Center for
Health Statistics

California Department of Health Services

July 2006

DATA SUMMARY
No. DS06-07000

Recent trends in deaths, diseases, and injuries for the California Baby Boomer population are examined in this report.

Highlights

Baby Boomers comprised 27 percent of the total California population in 2000.

Fifteen percent of Baby Boomers had no health insurance coverage in 2001 and 2003.

Death rates increased significantly for Baby Boomers between 2000 and 2004. The leading causes of death for Baby Boomers were cancer, heart disease, and unintentional injuries.

Morbidity indicators examined for Baby Boomers were: Obesity and overweight; Substance abuse; Mental disorders; Infectious and parasitic diseases; and Complications of medical and surgical care.

Mortality and Morbidity Among Baby Boomers California, 2000-2004

Introduction

According to the United States (U.S.) Census, there were 9.3 million Californians (27.4 percent of the total population) born between 1946-1964 and who were between the ages of 36-54 years in the year 2000.[1] Population projections indicate that while the Baby Boomers represented approximately 25 percent of California's population in 2005, by the year 2050 this cohort will have declined to only three percent of the population.[2]

Abridged life table data for California show that Baby Boomers age 55 in 2001 would have a total life expectancy (LE) of 27.2 years, and a healthy life expectancy (HLE) of 19.9 years (Table 1).[3] A female Baby Boomer was expected to have an average of 3.2 more years of life than their male counterparts at age 55, and 1.9 years more of HLE.

Table 1. Life Expectancy and Healthy Life Expectancy For Baby Boomers, California 2001

	TOTAL		FEMALE		MALE	
Age Interval	LE	HLE	LE	HLE	LE	HLE
35-39	45.3	35.1	47.2	36.0	43.2	34.1
40-44	40.6	31.0	42.5	32.0	38.5	30.0
45-49	36.0	27.1	37.8	28.0	34.0	26.1
50-54	31.5	23.4	33.2	24.2	29.7	22.4
55-59	27.2	19.9	28.7	20.8	25.5	18.9

SOURCE: Healthy California 2010: Progress in Achieving the Healthy People 2010 Objectives, 2000-2003. May 2005; Tables 1-A through 2-C.

Baby Boomers will face many health challenges as they continue to age, and will experience substantial health disparities for many conditions. The relative impact among Baby Boomers can be seen in the morbidity data developed by the California Office of Statewide Health Planning and Development (OSHPD).[4] For example, hospitalizations among Baby Boomers aged 37-55 during 2001 show that although females had significantly higher rates for chronic diseases, males had significantly higher rates for communicable diseases and for injuries (Table 2).

Table 2. Hospitalizations Among Baby Boomers, California 2001

Principal Diagnosis	TOTAL N	TOTAL Rate	FEMALE N	FEMALE Rate	MALE N	MALE Rate
Chronic Diseases	625,254	6,685.5	357,341	7,619.5	267,889	5,745.6
Injuries	64,980	694.8	27,767	592.1	37,207	798.0
Communicable Diseases	17,845	190.8	6,963	148.5	10,881	233.4

SOURCE: Office of Statewide Health Planning and Development, Patient Discharge Data.
NOTES: Rates are per 100,000 population aged 37-55; chronic diseases are defined by ICD-9-CM codes 140-459, 467-799; communicable diseases by ICD-9-CM codes 001-136, 460-466; injuries by ICD-9-CM codes 800-999.

Mortality among Baby Boomers will continue to increase as this population ages, and the leading causes of death transition from acute (e.g., unintentional injuries, homicide, suicide) to chronic conditions (e.g., heart disease, cancer, liver disease).[5] These increases and changes are likely to disproportionately impact health care and medical services, depending on population size, health status, and on the availability of services for this population at the local and regional levels.

California Health Interview Survey (CHIS) data indicate that while a greater proportion of female Baby Boomers had current health insurance coverage, they also delayed or did not get medical care compared with their male counterparts (Table 3).[6] These data further show that a greater percentage of both female and male Baby Boomers delayed or did not get medical care in 2003 compared with 2001, despite no appreciable change in the percentages who had current health insurance. The reasons most cited for delayed medical care or not receiving medical care were that they “forgot” (37.0 percent), or that they “couldn’t afford it” (12.2 percent). Only 4.2 percent of those surveyed reported that their insurance coverage would not pay for the medical care being sought.

Table 3. Selected California Health Interview Survey Responses from Baby Boomers, 2001 and 2003

Survey Topic	2001 FEMALE N	2001 FEMALE Percent	2003 FEMALE N	2003 FEMALE Percent	2001 MALE N	2001 MALE Percent	2003 MALE N	2003 MALE Percent
Had current health insurance	3,970,000	85.7	3,957,000	85.3	3,768,000	84.2	3,796,000	84.5
Delayed or didn't get medical care	796,000	17.2	877,000	18.9	598,000	13.4	695,000	15.5

SOURCE: California Health Interview Survey, 2001 and 2003.
NOTE: Includes responses for persons aged 37-55 in 2001 and 39-57 in 2003.

Methods

Data Sources

Mortality data used in this report were extracted from the Death Statistical Master Files (DSMF) and the Multiple Cause-Of-Death (MCOD) files maintained by the California Department of Health Services (CDHS), Center for Health Statistics (CHS). The underlying cause of death reported in these files uses *International Classification of Diseases, Tenth Revision* (ICD-10) codes, which represent the disease or condition that initiated the train of morbid events leading directly to death.[7] A contributing cause of death is operationally defined as any mention of an ICD-10 code as an "other than underlying" or a "contributing" cause of death, which are extracted from the MCOD file's record axis codes.[8] Mortality data were tabulated by place of residence, which excludes deaths that occurred among persons who were not residents of California. Baby Boomers were defined by their age at death, which included ages 36-54 for the year 2000, ages 37-55 for 2001, ages 38-56 for 2002, ages 39-57 for 2003, and ages 40-58 for 2004.

Morbidity data were extracted from the Patient Discharge Data (PDD) files developed by the OSHPD. The principal diagnosis reported in these files are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) codes, which represent the condition established to be the chief cause of the admission of the patient to the hospital.[9] Morbidity data were also extracted by place of residence, which exclude non-California residents, and for the age ranges specific to Baby Boomers in each year.

Prevalence estimates for selected morbid conditions were extracted from the CHIS database maintained by the University of California-Los Angeles, Center for Health Policy Research. The CHIS is a two-stage, geographically stratified random-digit-dial sample design, and the survey is conducted every two years.[10] The CHIS collected information from more than 55,000 households in 2001, and 42,000 households were surveyed statewide in 2003. Data specific to the Baby Boomer age ranges were extracted using the AskCHIS online query system.[6]

Population denominator data used in the calculation of age-specific mortality and morbidity rates were developed by the California Department of Finance, Demographic Research Unit, which bases its population estimates and projections on updated 2000 U.S. Census data for California.[11]

Data Limitations and Qualifications

Limitations and qualifications of mortality data are related to errors in the registration and reporting processes, and are examined in detail elsewhere.[12] Suffice it to say that death rates are sensitive to variations in both the numerator (the number of deaths) and denominator (population at risk), and are subject to errors that often lead to erroneous interpretations.

The rankings of leading causes of death follow a methodology developed by the National Center for Health Statistics (NCHS) that depends largely on how causes are grouped.[13] For example, cancer is the leading cause of death among Baby Boomers when all cancers are subsumed into one rankable cause of death category (defined by ICD-10 codes C00-C97) . However, if the different types of cancer were counted separately (e.g., lung cancer (C33-C34), breast cancer (C50), prostate cancer (C61), etc.), then their relative rankings as leading causes of death would be much lower. Some other causes of death (e.g., drug-induced, alcohol-induced) are also not rankable under the NCHS procedures, although these may be of considerable public health importance when assessing health status indicators for the Baby Boomer population.

Hospital discharge data limitations and qualifications also involve registration and reporting accuracy, and completeness of reporting. The OSHPD PDD system collects and reports data only for the civilian, non-institutionalized population admitted to licensed hospitals in California, with few exceptions that are detailed elsewhere.[14] Patient-level data are derived from hospital administrative discharge records and coding is not regularly audited by medical chart reviews, thus reporting may be inconsistent within a facility and between facilities throughout the state.

Population-based mortality and morbidity rates presented in this report are "age-specific" rates, not to be confused with "age-adjusted" rates. Age-specific rates per 100,000 population were calculated for Baby Boomers who were between the ages of 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004. While age-adjusted rates are based on a hypothetical "standard" population and provide useful relative comparisons for populations across space and time or between racial and ethnic groups, age-specific rates for Baby Boomers by gender and by race/ethnicity provide an absolute measurement as well as a useful tool for statistical comparisons and trend analyses.[15-16]

The CHIS data are based on telephone survey results, and are also subject to sampling errors and biases described in detail elsewhere.[6,10] Households without telephones and persons who only use cell phones were not included in the surveys. The overall adult response rate for the 2001 CHIS was 37.7 percent, and for the 2003 CHIS was 33.5 percent.[17-18] Since estimates for adults were based on self-reported data, the prevalence of certain health conditions may be over- or underestimated depending on whether the respondent had access to health care and medical services. Prevalence data from the CHIS were extracted for the Baby Boomer population according to the age ranges cited previously.

Results

Mortality Trends

The number of deaths among California resident Baby Boomers increased 35.3 percent from 24,840 in 2000 to 33,619 in 2004, and death rates per 100,000 population increased significantly from 266.8 in 2000 to 358.0 in 2004 (Table 4, Figure 1).

Death rates for male Baby Boomers were 1.7 times higher than those for female Baby Boomers each year during the 2000-2004 time period. Death rates for African American/Black Baby Boomers were significantly higher than rates for any other racial or ethnic population. Whites experienced the next highest death rates, followed by American Indians/Alaska Natives, Hispanics/Latinos, and Asians/Pacific Islanders. Multiracial Baby Boomers experienced the lowest death rates.

For the total California Baby Boomer population, the relative rankings of the top five leading causes of death (cancer, heart disease, injuries, chronic liver disease, and suicide) did not change between 2000 and 2004 (Table 5, Figure 2). Statistically significant increases in death rates were found for four of the top five leading causes of death, with no significant trend being found for suicide among Baby Boomers between 2000 and 2004. A significant decline in Human Immunodeficiency Virus (HIV) death rates between 2000 and 2004 was found, along with no significant trend for homicide rates among resident Baby Boomers.

Table 4. Deaths Among Baby Boomers, California 2000-2004

Population	2000	2001	2002	2003	2004
Total (All Races, Both Sexes)	9,310,840	9,352,353	9,381,144	9,418,665	9,389,994
Male	4,646,861	4,662,504	4,672,137	4,686,641	4,663,677
Female	4,663,979	4,689,849	4,709,007	4,732,024	4,726,317
African American/Black	618,040	622,119	627,249	634,670	630,390
American Indian/Alaska Native	58,519	65,181	70,244	74,827	79,345
Asian/Pacific Islander	1,131,819	1,151,584	1,158,106	1,152,314	1,168,188
Hispanic/Latino	2,352,726	2,386,556	2,413,846	2,431,352	2,438,531
White	5,024,272	5,001,478	4,986,277	5,000,050	4,948,201
Multirace	125,464	125,435	125,422	125,452	125,339
Deaths[1]	**2000**	**2001**	**2002**	**2003**	**2004**
Total (All Races, Both Sexes)	24,840	27,245	29,057	32,286	33,619
Male	15,674	17,009	18,215	20,210	20,899
Female	9,166	10,236	10,842	12,076	12,720
African American/Black	3,273	3,566	3,784	4,214	4,306
American Indian/Alaska Native	185	194	188	259	252
Asian/Pacific Islander	1,680	1,853	1,953	2,182	2,420
Hispanic/Latino	4,923	5,471	5,786	6,532	6,624
White	14,668	16,057	17,230	18,874	19,771
Multirace	86	63	82	171	202
Death Rates[2]	**2000**	**2001**	**2002**	**2003**	**2004**
Total (All Races, Both Sexes)	266.8	291.3	309.7	342.8	358.0
Male	337.3	364.8	389.9	431.2	448.1
Female	196.5	218.3	230.2	255.2	269.1
African American/Black	529.6	573.2	603.3	664.0	683.1
American Indian/Alaska Native	316.1	297.6	267.6	346.1	317.6
Asian/Pacific Islander	148.4	160.9	168.6	189.4	207.2
Hispanic/Latino	209.2	229.2	239.7	268.7	271.6
White	291.9	321.0	345.5	377.5	399.6
Multirace	68.5	50.2	65.4	136.3	161.2

SOURCES: California Department of Health Services, Center for Health Statistics, Death Statistical Master Files, 2000-2004;
California Department of Finance, Demographic Research Unit, Population Projections for California and Its Counties 2000-2050, May 2004.

NOTES: [1] Number of deaths among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004;
[2] Rate per 100,000 persons in each specified age range.

Table 5. Leading Causes of Death Among Baby Boomers, California 2000-2004

Cause of Death	ICD-10 Codes	2000 N[1]	2000 Rate[2]	2001 N[1]	2001 Rate[2]	2002 N[1]	2002 Rate[2]
Malignant neoplasms (cancers)	C00-C97	6,396	68.7	7,317	78.2	7,892	84.1
Diseases of the heart	I00-I09, I11, I13, I20-I51	4,352	46.7	4,878	52.2	5,429	57.9
Accidents	V01-X59, Y85-Y86	2,892	31.1	3,046	32.6	3,318	35.4
Chronic liver disease and cirrhosis	K70, K73-K74	1,489	16.0	1,651	17.7	1,673	17.8
Suicide	X60-X84, Y87.0	1,186	12.7	1,210	12.9	1,224	13.0
Human immunodeficiency virus (HIV)	B20-B24	979	10.5	945	10.1	942	10.0
Cerebrovascular disease (stroke)	I60-I69	919	9.9	981	10.5	1,031	11.0
Diabetes	E10-E14	678	7.3	764	8.2	814	8.7
Chronic lower respiratory diseases	J40-J47	490	5.3	537	5.7	560	6.0
Homicide	X85-Y09, Y87.1	490	5.3	528	5.6	538	5.7

Cause of Death	ICD-10 Codes	2003 N[1]	2003 Rate[2]	2004 N[1]	2004 Rate[2]	Trend[3]
Malignant neoplasms (cancers)	C00-C97	8,655	91.9	9,301	99.1	Sig. +
Diseases of the heart	I00-I09, I11, I13, I20-I51	6,411	68.1	6,518	69.4	Sig. +
Accidents	V01-X59, Y85-Y86	3,509	37.3	3,459	36.8	Sig. +
Chronic liver disease and cirrhosis	K70, K73-K74	1,797	19.1	1,825	19.4	Sig. +
Suicide	X60-X84, Y87.0	1,311	13.9	1,276	13.6	ns
Human immunodeficiency virus (HIV)	B20-B24	877	9.3	844	9.0	Sig. -
Cerebrovascular disease (stroke)	I60-I69	1,254	13.3	1,285	13.7	Sig. +
Diabetes	E10-E14	996	10.6	1,123	12.0	Sig. +
Chronic lower respiratory diseases	J40-J47	690	7.3	741	7.9	Sig. +
Homicide	X85-Y09, Y87.1	499	5.3	477	5.1	ns

SOURCES: California Department of Health Services, Center for Health Statistics, Death Statistical Master Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of deaths among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004;
[2] Rate per 100,000 persons in each specified age range.
[3] Statistically significant increase (Sig. +) or decrease (Sig. -) in age-specific death rates as measured by linear regression analysis ($p < .05$); Not significant (ns).

Disparities in mortality among Baby Boomers by gender indicate that heart disease was the leading cause of death for males followed by cancer (Table 6), and that cancer was the leading cause of death for female baby Boomers followed by heart disease (Table 7). Accidental injury was the third leading cause of death for both male and female Baby Boomers.

Statistically significant increases in death rates were found for seven of the top ten leading causes of death for male Baby Boomers, with no significant trend found for suicide and homicide rates and a significant decline found for HIV death rates. For female Baby Boomers, statistically significant increases were found for six of the leading causes of death and a significant decrease for HIV. No significant trends were found in death rates for five leading causes among female Baby Boomers (chronic liver disease, suicide, pneumonia and influenza, HIV, and homicide).

Table 6. Leading Causes of Death Among Male Baby Boomers, California 2000-2004

Cause of Death - Males	ICD-10 Codes	2000 N[1]	2000 Rate[2]	2001 N[1]	2001 Rate[2]	2002 N[1]	2002 Rate[2]
Diseases of the heart	I00-I09, I11, I13, I20-I51	3,221	69.3	3,567	76.5	3,985	85.3
Malignant neoplasms (cancers)	C00-C97	2,933	63.1	3,452	74.0	3,764	80.6
Accidents	V01-X59, Y85-Y86	2,138	46.0	2,180	46.8	2,362	50.6
Chronic liver disease and cirrhosis	K70, K73-K74	1,074	23.1	1,164	25.0	1,206	25.8
Suicide	X60-X84, Y87.0	878	18.9	895	19.2	912	19.5
Human immunodeficiency virus (HIV)	B20-B24	857	18.4	819	17.6	811	17.4
Cerebrovascular disease (stroke)	I60-I69	501	10.8	542	11.6	559	12.0
Diabetes	E10-E14	389	8.4	466	10.0	477	10.2
Homicide	X85-Y09, Y87.1	369	7.9	382	8.2	413	8.8
Chronic lower respiratory diseases	J40-J47	264	5.7	271	5.8	292	6.2

Cause of Death - Males	ICD-10 Codes	2003 N[1]	2003 Rate[2]	2004 N[1]	2004 Rate[2]	Trend[3]
Diseases of the heart	I00-I09, I11, I13, I20-I51	4,670	99.6	4,686	100.5	Sig. +
Malignant neoplasms (cancers)	C00-C97	4,146	88.5	4,563	97.8	Sig. +
Accidents	V01-X59, Y85-Y86	2,428	51.8	2,365	50.7	ns
Chronic liver disease and cirrhosis	K70, K73-K74	1,301	27.8	1,308	28.0	Sig. +
Suicide	X60-X84, Y87.0	984	21.0	903	19.4	ns
Human immunodeficiency virus (HIV)	B20-B24	778	16.6	728	15.6	Sig. -
Cerebrovascular disease (stroke)	I60-I69	719	15.3	737	15.8	Sig. +
Diabetes	E10-E14	573	12.2	657	14.1	Sig. +
Homicide	X85-Y09, Y87.1	376	8.0	375	8.0	ns
Chronic lower respiratory diseases	J40-J47	367	7.8	411	8.8	Sig. +

SOURCES: California Department of Health Services, Center for Health Statistics, Death Statistical Master Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of deaths among males aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004;

[2] Rate per 100,000 males in each specified age range.

[3] Statistically significant increase (Sig. +) or decrease (Sig. -) in age-specific death rates as measured by linear regression analysis ($p < .05$); Not significant (ns).

Table 7. Leading Causes of Death Among Female Baby Boomers, California 2000-2004

Cause of Death - Females	ICD-10 Codes	2000 N[1]	2000 Rate[2]	2001 N[1]	2001 Rate[2]	2002 N[1]	2002 Rate[2]
Malignant neoplasms (cancers)	C00-C97	3,463	74.2	3,865	82.4	4,128	87.7
Diseases of the heart	I00-I09, I11, I13, I20-I51	1,131	24.2	1,311	28.0	1,444	30.7
Accidents	V01-X59, Y85-Y86	754	16.2	866	18.5	956	20.3
Cerebrovascular disease (stroke)	I60-I69	418	9.0	439	9.4	472	10.0
Chronic liver disease and cirrhosis	K70, K73-K74	415	8.9	487	10.4	467	9.9
Suicide	X60-X84, Y87.0	308	6.6	315	6.7	312	6.6
Diabetes	E10-E14	289	6.2	298	6.4	337	7.2
Chronic lower respiratory diseases	J40-J47	226	4.8	266	5.7	268	5.7
Pneumonia and influenza	J10-J18	128	2.7	105	2.2	121	2.6
Human immunodeficiency virus (HIV)	B20-B24	122	2.6	126	2.7	131	2.8
Homicide	X85-Y09, Y87.1	121	2.6	146	3.1	125	2.7

Cause of Death - Females	ICD-10 Codes	2003 N[1]	2003 Rate[2]	2004 N[1]	2004 Rate[2]	Trend[3]
Malignant neoplasms (cancers)	C00-C97	4,509	95.3	4,738	100.2	Sig. +
Diseases of the heart	I00-I09, I11, I13, I20-I51	1,741	36.8	1,832	38.8	Sig. +
Accidents	V01-X59, Y85-Y86	1,081	22.8	1,094	23.1	Sig. +
Cerebrovascular disease (stroke)	I60-I69	535	11.3	548	11.6	Sig. +
Chronic liver disease and cirrhosis	K70, K73-K74	496	10.5	517	10.9	ns
Suicide	X60-X84, Y87.0	327	6.9	373	7.9	ns
Diabetes	E10-E14	423	8.9	466	9.9	Sig. +
Chronic lower respiratory diseases	J40-J47	323	6.8	330	7.0	Sig. +
Pneumonia and influenza	J10-J18	155	3.3	162	3.4	ns
Human immunodeficiency virus (HIV)	B20-B24	99	2.1	116	2.5	ns
Homicide	X85-Y09, Y87.1	123	2.6	102	2.2	ns

SOURCES: California Department of Health Services, Center for Health Statistics, Death Statistical Master Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of deaths among females aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004;
[2] Rate per 100,000 females in each specified age range.
[3] Statistically significant increase (Sig. +) or decrease (Sig. -) in age-specific death rates as measured by linear regression analysis ($p < .05$); Not significant (ns).

Selected Morbidity Indicators

Overweight and Obesity

Prevalence estimates generated from CHIS data for 2001 indicate that approximately 37.9 percent of Baby Boomers aged 37-55 years were overweight (i.e., had a Body Mass Index (BMI) of between 25.0 and 29.9), and that 22.8 percent were obese (i.e., had a BMI of 30.0 or greater) (Table 8). Data for 2003 show 36.9 percent of Baby Boomers aged 39-57 years were overweight (-1.0 percent from 2001) and 24.0 percent were obese (+1.2 percent from 2001).

Prevalence rates for overweight among male Baby Boomers (47.8 percent in 2001 and 46.3 percent in 2003) were significantly greater than that for females (28.1 and 27.8 percent, respectively), although there was no significant difference between male and female Baby Boomers for obesity rates. While the prevalence for overweight declined for both male and female Baby Boomers, the prevalence of obesity increased for both sexes between 2001 and 2003.

Examined by race/ethnicity, the highest overweight prevalence rates were observed for Hispanic/Latino Baby Boomers (42.7 percent in 2001 and 41.1 percent in 2003), while the highest obesity prevalence rates were observed for African American/Black Baby Boomers (35.1 percent in 2001 and 38.1 percent in 2003). The lowest overweight and obesity prevalence rates were observed for Asian Baby Boomers.

Patient discharge data from the OSHPD (Table 9) indicate that there were a total of 51,191 obesity-related hospital discharges among Baby Boomers aged 37-55 in 2001, at a rate of 549.8 per 100,000 population. In 2003, obesity-related hospital discharges among Baby Boomers aged 39-57 had significantly increased to 68,011 (727.2 per 100,000 population).

Although the obesity prevalence data indicated no significant difference between the sexes, obesity-related hospital discharge rates were significantly higher for females than for males (for 2003, 936.7 per 100,000 females versus 505.4 per 100,000 males). African American/Black Baby Boomers experienced significantly higher obesity-related hospital discharge rates (1437.9 per 100,000 in 2003) and Asians/Pacific Islanders experienced the lowest discharge rates (114.3 per 100,000 in 2003), a pattern similar to the obesity prevalence data observed in the CHIS data.

Table 8. Overweight and obesity prevalence among Baby Boomers, California 2001 and 2003

2001	TOTAL		OVERWEIGHT[1]		OBESE[2]	
Baby Boomers Aged 37-55	N	PERCENT	N	PERCENT	N	PERCENT
Total (All Races, Both Sexes)	5,392,000	60.7	3,368,000	37.9	2,024,000	22.8
Male	3,121,000	70.5	2,115,000	47.8	1,006,000	22.7
Female	2,271,000	51.0	1,253,000	28.1	1,018,000	22.9
African American/Black	432,000	74.7	229,000	39.6	203,000	35.1
American Indian/Alaska Native	48,000	66.3	24,000	32.9	24,000	33.4
Asian	362,000	34.4	311,000	29.5	51,000	4.9
Hispanic/Latino	1,710,000	75.3	970,000	42.7	740,000	32.6
White	2,712,000	57.6	1,766,000	37.5	946,000	20.1
Multirace	82,000	61.4	43,000	32.4	39,000	29.0
Other Single Race	45,000	69.2	25,000	38.3	20,000	30.9

2003	TOTAL		OVERWEIGHT[1]		OBESE[2]	
Baby Boomers Aged 39-57	N	PERCENT	N	PERCENT	N	PERCENT
Total (All Races, Both Sexes)	5,556,000	60.9	3,369,000	36.9	2,187,000	24.0
Male	3,199,000	71.2	2,080,000	46.3	1,119,000	24.9
Female	2,356,000	50.8	1,289,000	27.8	1,067,000	23.0
African American/Black	460,000	74.8	226,000	36.7	234,000	38.1
American Indian/Alaska Native	38,000	60.2	23,000	37.1	15,000	23.1
Asian	359,000	34.7	285,000	27.6	74,000	7.1
Hispanic/Latino	1,797,000	74.3	994,000	41.1	803,000	33.2
White	2,789,000	58.0	1,779,000	37.0	1,010,000	21.0
Multirace	85,000	60.8	46,000	32.7	39,000	28.1
Other Single Race	30,000	62.2	17,000	35.7	13,000	26.5

SOURCE: California Health Interview Survey, 2001 and 2003.

NOTES: [1] Overweight defined as a Body Mass Index (BMI) of 25.0 - 29.9;

[2] Obese defined as a BMI of 30.0 or greater.

Table 9. Obesity-Related Hospital Discharges Among Baby Boomers, California 2001 and 2003

	2001		2003		Difference	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	51,191	547.4	68,011	722.1	16,820	Sig. +
Male	17,813	382.0	23,686	505.4	5,873	Sig. +
Female	33,377	711.7	44,324	936.7	10,947	Sig. +
African American/Black	7,111	1143.0	9,126	1437.9	2,015	Sig. +
American Indian/Alaska Native	214	328.3	274	366.2	60	Sig. +
Asian/Pacific Islander	972	84.4	1,317	114.3	345	Sig. +
Hispanic/Latino	9,124	382.3	12,783	525.8	3,659	Sig. +
White	31,912	638.1	42,091	841.8	10,179	Sig. +

SOURCES: California Office of Statewide Health Planning and Development, Patient Discharge Data, 2001 and 2003; California Department of Finance, Demographic Research Unit, *Population Projections By Race/Ethnicity for California and It's Counties 2000-2050* , May 2004.

NOTES: [1] Number of hospital discharges with a principal diagnosis or other diagnosis of obesity (ICD-9-CM ocdes 278.00 and 278.01).

[2] Age-specific rate per 100,000 population aged 37-55 in 2001 and aged 39-57 in 2003.

Substance Abuse

The incidence of drug- and alcohol-induced deaths among Baby Boomers increased significantly between 2000 and 2004, and would rank in the top ten leading causes of death among Baby Boomers if reported either as a single rankable category or as separate categories.

“Drug-induced” deaths are defined by the NCHS as including the following causes and ICD-10 codes:

►Mental and behavioral disorders due to psychoactive substance use (F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.6, F19.7-F19.9);

►Accidental poisoning by and exposure to drugs, medicaments, and biological substances (X40-X44);

►Intentional self-poisoning (suicide) by and exposure to drugs, medicaments, and biological substances (X60-X64);

►Assault (homicide) by drugs, medicaments, and biological substances (X85); and

►Poisoning by and exposure to drugs, medicaments, and biological substances, undetermined intent (Y10-Y14).

Drug-induced causes exclude accidents, injuries, and other causes indirectly related to drug use.[19]

Age-specific death rates for drug-induced deaths among Baby Boomers increased significantly from 18.3 per 100,000 in 2000 to 23.5 per 100,000 in 2004 (Table 10). Male Baby Boomers experienced drug-induced death rates that were nearly twice as high as those for female Baby Boomers, and females experienced a statistically significant increase in drug-induced death rates between 2000 and 2004. African American/Black Baby Boomers experienced significantly higher death rates than all other race/ethnic populations for whom reliable rates were available, while White Baby Boomers experienced a statistically significant increase in drug-induced death rates between 2000 and 2004.

Table 10. Drug-Induced Deaths Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	1,705	18.3	1,771	18.9	2,074	22.1
Male	1,162	25.0	1,141	24.5	1,325	28.4
Female	543	11.6	630	13.4	749	15.9
African American/Black	191	30.9	190	30.5	286	45.6
American Indian/Alaska Native	10	DSU	13	DSU	12	DSU
Asian/Pacific Islander	19	DSU	29	2.5	25	2.2
Hispanic/Latino	304	12.9	304	12.7	377	15.6
Multirace	5	DSU	3	DSU	7	DSU
White	1,173	23.3	1,230	24.6	1,365	27.4

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	2,190	23.3	2,202	23.5	Sig. +
Male	1,394	29.7	1,335	28.6	ns
Female	796	16.8	867	18.3	Sig. +
African American/Black	250	39.4	271	43.0	ns
American Indian/Alaska Native	17	DSU	21	26.5	n/a
Asian/Pacific Islander	30	2.6	37	3.2	n/a
Hispanic/Latino	404	16.6	342	14.0	ns
Multirace	13	DSU	18	DSU	n/a
White	1,472	29.4	1,509	30.5	Sig. +

SOURCES: California Department of Health Services, Center for Health Statistics, Death Statistical Master Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of deaths among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004.

[2] Rate per 100,000 population in each specified age range; DSU = Data Statistically Unreliable (Relative Standard Error greater than 23 percent).

[3] Sig. + Statistically significant increase in age-specific death rates as measured by regression analysis ($p < .05$); ns = not significant; n/a data not available for trend analysis.

“Alcohol-induced” deaths are defined by the NCHS as including the following causes and ICD-10 codes:

►Mental and behavioral disorders due to alcohol use (F10);

►Degeneration of nervous system due to alcohol (G31.2);

►Alcoholic polyneuropathy (G62.1);

►Alcoholic cardiomyopathy (I42.6);

►Alcoholic gastritis (K29.2)

►Alcoholic liver disease (K70);

►Finding of alcohol in blood (R78.0);

►Accidental poisoning by and exposure to alcohol (X45);

►Intentional self-poisoning (suicide) by and exposure to alcohol (X65); and

►Poisoning by and exposure to alcohol, undetermined intent (Y15).

►Alcohol-induced causes exclude accidents, injuries, and other causes indirectly related to alcohol.[19,20]

Age-specific death rates for alcohol-induced deaths among Baby Boomers increased significantly from 17.4 per 100,000 in 2000 to 21.5 per 100,000 in 2004 (Table 11). Alcohol-induced death rates among male Baby Boomers were three times higher than those for females and increasing significantly. Death rates were significantly higher for American Indian/Alaska Native Baby Boomers than for any other race/ethnic population, and rates for Whites showed a statistically significant increase.

Table 11. Alcohol-Induced Deaths Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	1,618	17.4	1,857	19.9	1,835	19.6
Male	1,235	26.6	1,365	29.3	1,387	29.7
Female	383	8.2	492	10.5	448	9.5
African American/Black	115	18.6	123	19.8	112	17.9
American Indian/Alaska Native	25	42.7	36	55.2	39	55.5
Asian/Pacific Islander	41	3.6	33	2.9	41	3.5
Hispanic/Latino	512	21.8	562	23.5	576	23.9
Multirace	9	DSU	12	DSU	5	DSU
White	911	18.1	1,088	21.8	1,055	21.2

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	2,021	21.5	2,023	21.5	Sig. +
Male	1,501	32.0	1,511	32.4	Sig. +
Female	520	11.0	512	10.8	ns
African American/Black	123	19.4	122	19.4	ns
American Indian/Alaska Native	36	48.1	33	41.6	ns
Asian/Pacific Islander	36	3.1	37	3.2	ns
Hispanic/Latino	614	25.3	585	24.0	ns
Multirace	9	DSU	8	DSU	n/a
White	1,199	24.0	1,230	24.9	Sig. +

SOURCES: California Department of Health Services, Center for Health Statistics, Death Statistical Master Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of deaths among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004.

[2] Rate per 100,000 population in each specified age range; DSU = Data Statistically Unreliable (Relative Standard Error greater than 23 percent).

[3] Sig. + Statistically significant increase in age-specific death rates as measured by regression analysis ($p < .05$); ns = not significant; n/a data not available for trend analysis.

Mental Health and Mental Disorders

As the life span continues to increase, the number of Baby Boomers experiencing depression, co-morbid mental illnesses and addictive conditions such as schizophrenia and alcoholism, cognitive impairments such as those associated with Alzheimer's disease, and the emotional disturbances and mental disorders associated with stressful life events such as chronic diseases, disabilities, homelessness, unemployment, and incarceration will have a large-scale impact on the mental health system in the provision and delivery of preventive and treatment services to this aging population.[21]

Survey data from the 2001 CHIS indicate that although 17.5 percent of California Baby Boomers aged 37-55 needed help for emotional or mental health problems, only about half (9.1 percent) saw a health professional for these problems.[6] Nine percent also indicated that they experienced difficulties or delays in getting mental health care.

Hospital discharge data from the OSHPD indicate that during 2004 there were 89,541 hospitalizations among Baby Boomers with a principal diagnosis of a mental disorder (ICD-9-CM codes 290-319), at a rate of 953.6 per 100,000 population (Table 12). The highest rate during the five-year period examined was 982.9 per 100,000 in 2002. Male Baby Boomers had significantly higher mental disorder discharge rates than females (1015.4 per 100,000 males and 892.4 per 100,000 females in 2004), African Americans/Blacks had significantly higher discharge rates than any other racial or ethnic population (2127.1 per 100,000 population in 2004).

The largest categories of mental disorder hospitalizations among Baby Boomers were affective psychoses (ICD-9-CM code 296) and schizophrenic disorders (ICD-9-CM code 295) (Figure 2). Depressive disorders accounted for 28 percent of all mental disorder hospitalizations among Baby Boomers between 2000-2004, chief among these being major depressive disorders (ICD-9-CM codes 296.2 and 296.3) and bipolar affective disorders (ICD-9-CM code 296.5).

During 2004, a principal diagnoses of depression accounted for 25,100 discharges among baby Boomers aged 40-58 at a rate of 267.3 per 100,000 population (Table 13). Although female Baby Boomers experienced significantly lower hospitalization rates than males for all mental disorders combined (Table 12), they had significantly higher rates for depression. African Americans/Blacks experienced significantly higher hospitalization rates for depression than any other racial or ethnic population, followed by Whites. No statistically significant trends were found for depressive disorders among any Baby Boomer subpopulation by race/ethnicity or gender.

Schizophrenia accounted for 23 percent of all mental disorder hospitalizations among Baby Boomers, chief among these being the schizo-affective type (ICD-9-CM code 295.7) and the paranoid type (code 295.3). Diagnoses of schizophrenic disorders accounted for 26,728 discharges among Baby Boomers in 2004, at a rate of 284.6 per 100,000 population (Table 14). Male Baby Boomers experienced significantly higher schizophrenia hospitalization rates than females, although a statistically significant increase in rates was found for females. African Americans/Blacks had significantly higher discharge rates than any other racial or ethnic population, followed by Whites. No significant trends were found for any racial or ethnic population.

Table 12. Hospitalizations for Mental Disorders Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	89,111	957.1	86,076	920.4	92,208	982.9
Male	47,522	1022.7	44,678	958.2	48,753	1043.5
Female	41,578	891.5	41,394	882.6	43,448	922.7
African American/Black	13,370	2163.3	12,370	1988.4	13,789	2198.3
American Indian/Alaska Native	355	606.6	281	431.1	306	435.6
Asian/Pacific Islander	2,664	235.4	2,443	212.1	2,519	217.5
Hispanic/Latino	12,227	519.7	12,126	508.1	13,377	554.2
White	56,211	1118.8	55,121	1102.1	58,351	1170.2

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	91,619	972.7	89,541	953.6	ns
Male	48,663	1038.3	47,356	1015.4	ns
Female	42,948	907.6	42,178	892.4	ns
African American/Black	13,693	2157.5	13,409	2127.1	ns
American Indian/Alaska Native	300	400.9	322	405.8	ns
Asian/Pacific Islander	2,662	231.0	2,514	215.2	ns
Hispanic/Latino	13,044	536.5	12,835	526.3	ns
White	58,420	1168.4	57,212	1156.2	ns

SOURCES: California Office of Statewide Health Planning and Development, Patient Discharge Data Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of hospital discharges with a principal diagnosis of a mental disorder (ICD-9-CM codes 290-319) among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004.

[2] Age-specific rate per 100,000 population.

[3] ns Not significant (no statistically significant trend).

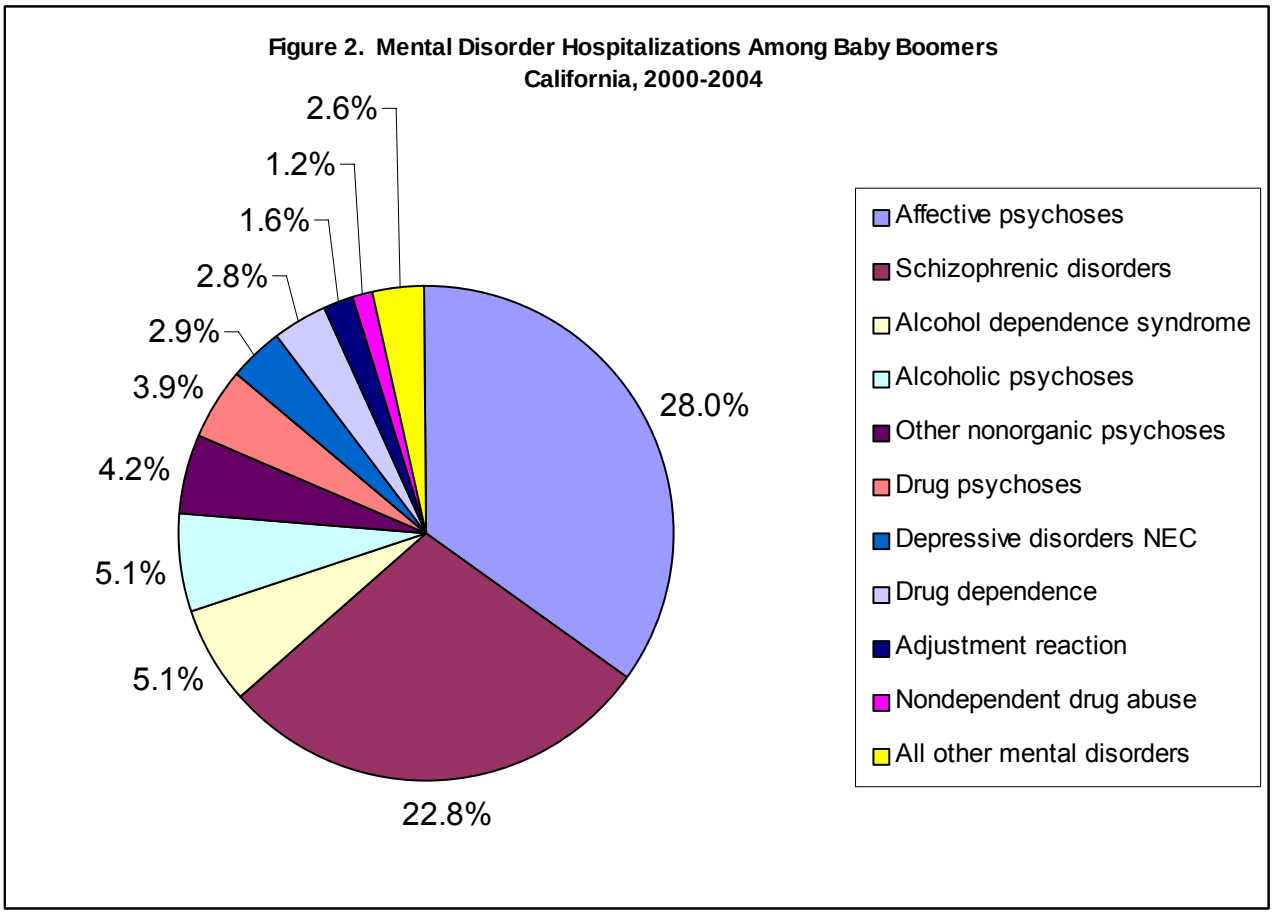
Figure 2. Mental Disorder Hospitalizations Among Baby Boomers
California, 2000-2004
2.6%
1.2%
1.6%
2.8%
2.9%
3.9%
4.2%
5.1%
5.1%
28.0%
22.8%
Affective psychoses
Schizophrenic disorders
Alcohol dependence syndrome
Alcoholic psychoses
Other nonorganic psychoses
Drug psychoses
Depressive disorders NEC
Drug dependence
Adjustment reaction
Nondependent drug abuse
All other mental disorders

Table 13. Hospitalizations for Depression Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	24,793	266.3	25,435	272.0	26,959	287.4
Male	10,396	223.7	10,576	226.8	11,448	245.0
Female	14,396	308.7	14,858	316.8	15,509	329.3
African American/Black	2,834	458.5	2,698	433.7	2,943	469.2
American Indian/Alaska Native	100	170.9	69	105.9	102	145.2
Asian/Pacific Islander	691	61.1	647	56.2	619	53.4
Hispanic/Latino	2,963	125.9	3,221	135.0	3,483	144.3
White	16,895	336.3	17,569	351.3	18,496	370.9

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	26,260	278.8	25,100	267.3	ns
Male	11,383	242.9	11,005	236.0	ns
Female	14,875	314.3	14,091	298.1	ns
African American/Black	3,061	482.3	2,904	460.7	ns
American Indian/Alaska Native	71	94.9	88	110.9	ns
Asian/Pacific Islander	678	58.8	620	53.1	ns
Hispanic/Latino	3,507	144.2	3,374	138.4	ns
White	17,969	359.4	17,166	346.9	ns

SOURCES: California Office of Statewide Health Planning and Development, Patient Discharge Data Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of hospital discharges with a principal diagnosis of depression (ICD-9-CM codes 296.2, 296.3, 296.5, 296.82, 300.4, 301.12, 309.0, 309.1, 311) among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004.

[2] Age-specific rate per 100,000 population.

[3] ns Not significant (no statistically significant trend).

Table 14. Hospitalizations for Schizophrenic Disorders Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	25,327	272.0	23,997	256.6	26,102	278.2
Male	15,040	323.7	13,908	298.3	15,426	330.2
Female	10,284	220.5	10,089	215.1	10,674	226.7
African American/Black	5,716	924.9	5,459	877.5	6,195	987.6
American Indian/Alaska Native	72	123.0	68	104.3	62	88.3
Asian/Pacific Islander	1,042	92.1	974	84.6	1,006	86.9
Hispanic/Latino	3,069	130.4	3,008	126.0	3,570	147.9
White	14,301	284.6	13,590	271.7	14,335	287.5

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	26,632	282.8	26,728	284.6	ns
Male	15,627	333.4	15,435	331.0	ns
Female	11,005	232.6	11,292	238.9	Sig. +
African American/Black	6,253	985.2	6,285	997.0	ns
American Indian/Alaska Native	74	98.9	79	99.6	ns
Asian/Pacific Islander	1,123	97.5	1,022	87.5	ns
Hispanic/Latino	3,402	139.9	3,596	147.5	ns
White	14,830	296.6	14,713	297.3	ns

SOURCES: California Office of Statewide Health Planning and Development, Patient Discharge Data Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of hospital discharges with a principal diagnosis of schizophrenic disorder (ICD-9-CM code 295) among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004.

[2] Age-specific rate per 100,000 population.

[3] Sig. + Statistically significant increase in age-specific death rates as measured by regression analysis ($p < .05$); ns = Not significant (no statistically significant trend).

Infectious and Parasitic Diseases

The emergence of HIV and Acquired Immune Deficiency Syndrome (AIDS), of severe acute respiratory syndrome (SARS)-associated coronavirus, of West Nile virus, the re-emergence of tuberculosis (TB) including multidrug-resistant TB strains, the threat of an influenza pandemic like the Asian flu that killed over 500,000 people in the United States during 1918-1919, and an overall increase in infectious and parasitic disease morbidity and mortality during the 1980s and 1990s provide ample evidence that as long as microbes can evolve, new diseases will appear and attack human targets of opportunity.[22-23]

California data indicate that hospital discharges among Baby Boomers with a principal diagnosis of an infectious or parasitic disease increased 31.3 percent from 15,249 in 2000 to 20,022 in 2004 (Table 15). Discharge rates increased significantly from 163.8 per 100,000 in 2000 to 213.2 per 100,000 in 2004, and were significantly higher for male Baby Boomers and for African American/ Black Baby Boomers.

Other bacterial diseases (ICD-9-CM codes 030-041), which include septicemia, streptococcal, staphylococcal, and meningococcal infections, accounted for the greatest proportion of discharge diagnoses, followed by HIV (ICD-9-CM code 042) (Figure 3). Intestinal infectious diseases (ICD-9-CM codes 001-009), which includes Escherichia coli (E. coli) and Clostridium difficile (C. difficile) infections, were the third leading cause of hospitalizations. The fourth leading cause was other diseases due to viruses and chlamydiae (ICD-9-CM codes 070-079), which includes viral hepatitis, mumps, and infectious mononucleosis. The greatest increases in the number of infectious disease hospitalizations among Baby Boomers was seen for other bacterial diseases, up 89.7 percent from 4,518 in 2000 to 8,569 in 2004. The greatest decline was observed for HIV infections, down 17.3 percent from 4,557 in 2000 to 3,768 in 2004.

Figure 3. Infectious and Parasitic Disease Hospitalizations Among Baby Boomers California, 2000-2004

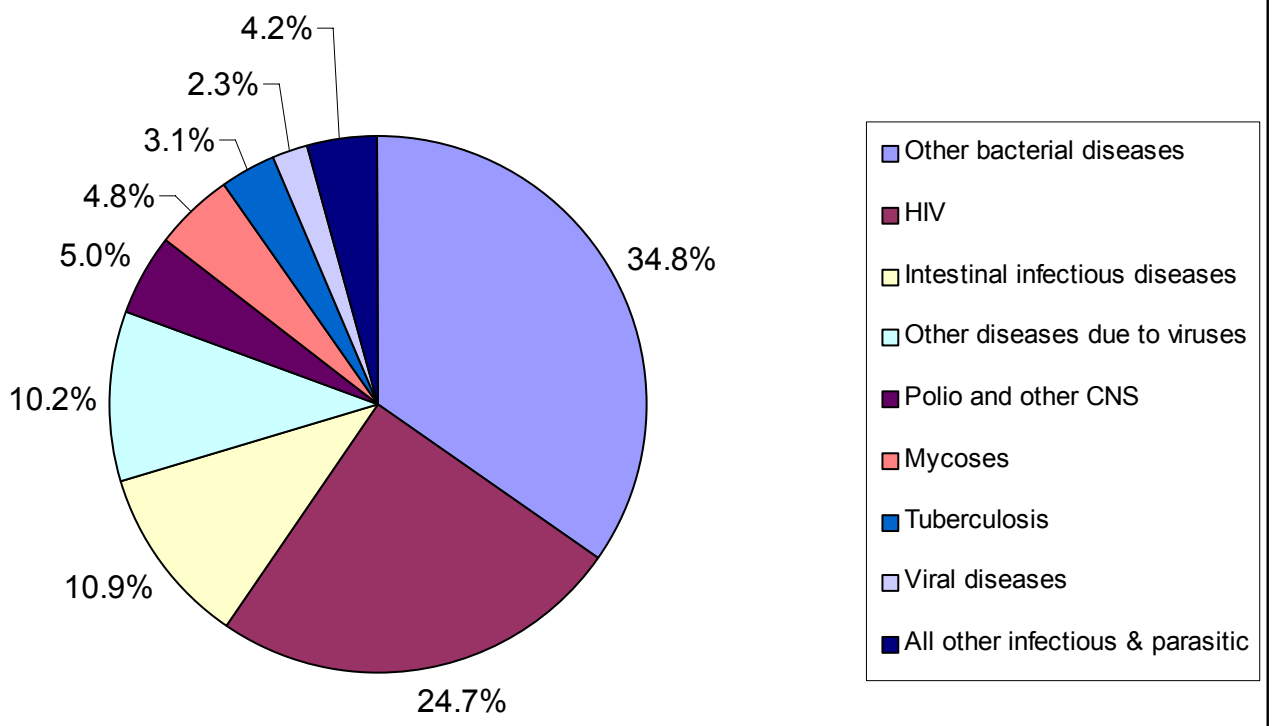

Table 15. Hospitalizations for Infectious and Parasitic Diseases Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	15,249	163.8	15,658	167.4	17,013	181.4
Male	9,538	205.3	9,707	208.2	10,311	220.7
Female	5,710	122.4	5,950	126.9	6,700	142.3
African American/Black	2,661	430.6	2,718	436.9	3,022	481.8
American Indian/Alaska Native	56	95.7	67	102.8	76	108.2
Asian/Pacific Islander	799	70.6	828	71.9	1,013	87.5
Hispanic/Latino	3,529	150.0	3,805	159.4	4,036	167.2
White	7,645	152.2	7,623	152.4	8,261	165.7

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	17,926	190.3	20,022	213.2	Sig. +
Male	10,647	227.2	11,571	248.1	Sig. +
Female	7,279	153.8	8,449	178.8	Sig. +
African American/Black	2,944	463.9	3,237	513.5	Sig. +
American Indian/Alaska Native	66	88.2	84	105.9	ns
Asian/Pacific Islander	987	85.7	1,224	104.8	Sig. +
Hispanic/Latino	4,293	176.6	4,846	198.7	Sig. +
White	9,052	181.0	10,085	203.8	Sig. +

SOURCES: California Office of Statewide Health Planning and Development, Patient Discharge Data Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of hospital discharges with a principal diagnosis of infectious or parasitic disease (ICD-9-CM codes 001-139) among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004.

[2] Age-specific rate per 100,000 population.

[3] Sig. + Statistically significant increase in age-specific death rates as measured by regression analysis ($p < .05$); ns = Not significant (no statistically significant trend).

Complications of Medical and Surgical Care

A substantial body of evidence on medical errors and patient safety indicates that preventable adverse events among hospitalized persons are a leading cause of death in the U.S.[24] The ICD-9-CM code set developed by the Agency for Health Care Policy and Research (AHCPR) to define hospitalizations due to complications of medical and surgical care excluded many conditions, such as "poisoning by drugs, medicinal and biological substances" (codes 960.0-979.9).[25] In addition, the California data shown in this report used only the Principal Diagnosis and excluded up to 24 Other Diagnoses available in the hospital discharge record. The intent in using only the Principal Diagnosis was to identify medical and surgical complications as accurately as possible and to provide a direct causal link to the current hospitalization.[26]

Discharge rates for Baby Boomers who experienced a medical or surgical complication during a hospitalization increased significantly from 221.8 per 100,000 in 2000 to 273.0 per 100,000 in 2004 (Table 16, Figure 4). Discharge rates for female Baby Boomers were significantly higher than those for their male counterparts (282.2 per 100,000 females and 263.8 per 100,000 males in 2004), and rates for both genders increased significantly between 2000 and 2004.

African American/Black Baby Boomers experienced rates that were significantly higher than those for all other racial and ethnic populations, and increased significantly from 422.8 per 100,000 in 2000 to 486.7 per 100,000 in 2004. White Baby Boomers had the second highest hospitalization rates for medical and surgical complications (311.7 per 100,000 in 2004), followed by Hispanic/Latino Baby Boomers (212.4 per 100,000 in 2004). Significant increases in complications of care rates were found for all racial and ethnic populations except for American Indians/Alaska Natives during the 2000-2004 time period.

The leading Principal Diagnoses associated with hospitalizations among Baby Boomers for complications of medical and surgical care were:

998.59	Other postoperative infection
996.4	Mechanical complication of internal orthopedic device
996.62	Infection and inflammatory reaction due to vascular device
997.4	Gastrointestinal complications not elsewhere classified
996.73	Other complications due to renal dialysis device

Table 16. Complications of Medical and Surgical Care Among Baby Boomers, California 2000-2004

	2000		2001		2002	
	N[1]	Rate[2]	N[1]	Rate[2]	N[1]	Rate[2]
Total (All Races, Both Sexes)	20,656	221.8	22,619	241.9	24,274	258.8
Male	9,637	207.4	10,582	227.0	11,490	245.9
Female	11,019	236.3	12,035	256.6	12,782	271.4
African American/Black	2,613	422.8	2,693	432.9	3,018	481.1
American Indian/Alaska Native	75	128.2	79	121.2	94	133.8
Asian/Pacific Islander	924	81.6	1,103	95.8	1,133	97.8
Hispanic/Latino	3,972	168.8	4,408	184.7	4,755	197.0
White	12,445	247.7	13,683	273.6	14,597	292.7

	2003		2004		
	N[1]	Rate[2]	N[1]	Rate[2]	Trend[3]
Total (All Races, Both Sexes)	25,393	269.6	25,639	273.0	Sig. +
Male	12,227	260.9	12,302	263.8	Sig. +
Female	13,165	278.2	13,337	282.2	Sig. +
African American/Black	3,000	472.7	3,068	486.7	Sig. +
American Indian/Alaska Native	100	133.6	83	104.6	ns
Asian/Pacific Islander	1,234	107.1	1,248	106.8	Sig. +
Hispanic/Latino	5,145	211.6	5,179	212.4	Sig. +
White	15,185	303.7	15,426	311.7	Sig. +

SOURCES: California Office of Statewide Health Planning and Development, Patient Discharge Data Files, 2000-2004; California Department of Finance, Demographic Research Unit, Population Projections, 2000-2004.

NOTES: [1] Number of hospital discharges with a principal diagnosis of a complication of medical or surgical care among persons aged 36-54 in 2000, 37-55 in 2001, 38-56 in 2002, 39-57 in 2003, and 40-58 in 2004; for complete list of ICD-9-CM codes used to extract data see http://www.dhs.ca.gov/hisp/chs/OHIR/reports/others/medicalcomps2000.pdf.

[2] Age-specific rate per 100,000 population.

[3] Sig. + Statistically significant increase in age-specific death rates as measured by regression analysis ($p < .05$); ns = Not significant (no statistically significant trend).

Discussion

Baby Boomers are now (in 2006) between 42 and 60 years of age, and comprise 25 percent of California's population. Over 30,000 Baby Boomer deaths occurred in 2004 at a rate of 358.0 per 100,000 population, mostly due to cancer, heart disease, and unintentional injuries. Significant increases were observed for alcohol- and drug-induced deaths, and for hospitalizations for obesity, mental disorders, infectious diseases, and complications of medical and surgical care.

Disparities in morbidity and mortality by gender and by race/ethnicity among Baby Boomers were also apparent in the data for 2000-2004, with males and African Americans/Blacks being disproportionately represented in most all of the disease and cause of death categories. As the Baby Boomer population ages, they will place substantial demands upon the medical and health care systems in both the public and private sectors at a time when there are increasing health care costs coupled with more use by more people.

Quantitative analyses of morbidity and mortality data will continue to play important roles in monitoring health status, adapting prevention strategies and treatment programs, and in developing health care policies targeting the Baby Boomer population and the health status disparities they experience.[27] Qualitative studies and surveys of life assessment measures will also play important roles in understanding how Baby Boomers' attitudes, beliefs, and perceptions in such areas as personal finances, work or career, relations with family and friends, and leisure activities interact with and influence their physical and mental health status as they age.[28] Although this population was not specifically targeted in the HP2010 objectives, a case could be made to establish a HP2010 Work Group on Baby Boomer Health (ala the HP2010 Work Group on Adolescent Health) to coordinate and provide inputs to the health promotion and disease prevention agenda for the nation.[29]

"The new century brings new challenges and opportunities to improve the health of everyone in the United States," former U.S. Department of Health and Human Services Secretary Donna Shalala is quoted as saying during the launching of Healthy People 2010.[30] *"People not only want to live a long life, but they also want to enjoy a healthy life. As the baby boom becomes the senior boom, quality of life will become a central issue for our health system. With Healthy People 2010, we want to add years to your life and health to your years."*

Former U.S. Surgeon General, Dr. David Satcher, added: *"Our greatest opportunities for reducing health disparities are in empowering individuals to make informed health care decisions and in providing the skills, education, and care necessary to improve health. The underlying premise of Healthy People 2010 is that the health of the individual is inseparable from the health of the larger community."*

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