693	279	93,554	3,366,864	35.9
39-40	0.003195	93,414	298	93,265	3,273,311	35.0
40-41	0.003444	93,116	321	92,955	3,180,046	34.2
41-42	0.003723	92,795	345	92,622	3,087,091	33.3
42-43	0.004041	92,449	374	92,263	2,994,469	32.4
43-44	0.004398	92,076	405	91,873	2,902,206	31.5
44-45	0.004791	91,671	439	91,451	2,810,333	30.7
45-46	0.005192	91,232	474	90,995	2,718,881	29.8
46-47	0.005631	90,758	511	90,502	2,627,887	29.0
47-48	0.006174	90,247	557	89,968	2,537,384	28.1
48-49	0.006865	89,690	616	89,382	2,447,416	27.3
49-50	0.007687	89,074	685	88,732	2,358,034	26.5
50-51	0.008585	88,389	759	88,010	2,269,303	25.7
51-52	0.009511	87,630	833	87,214	2,181,293	24.9
52-53	0.010484	86,797	910	86,342	2,094,079	24.1
53-54	0.011486	85,887	987	85,394	2,007,737	23.4
54-55	0.012520	84,900	1,063	84,369	1,922,343	22.6
55-56	0.013662	83,838	1,145	83,265	1,837,974	21.9
56-57	0.014876	82,692	1,230	82,077	1,754,709	21.2
57-58	0.016025	81,462	1,305	80,809	1,672,632	20.5
58-59	0.017043	80,157	1,366	79,474	1,591,823	19.9
59-60	0.017981	78,790	1,417	78,082	1,512,350	19.2
60-61	0.018943	77,374	1,466	76,641	1,434,268	18.5
61-62	0.020060	75,908	1,523	75,147	1,357,627	17.9
62-63	0.021384	74,385	1,591	73,590	1,282,480	17.2

See footnote at end of table.

**Table 8. Life table for black males: United States, 2008—Con.**Spreadsheet version available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/NVSR/61\\_03/Table08.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/61_03/Table08.xls).

Age (years)	Probability of dying between ages $x$ and $x + 1$	Number surviving to age $x$	Number dying between ages $x$ and $x + 1$	Person-years lived between ages $x$ and $x + 1$	Total number of person-years lived above age $x$	Expectation of life at age $x$
	$q_x$	$l_x$	$d_x$	$L_x$	$T_x$	$e_x$
63-64	0.022975	72,795	1,672	71,958	1,208,890	16.6
64-65	0.024792	71,122	1,763	70,241	1,136,932	16.0
65-66	0.026815	69,359	1,860	68,429	1,066,691	15.4
66-67	0.028913	67,499	1,952	66,523	998,262	14.8
67-68	0.030936	65,547	2,028	64,534	931,739	14.2
68-69	0.032808	63,520	2,084	62,478	867,205	13.7
69-70	0.034586	61,436	2,125	60,373	804,728	13.1
70-71	0.036216	59,311	2,148	58,237	744,354	12.6
71-72	0.038044	57,163	2,175	56,076	686,117	12.0
72-73	0.040536	54,988	2,229	53,874	630,042	11.5
73-74	0.043518	52,759	2,296	51,611	576,168	10.9
74-75	0.047282	50,463	2,386	49,270	524,557	10.4
75-76	0.051712	48,077	2,486	46,834	475,286	9.9
76-77	0.056127	45,591	2,559	44,312	428,452	9.4
77-78	0.061077	43,032	2,628	41,718	384,141	8.9
78-79	0.066419	40,404	2,684	39,062	342,423	8.5
79-80	0.071903	37,720	2,712	36,364	303,360	8.0
80-81	0.077689	35,008	2,720	33,648	266,996	7.6
81-82	0.083498	32,288	2,696	30,940	233,348	7.2
82-83	0.090466	29,592	2,677	28,254	202,407	6.8
83-84	0.097918	26,915	2,636	25,598	174,154	6.5
84-85	0.105872	24,280	2,571	22,995	148,556	6.1
85-86	0.114341	21,709	2,482	20,468	125,562	5.8
86-87	0.123339	19,227	2,371	18,041	105,093	5.5
87-88	0.132875	16,856	2,240	15,736	87,052	5.2
88-89	0.142954	14,616	2,089	13,571	71,317	4.9
89-90	0.153577	12,526	1,924	11,565	57,745	4.6
90-91	0.164742	10,603	1,747	9,729	46,181	4.4
91-92	0.176439	8,856	1,563	8,075	36,451	4.1
92-93	0.188655	7,293	1,376	6,605	28,377	3.9
93-94	0.201369	5,917	1,192	5,322	21,771	3.7
94-95	0.214555	4,726	1,014	4,219	16,450	3.5
95-96	0.228181	3,712	847	3,288	12,231	3.3
96-97	0.242209	2,865	694	2,518	8,942	3.1
97-98	0.256594	2,171	557	1,892	6,424	3.0
98-99	0.271288	1,614	438	1,395	4,532	2.8
99-100	0.286237	1,176	337	1,008	3,137	2.7
100 and over	1.000000	839	839	2,129	2,129	2.5

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 9. Life table for black females: United States, 2008**Spreadsheet version available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/NVSR/61\\_03/Table09.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/61_03/Table09.xls).

Age (years)	Probability of dying between ages $x$ and $x + 1$	Number surviving to age $x$	Number dying between ages $x$ and $x + 1$	Person-years lived between ages $x$ and $x + 1$	Total number of person-years lived above age $x$	Expectation of life at age $x$
	$q_x$	$l_x$	$d_x$	$L_x$	$T_x$	$e_x$
0-1	0.011492	100,000	1,149	98,997	7,717,329	77.2
1-2	0.000548	98,851	54	98,824	7,618,332	77.1
2-3	0.000350	98,797	35	98,779	7,519,508	76.1
3-4	0.000322	98,762	32	98,746	7,420,729	75.1
4-5	0.000207	98,730	20	98,720	7,321,983	74.2
5-6	0.000190	98,710	19	98,700	7,223,263	73.2
6-7	0.000159	98,691	16	98,683	7,124,562	72.2
7-8	0.000138	98,675	14	98,669	7,025,879	71.2
8-9	0.000127	98,662	12	98,655	6,927,210	70.2
9-10	0.000123	98,649	12	98,643	6,828,555	69.2
10-11	0.000129	98,637	13	98,631	6,729,912	68.2
11-12	0.000144	98,624	14	98,617	6,631,281	67.2
12-13	0.000170	98,610	17	98,602	6,532,664	66.2
13-14	0.000206	98,593	20	98,583	6,434,062	65.3
14-15	0.000249	98,573	25	98,561	6,335,479	64.3
15-16	0.000294	98,549	29	98,534	6,236,918	63.3
16-17	0.000339	98,520	33	98,503	6,138,384	62.3
17-18	0.000384	98,486	38	98,467	6,039,881	61.3
18-19	0.000430	98,448	42	98,427	5,941,413	60.4
19-20	0.000480	98,406	47	98,383	5,842,986	59.4
20-21	0.000537	98,359	53	98,333	5,744,603	58.4
21-22	0.000597	98,306	59	98,277	5,646,271	57.4
22-23	0.000650	98,247	64	98,216	5,547,994	56.5
23-24	0.000690	98,184	68	98,150	5,449,779	55.5
24-25	0.000718	98,116	70	98,081	5,351,629	54.5
25-26	0.000745	98,045	73	98,009	5,253,548	53.6
26-27	0.000777	97,972	76	97,934	5,155,539	52.6
27-28	0.000814	97,896	80	97,856	5,057,605	51.7
28-29	0.000858	97,817	84	97,775	4,959,748	50.7
29-30	0.000913	97,733	89	97,688	4,861,974	49.7
30-31	0.000981	97,643	96	97,595	4,764,286	48.8
31-32	0.001060	97,548	103	97,496	4,666,690	47.8
32-33	0.001149	97,444	112	97,388	4,569,194	46.9
33-34	0.001230	97,332	120	97,272	4,471,806	45.9
34-35	0.001315	97,212	128	97,149	4,374,534	45.0
35-36	0.001406	97,085	136	97,016	4,277,385	44.1
36-37	0.001513	96,948	147	96,875	4,180,369	43.1
37-38	0.001645	96,802	159	96,722	4,083,494	42.2
38-39	0.001812	96,642	175	96,555	3,986,772	41.3
39-40	0.002011	96,467	194	96,370	3,890,217	40.3
40-41	0.002225	96,273	214	96,166	3,793,847	39.4
41-42	0.002453	96,059	236	95,941	3,697,681	38.5
42-43	0.002708	95,823	260	95,694	3,601,740	37.6
43-44	0.002991	95,564	286	95,421	3,506,046	36.7
44-45	0.003290	95,278	314	95,121	3,410,625	35.8
45-46	0.003592	94,965	341	94,794	3,315,504	34.9
46-47	0.003900	94,623	369	94,439	3,220,710	34.0
47-48	0.004232	94,254	399	94,055	3,126,271	33.2
48-49	0.004604	93,856	432	93,640	3,032,216	32.3
49-50	0.005013	93,423	468	93,189	2,938,576	31.5
50-51	0.005459	92,955	507	92,701	2,845,387	30.6
51-52	0.005917	92,448	547	92,174	2,752,685	29.8
52-53	0.006367	91,901	585	91,608	2,660,511	28.9
53-54	0.006789	91,316	620	91,006	2,568,903	28.1
54-55	0.007196	90,696	653	90,369	2,477,897	27.3
55-56	0.007622	90,043	686	89,700	2,387,528	26.5
56-57	0.008094	89,357	723	88,995	2,297,828	25.7
57-58	0.008618	88,633	764	88,252	2,208,833	24.9
58-59	0.009217	87,870	810	87,465	2,120,581	24.1
59-60	0.009907	87,060	862	86,628	2,033,117	23.4
60-61	0.010701	86,197	922	85,736	1,946,488	22.6
61-62	0.011589	85,275	988	84,781	1,860,752	21.8
62-63	0.012543	84,287	1,057	83,758	1,775,972	21.1

See footnote at end of table.

**Table 9. Life table for black females: United States, 2008—Con.**Spreadsheet version available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/NVSR/61\\_03/Table09.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/61_03/Table09.xls).

Age (years)	Probability of dying between ages $x$ and $x + 1$	Number surviving to age $x$	Number dying between ages $x$ and $x + 1$	Person-years lived between ages $x$ and $x + 1$	Total number of person-years lived above age $x$	Expectation of life at age $x$
	$q_x$	$l_x$	$d_x$	$L_x$	$T_x$	$e_x$
63-64	0.013515	83,229	1,125	82,667	1,692,214	20.3
64-65	0.014498	82,105	1,190	81,509	1,609,547	19.6
65-66	0.015556	80,914	1,259	80,285	1,528,038	18.9
66-67	0.016729	79,655	1,333	78,989	1,447,753	18.2
67-68	0.017968	78,323	1,407	77,619	1,368,764	17.5
68-69	0.019294	76,916	1,484	76,174	1,291,144	16.8
69-70	0.020749	75,432	1,565	74,649	1,214,971	16.1
70-71	0.022247	73,866	1,643	73,045	1,140,322	15.4
71-72	0.023808	72,223	1,720	71,363	1,067,277	14.8
72-73	0.025736	70,504	1,814	69,596	995,914	14.1
73-74	0.028023	68,689	1,925	67,727	926,318	13.5
74-75	0.030602	66,764	2,043	65,743	858,591	12.9
75-76	0.033418	64,721	2,163	63,640	792,848	12.3
76-77	0.036264	62,558	2,269	61,424	729,209	11.7
77-78	0.039609	60,290	2,388	59,096	667,785	11.1
78-79	0.043469	57,902	2,517	56,643	608,689	10.5
79-80	0.046965	55,385	2,601	54,084	552,046	10.0
80-81	0.051123	52,784	2,698	51,434	497,962	9.4
81-82	0.055872	50,085	2,798	48,686	446,527	8.9
82-83	0.060939	47,287	2,882	45,846	397,842	8.4
83-84	0.067889	44,405	3,015	42,898	351,996	7.9
84-85	0.074821	41,391	3,097	39,842	309,098	7.5
85-86	0.082239	38,294	3,149	36,719	269,256	7.0
86-87	0.090119	35,144	3,167	33,561	232,537	6.6
87-88	0.098628	31,977	3,154	30,400	198,976	6.2
88-89	0.107789	28,823	3,107	27,270	168,576	5.8
89-90	0.117626	25,717	3,025	24,204	141,306	5.5
90-91	0.128154	22,692	2,908	21,238	117,102	5.2
91-92	0.139385	19,784	2,758	18,405	95,864	4.8
92-93	0.151323	17,026	2,576	15,738	77,459	4.5
93-94	0.163967	14,450	2,369	13,265	61,721	4.3
94-95	0.177303	12,080	2,142	11,009	48,456	4.0
95-96	0.191312	9,938	1,901	8,988	37,447	3.8
96-97	0.205961	8,037	1,655	7,209	28,459	3.5
97-98	0.221210	6,382	1,412	5,676	21,250	3.3
98-99	0.237007	4,970	1,178	4,381	15,574	3.1
99-100	0.253291	3,792	961	3,312	11,193	3.0
100 and over	1.000000	2,832	2,832	7,881	7,881	2.8

SOURCE: CDC/NCHS, National Vital Statistics System.