



Center for Health Statistics



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DATA
SUMMARY
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Reports
from prior
periods are
available on
this subject.

Highlights

- In 2001 life expectancy at birth for the total California population was 79.1 years.
- The life expectancy of Californians was 1.9 years longer than the life expectancy of the U.S. population.
- The difference in life expectancy between California males and females was 4.6 years in 2001, a narrowing of the difference of 6.7 years in 1990.

Abridged Life Tables for California, 2001

By Sandy Ficenec

Introduction

Life tables statistically summarize the death rates for a specific period, and they have long been used as the principal analytical tool in the study of life expectancy. 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 and involves the mortality experience of a group or cohort of individuals that were born during the same time period. This type of life table best reflects changing environmental conditions, but is not often used due to the practical constraints of gathering mortality data over many years.

A current life table can be characterized as “cross-sectional.” Unlike the generation life table, the current life table does not represent the mortality experience of an actual cohort. This type of table considers a hypothetical cohort and assumes that it is subject to the age-specific death rates for an actual population during a particular period. In this report the term “life table” refers only to the current life table and not to the generation life table.

Life tables can also differ in the length of the age intervals used. A complete life table uses every single year of age from birth to the last applicable age. An abridged life table uses broader age intervals--generally five years. This report uses current abridged life tables for all California residents, males and females, for 2001.

Life Expectancy at Birth for Total Population

Table 1 shows that in 2001 the average life expectancy at birth was 79.1 years for the total California population. Life expectancy continued the general increase that has occurred over the years presented in **Table 1**, going back to 1950. **Figure 1** shows the trend of increasing life expectancy in California for the years 1990 through 2001. During this time period, life expectancy increased 2.9 years.

The life expectancy of Californians continues to exceed the life expectancy of the population of the United States (U.S.). In 2001 life expectancy was

79.1 years for the total California population compared with 77.2 years for that of the U.S. population as a whole (Tables 1 and 2). The U.S. data for 2001 are preliminary.

A description of [methods](#) is provided at the end of this report.

Life Expectancy at Birth by Sex

Life expectancy for females in 2001 was 81.4 years. Between 1990 and 2001 life expectancy for females increased 1.9 years. Life expectancy for males was 76.8 years in 2001 with an increase of 4 years between 1990 and 2001. In 2001 the difference in life expectancy between males and females was

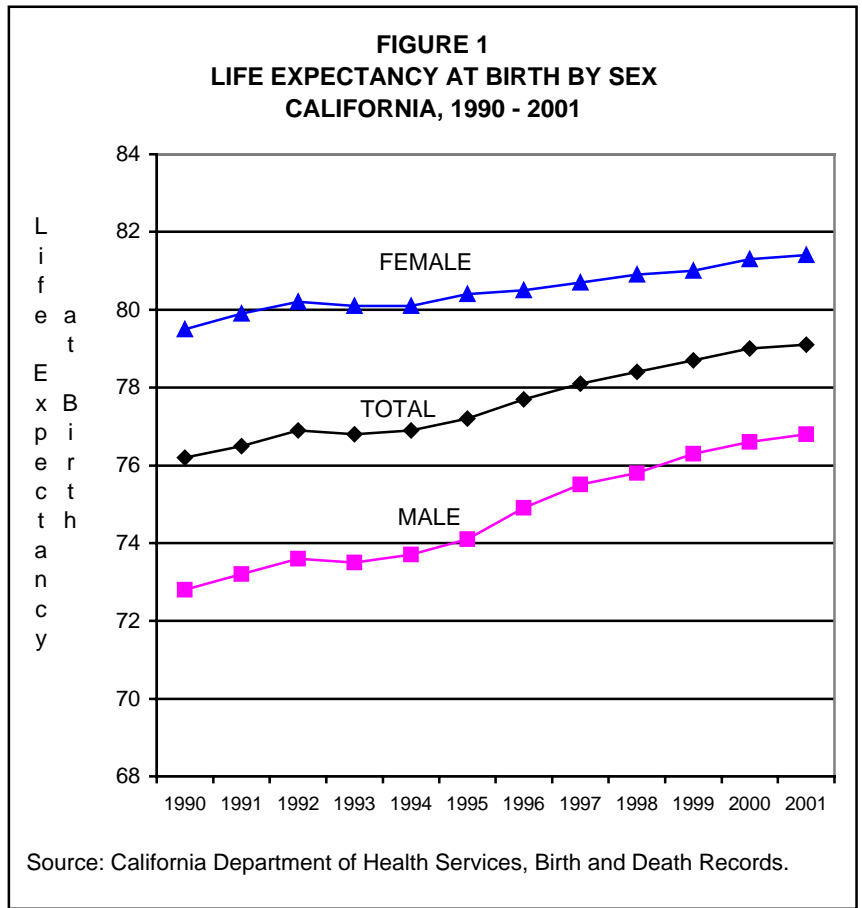
4.6 years, a narrowing from the difference of 6.7 years in 1990 (Table 1). Figure 1 shows the increases in life expectancy for both males and females, as well as the decrease in discrepancy between the two sexes.

California's male population at birth was expected to live 2.4 years longer than the U.S. male population in 2001. California's females were expected to live 1.6 years longer than the U.S. female population in 2001 (Tables 1 and 2).

Life Expectancy at Age 65

Expected remaining average years of life are often examined at 65 years of age. In 2001 a 65-year-old person living in California could expect to live an additional 19.3 years, for a total of 84.3 years. This was 0.2 year longer than in 2000 and 1.4 years longer than in 1990.

At age 65, Californians were expected to live 1.2 years longer than the U.S. preliminary population in 2001, a larger discrepancy than in prior years (1.1 years in 2000 and 0.7 years in 1990). The average years of life remaining at age 65 in California has consistently exceeded the average years of life remaining at age 65 in the U.S. (Tables 1 and 2).



Life Expectancy at Age 65 by Sex

In 2001 California's male population at age 65 was expected to live 1.5 years longer than the U.S. male (preliminary) population, while California's female population was expected to live 1.1 years longer than the U.S. female (preliminary) population. Californians of both sexes at age 65 have exceeded their respective U.S. life expectancies for many years (**Tables 1 and 2**).

For more data, see DHS Center for Health Statistics Home Page at:

www.dhs.ca.gov/org/hisp/chs/chsindex.htm

Detailed Life Tables

Tables 3 through 5 in this report are 2001 abridged life tables for California's total, male and female populations. These tables show more detail than **Tables 1 and 2**, with age intervals calculated in five-year increments.

Methodological Approach

A report entitled "Methodology for Constructing Life Tables for 1977" describes in detail the methodology used in constructing life tables.¹ The standard life table methodology uses Chiang's formulae and the "fraction of last year of life" adjustments to calculate the probability of death.² The 2001 life tables in this report follows this methodology, with the exceptions that are noted in the technical notes of the report "California Life Expectancy: Abridged Life Tables For California 1990-1996."³ The 2001 population data used for the life tables in this report came from the State of California, Department of Finance.

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¹Oreglia A. *Methodology For Constructing Abridged Life Tables For California, 1977*, Data Matters, No. 81-01021, Center for Health Statistics, California Department of Health Services, January 1981.

²Chiang Chin Long. *Life Table and Mortality Analysis*, World Health Organization, 1978.

³Harms C., McKendry J. *California Life Expectancy: Abridged Life Tables For California, 1990-96*, Data Matters, No. DM98-08000, Center for Health Statistics, California Department of Health Services, August 1999.

**TABLE 3
ABRIDGED LIFE TABLE
FOR TOTAL POPULATION
CALIFORNIA, 2001**

AGE INTERVAL	PROPORTION DYING			OF 100,000 BORN ALIVE		STATIONARY POPULATION		AVERAGE REMAINING LIFETIME
	Uncorrected	Correction Term	Corrected	Number Living at Beginning of Age Interval	Number Dying During Age Interval	In the Age Interval	In This And All Subsequent Age Intervals	Average Remaining Years of Life
0-1	-	0.17775	0.00534	100,000	534	99,561	7,910,876	79.11
1-5	0.00024	0.39286	0.00096	99,466	95	397,634	7,811,315	78.53
5-10	0.00012	0.46008	0.00062	99,371	62	496,689	7,413,682	74.61
10-15	0.00015	0.57171	0.00076	99,309	75	496,386	6,916,993	69.65
15-20	0.00059	0.59594	0.00295	99,234	293	495,580	6,420,607	64.70
20-25	0.00085	0.50377	0.00423	98,942	419	493,669	5,925,027	59.88
25-30	0.00085	0.50893	0.00423	98,523	417	491,590	5,431,358	55.13
30-35	0.00091	0.52447	0.00455	98,106	447	489,466	4,939,768	50.35
35-40	0.00130	0.53792	0.00648	97,659	633	486,832	4,450,302	45.57
40-45	0.00191	0.54223	0.00951	97,026	923	483,017	3,963,470	40.85
45-50	0.00303	0.54289	0.01506	96,103	1,447	477,207	3,480,452	36.22
50-55	0.00449	0.53213	0.02220	94,656	2,101	468,362	3,003,246	31.73
55-60	0.00666	0.53524	0.03279	92,554	3,035	455,718	2,534,883	27.39
60-65	0.01005	0.54067	0.04911	89,519	4,396	437,499	2,079,165	23.23
65-70	0.01596	0.53450	0.07696	85,123	6,551	410,366	1,641,666	19.29
70-75	0.02464	0.53354	0.11652	78,572	9,155	371,505	1,231,300	15.67
75-80	0.04000	0.52442	0.18264	69,416	12,678	316,933	859,795	12.39
80-85	0.06631	0.51484	0.28559	56,738	16,204	244,382	542,862	9.57
85+	0.13580		1.00000	40,534	40,534	298,481	298,481	7.36

Ref: Oreglia A. *Methodology for Constructing Abridged Life Tables for California, 1977*, Data Matters. Center for Health Statistics, California Department of Health Services, February 26, 1981.

Harms C, McKendry J. *California Life Expectancy: Abridged Life Tables For California, 1990-96*, Data Matters. Center for Health Statistics, California Department of Health Services, August 1998.

Sources: State of California, Department of Finance, 2001 Population: 1997-2040 Population Projections with Age and Sex Detail, December 1998.
State of California, Department of Health Services, Birth and Death Records.

**TABLE 4
ABRIDGED LIFE TABLE
FOR MALE POPULATION
CALIFORNIA, 2001**

AGE INTERVAL	PROPORTION DYING			OF 100,000 BORN ALIVE		STATIONARY POPULATION		AVERAGE REMAINING LIFETIME
	Uncorrected	Correction Term	Corrected	Number Living at Beginning of Age Interval	Number Dying During Age Interval	In the Age Interval	In This And All Subsequent Age Intervals	Average Remaining Years of Life
0-1	-	0.17384	0.00574	100,000	574	99,526	7,674,677	76.75
1-5	0.00028	0.39492	0.00111	99,426	111	397,436	7,575,151	76.19
5-10	0.00014	0.46896	0.00068	99,315	67	496,398	7,177,714	72.27
10-15	0.00017	0.55024	0.00084	99,248	83	496,054	6,681,316	67.32
15-20	0.00085	0.61438	0.00426	99,165	422	495,012	6,185,262	62.37
20-25	0.00124	0.50017	0.00620	98,743	612	492,186	5,690,250	57.63
25-30	0.00119	0.50421	0.00591	98,131	580	489,217	5,198,064	52.97
30-35	0.00120	0.52085	0.00597	97,551	583	486,358	4,708,848	48.27
35-40	0.00163	0.52788	0.00814	96,968	789	482,978	4,222,490	43.55
40-45	0.00241	0.54243	0.01198	96,179	1,152	478,259	3,739,512	38.88
45-50	0.00383	0.54464	0.01900	95,027	1,805	471,025	3,261,253	34.32
50-55	0.00553	0.53069	0.02730	93,222	2,545	460,136	2,790,228	29.93
55-60	0.00819	0.53239	0.04018	90,676	3,643	444,864	2,330,092	25.70
60-65	0.01212	0.54049	0.05897	87,033	5,132	423,374	1,885,228	21.66
65-70	0.01891	0.53164	0.09056	81,901	7,417	392,135	1,461,854	17.85
70-75	0.02938	0.53361	0.13746	74,484	10,239	348,542	1,069,719	14.36
75-80	0.04857	0.51980	0.21749	64,245	13,973	287,676	721,176	11.23
80-85	0.08058	0.50714	0.33615	50,272	16,899	209,716	433,501	8.62
85+	0.14913		1.00000	33,373	33,373	223,784	223,784	6.71

Ref: Oreglia A. *Methodology for Constructing Abridged Life Tables for California, 1977*, Data Matters. Center for Health Statistics, California Department of Health Services, February 26, 1981.

Harms C, McKendry J. *California Life Expectancy: Abridged Life Tables For California, 1990-96*, Data Matters. Center for Health Statistics, California Department of Health Services, August 1998.

Sources: State of California, Department of Finance, 2001 Population: 1997-2040 Population Projections with Age and Sex Detail, December 1998.
State of California, Department of Health Services, Birth and Death Records.

**TABLE 5
ABRIDGED LIFE TABLE
FOR FEMALE POPULATION
CALIFORNIA, 2001**

AGE INTERVAL	PROPORTION DYING			OF 100,000 BORN ALIVE		STATIONARY POPULATION		AVERAGE REMAINING LIFETIME
	Uncorrected	Correction Term	Corrected	Number Living at Beginning of Age Interval	Number Dying During Age Interval	In the Age Interval	In This And All Subsequent Age Intervals	
Period of Life Between Two Exact Ages	Average Annual Death Rate	Fraction of Last Age Interval Lived	Proportion Dying During Age Interval	Number Living at Beginning of Age Interval	Number Dying During Age Interval	In the Age Interval	In This And All Subsequent Age Intervals	Average Remaining Years of Life
0-1	-	0.18250	0.00492	100,000	492	99,598	8,138,752	81.39
1-5	0.00020	0.38979	0.00079	99,508	79	397,840	8,039,154	80.79
5-10	0.00011	0.44882	0.00056	99,429	56	496,992	7,641,315	76.85
10-15	0.00013	0.59928	0.00067	99,373	67	496,733	7,144,323	71.89
15-20	0.00031	0.53965	0.00156	99,307	155	496,176	6,647,589	66.94
20-25	0.00041	0.51625	0.00207	99,151	205	495,261	6,151,414	62.04
25-30	0.00048	0.51849	0.00237	98,946	235	494,166	5,656,153	57.16
30-35	0.00059	0.53392	0.00295	98,711	292	492,877	5,161,987	52.29
35-40	0.00094	0.55803	0.00470	98,420	462	491,078	4,669,110	47.44
40-45	0.00140	0.54312	0.00697	97,958	683	488,229	4,178,033	42.65
45-50	0.00223	0.54077	0.01110	97,275	1,080	483,896	3,689,804	37.93
50-55	0.00347	0.53474	0.01719	96,195	1,654	477,130	3,205,908	33.33
55-60	0.00519	0.54017	0.02564	94,542	2,424	467,135	2,728,778	28.86
60-65	0.00810	0.54147	0.03976	92,118	3,662	452,193	2,261,643	24.55
65-70	0.01332	0.53856	0.06460	88,456	5,714	429,094	1,809,451	20.46
70-75	0.02072	0.53522	0.09883	82,741	8,177	394,704	1,380,357	16.68
75-80	0.03378	0.52909	0.15644	74,564	11,665	345,356	985,652	13.22
80-85	0.05711	0.52231	0.25126	62,900	15,804	276,751	640,296	10.18
85+	0.12954		1.00000	47,095	47,095	363,545	363,545	7.72

Ref: Oreglia A. *Methodology for Constructing Abridged Life Tables for California, 1977*, Data Matters Center for Health Statistics, California Department of Health Services, February, 26, 1981.

Harms C, McKendry J. *California Life Expectancy: Abridged Life Tables For California, 1990-96*, Data Matters. Center for Health Statistics, California Department of Health Services, August 1998.

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