

Vital Statistics and Health

This section presents data on births, deaths, marriages, divorces, morbidity, hospitals, and health personnel.

Vital indices generally reflect the high health standards of Hawaii. Expectation of life at birth was 71.55 years in 1959-1961, seventh highest of the fifty states and almost twice the 1884-1885 average of 36.5 years. The crude death rate in 1969 was only 5.6, half the 1930 level and four-fifths below mortality rates at the turn of the century. Deaths under one year of age per 1,000 live births dropped from 205 in 1910 to less than 20 after 1965. The 1969 crude birth rate was 21.4.

Over 99 percent of all babies were born in hospitals, and a fourth were born to military couples. One out of eleven births was illegitimate. Marriages numbered 9,891 in 1969, with about a third accounted for by nonresidents. Divorces reached a 1969 total of 2,314. The State had 31 hospitals (with 5,447 beds) and 146 nursing and care homes (with 1,963 beds) when most recently surveyed.

Average length of stay in the largest of the hospitals was 8.5 days in 1969, compared with 13.0 in 1920 and 59 in the 1870's. State licensing boards listed 945 physicians and surgeons, 467 dentists, 3,078 professional nurses, and 205 pharmacists.

Major sources for data on vital statistics and health are the annual statistical reports of the Hawaii State Department of Health and various publications of the U.S. Public Health Service. Section 2 of the *Statistical Abstract of the United States: 1969* contains similar data for the nation as a whole.

Table 12. -- BIRTHS, DEATHS, MARRIAGES, AND DIVORCES: 1849 TO 1969
 (Place of occurrence basis. Not adjusted for underreporting,
 known to have been significant before 1920)

Year ¹	Live births	Deaths ²	Rate per 1,000 population ³		Infant death rate ⁴	Marriages	Divorces and annulments
			Birth	Death ²			
1849	1,422	4,320	16.6	50.5	(NA)	1,810	1
1860	1,672	2,343	23.8	33.4	(NA)	1,075	86
1870	2,413	3,819	40.8	64.6	(NA)	(NA)	38
1880	2,350	2,550	35.6	38.6	(NA)	(NA)	79
1890	(NA)	(NA)	(NA)	30.6	(NA)	(NA)	48
1900	(NA)	(NA)	(NA)	32.8	(NA)	(NA)	48
1910	4,302	2,941	22.8	15.6	205.5	1,959	197
1920	10,165	4,564	40.4	18.1	108.8	2,127	570
1930	10,873	3,976	31.1	11.4	82.3	2,443	529
1940	9,524	3,025	24.1	7.6	43.7	5,355	946
1950	14,059	2,883	29.4	6.0	23.8	5,575	1,173
1960	17,193	3,540	29.5	6.1	23.2	5,237	1,270
1961	17,558	3,367	29.3	5.6	21.7	5,298	1,556
1962	17,932	3,512	29.1	5.7	20.6	5,484	1,471
1963	17,744	3,643	28.1	5.8	22.5	5,750	1,515
1964	17,284	3,638	26.8	5.6	19.8	5,790	1,690
1965	16,259	3,705	24.4	5.6	21.5	6,071	1,111
1966	14,943	3,770	22.0	5.5	18.9	5,792	897
1967	14,765	3,897	21.0	5.5	16.9	7,345	1,451
1968	14,595	4,192	20.3	5.8	19.0	9,021	1,865
1969	15,755	4,158	21.4	5.6	19.1	9,891	2,314

Year	Percent of births			Percent of deaths 65 and over ⁷	Resident grooms		Percent of marriages interracial
	In hospitals ⁵	Father in armed forces	Illegitimate ⁶		Number	Percent	
1940	69.5	(NA)	6.25	28.8	(NA)	(NA)	25.0
1950	97.1	(NA)	4.97	39.3	(NA)	(NA)	29.7
1960	99.1	29.5	5.13	46.7	5,043	96.3	37.3
1961	99.1	27.8	5.76	46.5	5,101	96.3	36.1
1962	99.3	28.3	6.03	47.9	5,291	96.5	37.7
1963	99.3	28.2	6.40	47.8	5,516	95.9	38.6
1964	99.5	28.9	6.63	49.3	5,481	94.7	38.3
1965	99.3	26.6	7.21	48.8	5,703	93.9	38.1
1966	99.4	22.9	8.38	49.9	5,358	92.5	37.7
1967	99.5	24.4	8.75	52.5	5,904	80.4	33.5
1968	99.3	25.9	9.48	51.0	6,321	70.1	33.8
1969	(NA)	25.9	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

1. Divorce total for 1860 is annual average for two-year period ended March 31, 1862. Birth and death data for 1880 and divorce data for 1870-1890 are annual averages for two-year periods begun on January 1 for year specified. Birth and death data, 1910-1940, infant deaths and marriages, 1910, and hospital births, illegitimate births, and interracial marriages, 1940, are for years ended June 30. All other data are for calendar years.

2. Death data include armed forces through 1940 but exclude them thereafter. The 1890 and 1900 rates are for Honolulu only.

3. Based on total resident population through 1900 and civilian resident population thereafter.

4. Deaths under one year of age per 1,000 live births.

5. Place of residence basis for 1940 and 1950.

6. Place of residence basis for all years.

7. Includes armed forces through 1961 but excludes them thereafter.

Source: Hawaii State Department of Health, annual statistical reports for 1940, 1950, and 1960-1968, and records; Robert C. Schmitt, Demographic Statistics of Hawaii: 1778-1965 (University of Hawaii Press, 1968), pp. 165-167, 171, and 210-212.

Table 13. -- AVERAGE REMAINING LIFETIME IN YEARS AT SPECIFIED AGES, BY SEX:
1884-1885 TO 1959-1961

Sex and year	Birth	1	15	25	45	65
Both sexes:						
1884-1885 ¹	36.5	41.2	33.9	27.8	18.4	5.1
1959-1961	71.55	72.22	58.71	49.19	30.48	14.97
Male:						
1919-1920	47.7	--	--	--	--	--
1929-1931	52.63	57.24	46.43	38.03	22.01	8.71
1939-1941	59.46	61.79	49.38	40.31	23.37	9.10
1949-1951	67.76	68.77	55.54	46.20	28.01	13.70
1959-1961....						
White	66.95	67.55	53.95	44.48	25.81	12.00
Nonwhite	70.69	71.62	58.18	48.88	30.34	14.73
Female:						
1919-1920	47.27	--	--	--	--	--
1929-1931	55.31	58.55	47.38	39.10	23.63	9.16
1939-1941	62.60	64.32	51.67	42.51	25.26	9.85
1949-1951	71.29	71.86	58.51	48.93	30.50	15.11
1959-1961....						
White	72.37	72.84	59.22	49.50	30.58	14.95
Nonwhite	74.81	75.31	61.82	52.12	33.28	16.92

1. City of Honolulu only. For two-year period ended March 31, 1885.

Source: Robert C. Schmitt, Demographic Statistics of Hawaii: 1778-1965 (University of Hawaii Press, 1968), p. 172; U.S. Department of Health, Education, and Welfare, Public Health Service, Life Tables: 1959-61, Vol. 2, No. 12, Hawaii State Life Tables: 1959-61 (June 1966), pp. 162-171.

Table 14. -- CIVILIAN DEATHS, BY CAUSE: 1928 TO 1968

Cause of death ¹	Number, 1968	Percent distribution			Rate per 100,000 population		
		1968	1958	1928	1968	1958	1928
All causes	4,192	100.0	100.0	100.0	584.1	543.3	1,209.6
Disease of the heart	1,374	32.8	33.0	10.1	191.5	179.2	121.7
Malignant neoplasms	800	19.1	17.7	5.5	111.5	95.9	66.0
Cerebrovascular disease	351	8.4	8.4	5.1	48.9	45.5	61.9
All accidents	274	6.5	5.1	6.7	38.2	27.6	81.2
Influenza and pneumonia	175	4.2	3.8	14.4	24.4	20.5	174.4
Diseases of early infancy ...	169	4.0	8.3	6.2	23.5	45.2	75.3
Diabetes mellitus	100	2.4	2.2	0.6	13.9	12.0	7.6
Congenital anomalies	72	1.7	2.4	1.2	10.0	13.2	15.0
Cirrhosis of liver	65	1.6	1.2	0.6	9.1	6.8	7.3
Suicide	58	1.4	1.8	1.6	8.1	9.9	19.6
Emphysema	57	1.4	(NA)	(NA)	7.9	(NA)	(NA)
Nephritis and nephrosis	36	0.9	1.4	5.7	5.0	7.6	68.9
Arteriosclerosis	35	0.8	1.5	(NA)	4.9	8.2	(NA)
Peptic ulcer	35	0.8	0.7	0.8	4.9	3.8	9.4
Asthma	27	0.6	0.8	(NA)	3.8	4.5	(NA)
Other than specified above ..	564	13.4	11.7	41.4	78.6	63.4	501.3

NA Not available.

1. The 15 leading causes of death in 1968, listed in order of deaths for that year.

Source: Annual Report, Department of Health, State of Hawaii, Statistical Supplement, 1968, p. 30.

Table 15. -- AVERAGE LENGTH OF STAY AND COST PER PATIENT DAY AT THE QUEEN'S HOSPITAL: 1859 TO 1969

Year ¹	Average stay (days)	Cost per patient day (dollars)	Year	Average stay (days)	Cost per patient day (dollars)
1859 - 1861	42	0.83	1950	7.3	21.16
1877 - 1879	59	0.61	1960	6.5	37.90
1903	33.7	1.78	1967	7.5	61.93
1920	13.0	4.20	1968	7.8	66.48
1940	8.3	6.20	1969	8.5	71.65

1. August 1, 1859 - June 20, 1861; 24-month period ended in mid-1879; calendar years 1903-1940; fiscal years ended June 30, 1950-1969.

Source: Robert C. Schmitt, "Medical Costs in Hawaii, 1859-1967," Hawaii Medical Journal, Jan. - Feb. 1968, pp. 236-239; The Queen's Medical Center, records.

Table 16. -- HOSPITALS AND NURSING AND CARE HOMES, BY ISLAND: 1968

Category and island	Number of estab.	Beds		Bassi-nets	Pct. of occu-pancy	Average patient occup.	Patients ad-mitted
		Total ¹	Accept-able				
HOSPITALS							
All islands	31	5,447	3,005	305	78.6	4,170	81,771
Hawaii	5	507	355	42	75.9	385	8,084
Maui	3	318	181	37	62.3	197	5,180
Lanai	1	14	14	3	14.2	2	133
Molokai	2	307	28	4	53.4	164	1,093
Oahu	17	4,022	2,244	196	80.0	3,326	63,326
Kauai	3	279	183	23	73.5	205	4,155
NURSING AND CARE HOMES							
All islands	146	1,963	1,964	--	92.2	1,811	2,277
Hawaii.....	5	28	28	--	92.8	26	29
Maui	6	141	142	--	70.4	100	56
Oahu	105	987	1,001	--	92.7	914	656
Kauai	18	66	65	--	87.8	58	50

1. Maximum based on square foot requirements rather than actual complement. The hospital total of 5,447 beds includes 1,978 general beds, 97 maternity-gynecological, 73 pediatric, 336 tuberculosis, 1,634 mental, 539 leprosy, 689 long-term, 58 orthopedic, and 43 rehabilitation. Data include residential cottages for leprosy and mental patients.

Source: Annual Report, Department of Health, State of Hawaii, Statistical Supplement, 1968, pp. 115-117.

Table 17. -- PHYSICIANS, DENTISTS, NURSES AND PHARMACISTS LICENSED IN HAWAII, BY ISLAND: 1969

Date of data and professional group	All islands	Hawaii	Maui	Lanai	Molokai	Oahu	Kauai
June 1969:							
Physicians (M.D.) ..	945	58	38	2	2	825	20
Dentists	467	31	19	1	1	397	18
Reg. nurses (active).	3,078	205	142	7	19	2,625	80
March 1969:							
Pharmacists	205	11	10	--	1	179	4

Source: Hawaii State Department of Regulatory Agencies, October 17, 1969.

Table 18. -- STATISTICS FROM THE HAWAII HEALTH SURVEILLANCE PROGRAM SURVEY, FOR OAHU: 1964-1967

Subject	Number ¹
Average non-institutional, non-barracks population	565,000
Hospital discharges, annual average	66,500
Median length of stay per discharged person (days)	5.0
Acute conditions, annual average	1,040,700
Per 100 population	182.6
Persons with one or more chronic conditions, average	205,100
Percent of population	36.3
Restricted activity days, annual average per person.....	12.0
Bed days, annual average per person	4.8
Injuries, annual average per person ²	28.1
Home accidents, annual average per person ²	8.3

1. Based on sample of non-institutional non-barracks population surveyed April 1964 - March 1967, unless otherwise specified.

2. Surveyed April 1964 - September 1965.

Source: Hawaii State Department of Health, unpublished tabulations.