



Hayward Health Profile 2004



Alameda County Public Health Department





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Public
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Executive Summary

Major Findings

Demographic and Social Profile

Hayward has a profile similar to that of Alameda County for a number of socioeconomic measures. Median household income, poverty level, home ownership, and unemployment rates in Hayward are similar to that of the county.

Hayward residents are more likely than county residents to not have a high school degree. Schools in Hayward have had a dramatic decrease in the high school dropout rate in the last decade—Hayward’s rate is now lower than that in the county. Hayward has a more equitable income distribution compared to the county. It has a higher cost of living and higher housing costs compared to the county. Hayward residents are also more likely to have lower paying jobs and lack health insurance than county residents.

Hayward’s population has a higher proportion of Latinos and multiracial persons and a lower proportion of White, Asian and African American persons than the county. Spanish speakers comprise a much higher proportion of Hayward residents than the county. About one in four Hayward residents speaks Spanish and one in ten persons speak Asian languages at home.

Mortality

Over the past decade, mortality from all causes in Hayward declined 17%—however, Hayward has a higher mortality rate than the county. Males have higher rates of death from all causes than females. Native Hawaiian and Other Pacific Islanders (NHOPI) and African Americans have the highest rates of death from all causes. Residents

of the central Tennyson area have the highest all-cause mortality in Hayward.

The three leading causes of death are heart disease, cancer and stroke, accounting for 50% of all deaths. Unintentional injury was the leading cause of death among persons 15 to 44 years. Cancer is the leading cause of death for adults 45 to 74. Cancer and heart disease are major causes of premature mortality and have the most impact in terms of lost years of productive life in Hayward.

Life expectancy is higher among females than males. It is highest in the Asian population and lowest in the African American population. Life expectancy for Hayward residents is lower than for county residents.

Chronic Disease

There has been no substantial change over the past decade in coronary heart disease hospitalizations and mortality, stroke mortality, all cancer, lung cancer, breast cancer incidence and mortality, prostate cancer mortality and all asthma hospitalizations. Although not a significant change, there were slight decreases in stroke hospitalizations, childhood asthma hospitalizations, and a slight increase in prostate cancer incidence during the past decade.

Of all the indicators examined in this report, diabetes-related hospitalizations and mortality increased in the past decade.

Hayward bears a disproportionate burden of coronary heart disease and diabetes hospitalization and mortality, stroke mortality, as well as mortality from all cancers combined and lung cancer. Hayward has lower rates of stroke hospitalization, breast and prostate cancer incidence, and

asthma hospitalization than the county. Rates of lung cancer incidence, breast cancer mortality, and prostate cancer mortality are similar to those of the county.

Men have higher death rates and hospitalization rates than females for almost all chronic diseases.

Different race/ethnic groups bear the burden of specific chronic diseases in Hayward. African Americans bear the greatest burden of coronary heart disease mortality, stroke and diabetes hospitalization, all-cancer mortality, prostate cancer incidence, and asthma hospitalization. The White population has the highest rate of coronary heart disease hospitalizations, lung cancer and breast cancer incidence and mortality, and prostate cancer mortality. The Latino population has the highest rates of stroke mortality and diabetes mortality. The patterns of chronic disease mortality by race/ethnicity in Hayward are not consistent with those in the county for several indicators.

Rates of childhood asthma hospitalization were examined geographically and found to be similar to, or below the county rates in most areas of Hayward.

The increase in diabetes hospitalization and mortality is of concern. Hayward has a higher rate of hospitalization for diabetes and a higher rate of diabetes mortality than the county. Females have a higher rate of diabetes hospitalization than males. African Americans have a higher rate of diabetes-related hospitalizations. Latinos have a higher rate of diabetes mortality. Diabetes-related hospitalizations are substantially higher than county rates in the marsh lands and Tennyson areas of Hayward.

Maternal, Child, and Adolescent Health

Hayward residents have made significant improvements in a number of MCAH indicators over the last decade. Infant mortality declined by 35%, early prenatal care increased 3.8%, and teen births decreased by a third. Low birth weight has remained the same over this past decade, as it has for the county.

Hayward has a higher birth rate, higher proportion of births to mothers aged 19 and younger, lower proportion of mothers who completed high school, and a higher proportion of births paid by Medi-Cal than the county. These indicators are all associated with poor birth outcomes in health studies.

African Americans have the highest rates of low birth weight. Native Hawaiian and Other Pacific Islanders have

the lowest rates of early prenatal care. Latinos have the highest teen birth rate. Teen birth rates are concentrated in poorer areas in Hayward, such as Downtown, parts of Tennyson, as well as areas of less poverty.

Injury

This report examines both unintentional and intentional injury indicators. Substantial improvements have been made over the past decade in deaths due to motor vehicle crashes, homicide and suicide.

There have been no clear improvements in unintentional injury hospitalizations and mortality, hospitalizations due to motor vehicle crashes, self-inflicted injury hospitalizations (suicide attempts), and hospitalizations due to assaults. County rates of hospitalization due to assault and motor vehicle crashes declined during this same time period.

The major causes of unintentional injury deaths in Hayward are poisoning (which includes drug overdose), motor vehicle crashes, and falls. The major causes of unintentional injury hospitalization in Hayward are falls and motor vehicle crashes.

Hayward bears a disproportionate burden of unintentional and intentional injury. It has higher rates of unintentional injury and motor vehicle crash hospitalizations and deaths, and hospitalizations due to self-inflicted injury, than the county. Hayward has rates similar to the county for hospitalizations due to assault, and deaths due to homicide and suicide.

Males have the highest rates of hospitalizations and deaths due to unintentional injury, motor vehicle crashes, assault hospitalizations, homicide and suicide. White persons have the highest rates of hospitalizations due to unintentional injury, motor vehicle crashes and self-inflicted injury. Unintentional injury mortality rates among Latinos are comparable to those for the White population. African American and White persons have similar rates of homicide in Hayward.

Communicable Diseases

Over the past decade AIDS case rates in Hayward have decreased significantly. Tuberculosis case rates have decreased only slightly during this same time period. Hayward's AIDS case rate is now comparable to the county, and its tuberculosis case rate is higher than the county rate.

Hayward case rates for chlamydia and gonorrhea are lower than the county rates. The population most affected by these communicable diseases varies by individual disease.

Men, African Americans, and persons ages 30 to 39 are most impacted by AIDS. The most common mode of exposure in Hayward is men having sex with men, although the proportion of AIDS from heterosexual contact has increased over the years.

Adolescents and adult females 15 to 24 have the highest rates of chlamydia and gonorrhea. Rates by race/ethnicity could not be examined due to a high percentage of cases where this information is missing.

Men, Asian/Pacific Islanders, seniors, and foreign-born persons are most likely to be impacted by tuberculosis. Tuberculosis cases are generally concentrated in the more densely populated areas of the Hayward, primarily the Eden and Tennyson areas.

Geographic Distribution

Generally, poor health outcomes are concentrated in particular areas in the city of Hayward. Parts of the Tennyson and Downtown area have the highest poverty rates, high rates of all-cause mortality, teen births, tuberculosis, and diabetes-related hospitalizations.

Recommendations

The Hayward Health Profile 2004 highlights the current health status of Hayward residents. Improving the health status of Hayward residents and reducing health inequities requires prevention strategies that address individual behaviors related to health, as well as the social and environmental contexts in which these occur. Some key recommendations are listed below.

1. Increase access to early detection, diagnosis, treatment, and acute care for chronic diseases and their key risk factors. For example:

- Improve screening for diabetes, and prostate cancer and breast cancer, especially among vulnerable populations.
- Improve treatment of coronary heart disease and stroke risk factors—high blood pressure and high cholesterol. Improve treatment of diabetes and asthma among populations at greatest risk for these chronic diseases.
- Identify target populations for improved tobacco control interventions.
- Promote access to acute care for heart disease and stroke.

2. Target high-risk populations with focused and culturally appropriate health interventions.

- To reduce the burden of communicable diseases, focus on tuberculosis screening and treatment of immigrant Asians and Latinos, and STD screening of youth and young adults, especially females.
- To reduce the burden of coronary heart disease focus prevention efforts toward the White and African American populations.
- To reduce the burden of diabetes, target low-income Latinos and African Americans for prevention.

3. Increase awareness of risks for unintentional and intentional injury.

- Promote enforcement of traffic safety laws that help mitigate injury severity such as seat belt and traffic regulations to address motor vehicle crashes.
- Develop strategies to prevent falls among seniors.
- Promote enforcement of policies that address the availability of firearms.

4. Increase surveillance, early detection, diagnosis and treatment of communicable diseases, specifically tuberculosis in Hayward. In addition, identify and address barriers to care.

5. Develop a better understanding of the relationship between social environment and risk behaviors such as unhealthy diet, physical inactivity, overweight and obesity, tobacco use, alcohol and drug use, and unsafe sexual practices.

Health inequities by race/ethnicity exist in Hayward, but the pattern does not mirror that in the county for some indicators. This finding suggests the need to better understand the socioeconomic, cultural, and behavioral issues, as well as access to health care as determinants of health status among populations with the greatest burden of morbidity or mortality.

- Develop and support surveillance of behavioral and other underlying risk factors for chronic diseases.
- Enhance the quality of information on socioeconomic status and geographic information such as zip code and census tract in surveillance systems for a broad range of health conditions.
- Improve the quality of data on race/ethnicity for sexually transmitted diseases.

6. In neighborhoods with high poverty rates and poorer health outcomes, focus on supporting and working with community as partners to address social and environmental factors associated with good health. Specific issues include access to healthy foods, parks and playgrounds, housing, transportation, education, employment, universal access to quality health care and clean air.

The Alameda County Public Health Department is working with community partners in Hayward to implement these strategies to change the medical, behavioral, social and environmental conditions that adversely affect the health of Hayward residents.



The Hayward Health Profile 2004 describes the health status of Hayward residents. This report includes a range of indicators to measure health and factors associated with health. The chapters in this report are:

- 1** Demographic and Social Profile
- 2** Mortality
- 3** Chronic Disease
- 4** Maternal, Child, and Adolescent Health
- 5** Injury
- 6** Communicable Diseases

The Hayward Health Profile 2004 presents health status by race/ethnicity for most indicators. Health status by sex and age are presented where they are relevant. Trends and current health status are compared to Alameda County.

How This Report Is Organized

This report begins with a demographic and social profile of Hayward. The purpose of this chapter is to provide an understanding of the socioeconomic context of health, by the inclusion of data on select demographic, social, and economic factors. The chapters that follow the opening profile present the health status of Hayward residents on specific health outcomes.

Background information on the health condition is included for each chapter describing the health status of Hayward. Findings on Hayward are presented in tables, graphs, and maps. Tables in chapters describe findings for the City of Hayward. Graphs in each chapter provide a comparison of Hayward to Alameda County. Maps present geographic distributions for select health indicators. Detailed findings (e.g. confidence intervals) for all indica-

tors on Hayward and Alameda County are referred to in the discussion, and are contained in tabular appendices for each chapter. Each chapter also includes a summary of findings and recommendations for action. The table of contents lists chapters and sections within chapters, a list of figures (graphs), and a list of maps.

This report contains seven appendices. Appendices 1-6 contain data tables for chapters 1 through 6. Tables in each of these appendices are listed at the beginning of each appendix. Tables in Appendix 1-6 are numbered based on chapter number, section (A, B, C) within each chapter, and, in most cases, their sequence within the chapter.

Appendix 7 contains technical notes. Data sources, population estimates used for the calculation of rates, issues with interpretation of data, key data definitions, and selected methods of analysis are described.



Demographic and Social Profile

Several demographic characteristics are related to health outcomes either directly or through a complex interplay with socioeconomic status and other environmental factors. Understanding this complex interplay is critical to understanding the root causes of health disparities and to designing effective strategies to eradicate these disparities.¹ This demographic profile describes various characteristics of Hayward's population, including age, sex, race and ethnicity and language. A substantial body of evidence now indicates that health and well-being are strongly associated with the social and economic characteristics of communities and neighborhoods.^{2,3} This social profile therefore includes important social and economic characteristics such as education, income, poverty, housing, unemployment, crime, and access to health care.

Hayward History

How Hayward Got Its Name

In 1843, the Governor of Mexico rewarded an early settler, Guillermo Castro, for his military and civil service by granting him “El Rancho San Lorenzo”—27,000 acres of flatlands, hills and canyons now known as Hayward and Castro Valley. Castro built a house where the historic Hayward City Hall is located. By 1852, Don Castro had laid out the town he called San Lorenzo on the area surrounding his property. He donated land for schools and public places and began to sell parcels of his land.

In 1851, during the time of the Gold Rush, William Hayward made his way to “El Rancho San Lorenzo”. In 1852, at the invitation of Guillermo Castro, William Hayward bought 40 acres of land spanning what is now the downtown Hayward area. He opened the “Hayward’s Hotel,” one of the area’s finest resorts.

Although Castro had named what is now downtown Hayward “San Lorenzo,” many people referred to the town as “Hayward’s Place” or “Hayward’s” because of the famous hotel. In 1876 it was incorporated as the Town of Haywards. In 1928, the status of the community was changed to the City of Hayward.

Early Transportation

In 1850, Hayward’s convenient ship access to San Francisco Bay and the Pacific beyond attracted the freighter industry. Hayward was also the stagecoach stop between Oakland and San Jose. In 1865, the first railroad reached Hayward from Alameda via San Leandro. The “San Francisco, Alameda and Hayward Railroad” helped draw hundreds of newcomers to the area.

The Hayward-San Mateo Bridge, built in 1929, and the rising popularity of the automobile attracted more and more people to Hayward. Hayward had become the crossroads of the Bay Area. Today, two Bay Area Rapid Transit (BART) stations, an Amtrak station, an extensive network of freeways, public transportation and easy access to San Francisco, Oakland and San Jose airports allow commuters and residents to travel to and from Hayward with ease.

From a Town to a City

In the early decades of the twentieth century, the Hayward area became known as the “Heart of the Garden of Eden” because of its temperate climate and fertile soil. Everything—produce, chickens, cattle, flowers—grew in abundance. By 1950, Hayward, grown to a population of 14,000, had become the “Apricot City” and home to Hunt’s Cannery.

By the mid-1960s, Hayward's landscape changed from apricot trees and canneries to subdivisions and shopping centers. Hayward's growth continued through the 1970s and 1980s.

By 1990, with a population of 121,000, Hayward had become known as one of the most ethnically diverse communities in the nation.⁴ Here, people from many cultures lived and worked together to build a community reflective of its residents.

Hayward Today

Today, the City of Hayward is known as the “Heart of the Bay,” not only for its central location but also for its accepting and caring environment. The city continues to balance the needs of diverse residents and a growing business community by the preservation of open space, and planning its economic development.

The city's plan includes creation of a pedestrian-friendly downtown with a balanced mix of housing, retail shops, offices and restaurants. The new civic center serves as the focal point for this revitalization. Encouraging new businesses to move to Hayward, expanding the sales tax base, and strengthening a diverse economy are priorities for the city.⁴

Map 1.1 on the following page shows Hayward's neighborhoods, topography, and highways along with its context in Alameda County. The city's development areas and neighborhoods as they are known today are also identified.

Large areas along the coastal western boundary of the city are marsh lands. The Eden neighborhood is defined by the intersection of Hayward's major roadways—Jackson Street (an artery to the Hayward-San Mateo Bridge), I-880, Hesperian Boulevard, Industrial Boulevard, and Tennyson Road. Chabot College is a major landmark in this area.

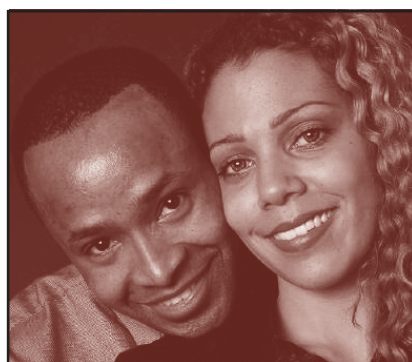
The Tennyson area extends along I-880 and along Tennyson Road inside Mission Boulevard. The Mission corridor is in the central part of the city, just west of the Hayward hills and the Highlands. California State University, located in the hills, is a major campus that attracts young people in the Bay Area. Downtown Hayward is at the northern tip of the city's boundary, and is served by one of the city's two BART stations.⁵

The demographic and social profile of Hayward is presented in the sections below. Information from a variety of sources is summarized to describe people who live in Hayward. Data on selected social and economic conditions important for the health and quality of life of its residents are presented.

Population Characteristics

Population by Sex and Age

Sex and age are important predictors of the health challenges a community faces. Hayward's population is 49.6% male and 50.4% female (Table 1.1 on the following page). Adults aged 25 to 44 years make up 33.4% of Hayward's population, children up to 14 years 22.8%, adults 45 to



Hayward's population is diverse – no single race/ethnic group comprises a majority

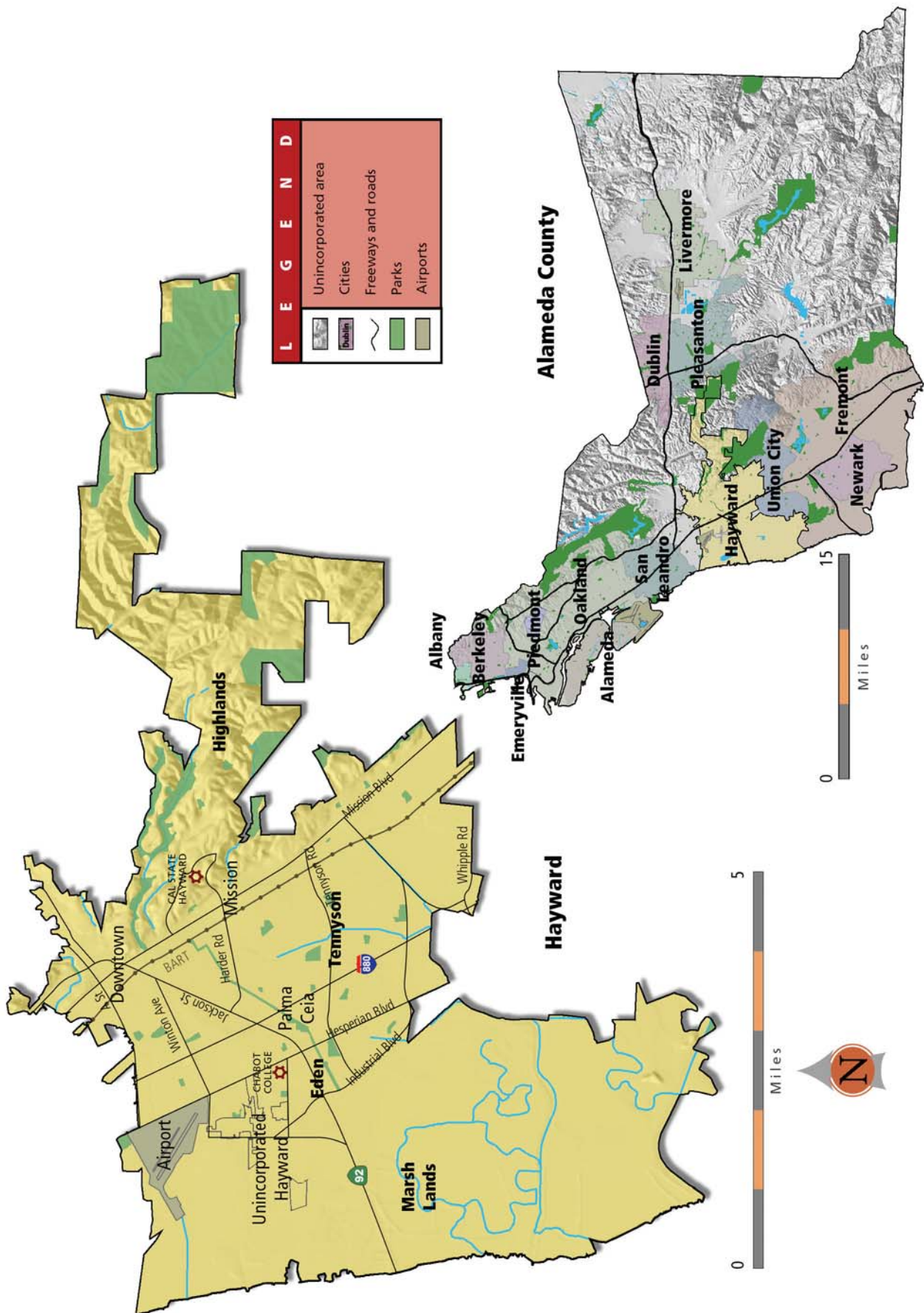


Table 1.1	Characteristics of Persons: Sex, Race, and Age Distributions			
	Hayward		Alameda County	
	Count	%	Count	%
Total	140,030	100.0	1,443,741	100.0
Population by Sex				
Male	69,490	49.6	709,300	49.1
Female	70,540	50.4	734,441	50.9
Population by Race/Ethnicity				
Hispanic/Latino	47,850	34.2	273,910	19.0
White	40,896	29.2	591,095	40.9
Asian	26,189	18.7	292,673	20.3
Black or African American	14,846	10.6	211,124	14.6
AIAN	570	0.4	5,306	0.4
NHOPI	2,511	1.8	8,458	0.6
Some other race	692	0.5	4,676	0.3
Two or more races	6,476	4.6	56,499	3.9
Population by Age				
0 to 14 years	31,963	22.8	299,795	20.8
15 to 24 years	20,751	14.8	193,193	13.4
25 to 44 years	46,731	33.4	489,779	33.9
45 to 64 years	26,358	18.8	313,383	21.7
65 years and over	14,227	10.2	147,591	10.2
Language Spoken at Home				
English	65,909	51.1	850,906	63.2
Spanish	34,348	26.6	192,512	14.3
Other Indo-European languages	9,076	7.0	85,324	6.3
Asian and Pacific Island languages	18,522	14.4	204,944	15.2
Other languages	1,113	0.9	12,980	1.0

Source: Census 2000. Notes: NHOPI = Native Hawaiian and Other Pacific Islander; AIAN = American Indian and Alaskan Native. Indo-European languages include those from south Asia, the eastern Mediterranean, and Europe.

64 18.8%, teens and young adults 14.8% and seniors and the elderly 10.2%.

Population by Race and Ethnicity

Despite the fact that race is primarily a social construct with only limited biological significance, in the United States, race/ethnicity is strongly associated with socioeconomic position, an important determinant of health.¹ In Alameda County, racial health disparities are profound.⁶ Dissecting race/ethnicity from a host of socioeconomic factors that are also strongly linked to health outcomes is a difficult task, particularly due to the lack of detailed

socioeconomic data that are collected with health data. As a consequence, race/ethnicity data often serve to some degree as a proxy for socioeconomic data.

Hayward's population is diverse. No single race or ethnic group comprises a majority. The city's population is 34.2% Hispanic or Latino, 29.2% White, 18.7% Asian, and 10.6% African American (Table 1.1). The category "two or more races" was included for the first time in the 2000 Census, and makes up 4.6% of Hayward's population. The groups American Indian and Alaskan Native, Native Hawaiian and Pacific Islander (NHOPI), and the group "some other race" together comprise 2.7% of Hayward's population. In

Alameda County, a higher proportion of the population is White (40.9%), Asian (20.3%) and African American (14.6%), and a lower proportion Hispanic or Latino (19.0%) or of two or more races (3.9%), compared to Hayward. The difference between Hayward and the county in proportion of White and Hispanic or Latino populations is much more pronounced than for the other major racial groups.⁷

Details on subgroups for two or more races, Hispanic or Latino, and Asian populations are shown in Appendix tables 1A.1 to 1A.4. Hayward's Hispanic or Latino population is similar in composition to that of the county. (Appendix table 1A.2). Hayward has a much higher proportion of residents who are Filipino and a much lower proportion of residents who are Chinese, compared to the county (Appendix table 1A.3). The race/ethnic distribution and composition of the Asian community in Hayward is important for planning and targeting culturally appropriate health services and prevention programs in its diverse population.

Social and Economic Characteristics

Socioeconomic status measures such as education, income, and poverty level are important factors that influence the health and quality of life for individuals and families. Specifically, socioeconomic status is linked to many different health outcomes such as chronic disease, tobacco use, being overweight and sedentary lifestyles, and teen pregnancy.¹⁻³ Select economic indicators from Census 2000 and other sources are described below.

Education

Education is a widely used indicator of socioeconomic position, and an important predictor of morbidity and mortality.¹ Hayward has a higher proportion of persons with less than a high school education, and a lower proportion of person's with a bachelor's degree or higher than the county (**Table 1.2**). Of the population 25 years and over in Hayward, 24.9% does not have a high school education, compared to 17.6% in the county.⁷

The high school dropout rate in Hayward is lower than the county and has shown a dramatic decline since the

Table 1.2 Individual Economic and Social Characteristics				
	Hayward		Alameda County	
	Count	%	Count	%
Educational Attainment				
Population ≥25 years old	87,792	100.0	953,716	100.0
Less than 9th grade	2,736	11.3	76,513	8.0
9th to 12th grade, no diploma	5,249	13.6	91,768	9.6
High school graduate (incl. equivalency)	22,687	25.8	181,668	19.0
Some college, no degree	13,457	22.7	206,013	21.6
Associate degree	5,906	6.7	64,800	6.8
Bachelor's degree	12,675	14.4	202,586	21.2
Graduate or professional degree	461	5.4	130,368	13.7
Individual Poverty				
Total persons for whom poverty determined	137,965		1,419,998	
Income in 1999 below poverty level	13,805	100.0	156,804	100.0
≤5 years	1,629	11.8	14,552	9.3
6 to 17 years	2,882	20.9	33,669	21.5
18 to 64 years	8,322	60.3	97,044	61.9
≥65 years	972	7.0	11,539	7.4

Source: Census 2000.

early 1990s. In the 1991 to 1992 school year, the dropout rate was 8.2%, while in the 2002 to 2003 school year it was only 1.5%. In contrast, in the county the dropout rate went down only slightly from 3.9% to 2.7% in the same time period.⁸

Persons with some college or an associate degree make up 29.4% of Hayward's population over 25, compared to 28.4% in the county. The proportion of persons with a bachelor's degree or higher comprise only 19.8% of Hayward's population compared to 34.9% of the county population over 25.⁷

Household and Family Characteristics

The average household and family size in Hayward are 3.1 and 3.6 respectively—slightly higher than in the county (Appendix table 1B.1). Hayward has a higher proportion of family households compared to the county (71.3% and 64.8% respectively). Non-family households make up 28.7% of Hayward households—less than in the county (35.2%). Hayward has a higher proportion of households with individuals under 18 years (42.5%) than the county (36.5%).

Hayward's population is very similar to the county on marital status. It is largely made up of married persons (51.0%), and 17.9% of the population is separated, widowed, or divorced. Of the city's population aged 15 years and over, 31.1% are single and have never been married.⁷

Language and Language Isolation

Hayward is a linguistically diverse community as is Alameda County (Table 1.1). Over half (51.1%) of Hayward residents over the age of five years speak English at home. Spanish speakers comprise a much higher proportion of Hayward residents than the county (26.6%

compared to 14.3%). The next most frequently spoken languages in Hayward are Asian and Pacific Island languages (14.4%) and other Indo-European languages (7.0%).

Persons in non-English speaking households may be “linguistically isolated”, which means not having an English speaker over the age of 14 years in the household. Spanish-speaking households in Hayward are more likely to experience linguistic isolation than any other non-English speaking households. Persons in Asian and Pacific Island language households in Hayward are much less likely to be linguistically isolated than persons in these households in the county (Appendix table 1B.2). Individuals in these households may not be linguistically isolated from their own communities, but may experience barriers in accessing or utilizing health care and other services.⁹

Another way of describing the language profile of a community is by the percentage of school children for whom English is not a first language (English learners). From 1992 through 2002, Hayward Unified School District had a substantially higher proportion of English learners than the county or the state. The proportion rose from 23.3% to 33.6% in this time period (Appendix table 1B.3). This suggests that an increasing proportion of children from non-English speaking households are enrolling in Hayward school districts, which is likely related to the trends in immigration into the city.¹⁰

Immigration

The composition of Hayward's population reflects changes due to immigration in the past few decades. Over one-third (34.8%) of Hayward residents were born in foreign countries—a much higher proportion than in the county (27.2%) as seen in Appendix table 1B.4.⁷

Hayward's foreign-born population is comprised predominantly of individuals who entered the United States



*Over one-third of
Hayward residents
were born in
foreign countries*

in the last two decades—43.6% in the 1990s and 33.3% in the 1980s. A relatively smaller proportion entered the country in the 1970s (14.1%) and before 1970 (9.1%). This pattern is similar to that in the county (Appendix table 1B.4).

Low Income and Poverty

Poverty and economic deprivation has been documented as a predictor of socioeconomic position and determinant of health in numerous studies.¹⁻³ The federal government publishes poverty levels annually. Poverty thresholds calculate the minimum pre-tax income needed by families of various sizes for basic sustenance. Poverty rates may indicate percentages of individuals, of families, or of households below the poverty threshold.

The definition of poverty does not take into account regional variation in living expenses, such as housing, childcare, or transportation. For this reason, official poverty estimates such as those from the Census Bureau underestimate the proportion of the population living in poverty in California and the Bay Area. In 1999 a family of four was considered to be living in poverty if they earned less than \$16,895.⁷ In 2003 this threshold was \$18,400. In 1999, 8.5% of Hayward households were considered to be living in poverty compared to 9.8% in Alameda County, according to Census 2000 (Appendix table 1B.5).

Among the common conditions that are associated with living in poverty is food insecurity.¹¹ A family that is food insecure may forego such needs as rent, utilities, or medical care to put food on the table. In addition, about one-third of persons living in poverty or in low-income households do not have health insurance.¹² These condi-

tions, being food insecure or uninsured, are associated with poor health status and unfavorable long-term health outcomes.

Appendix table 1B.1 shows median household income in Hayward and Alameda County. In 1999, the median household income in Hayward was \$51,177—close to that for the county (\$55,946). The median household income in Hayward increased by only 4.0% between 1989 and 1999—less than half the rate of increase in the county (9.8%).

Households with public assistance income comprise 4.3% of Hayward households, similar to the county (4.2%). Public assistance income according to Census 2000 includes general assistance and Temporary Assistance for Needy Families (TANF). It does not include assistance for hospital or other medical care or Supplemental Security Income.⁷ Public assistance programs in Alameda County include CalWORKs, food stamps, Cash Assistance Program for Immigrants, Refugee Cash Assistance, and Cal-Learn.

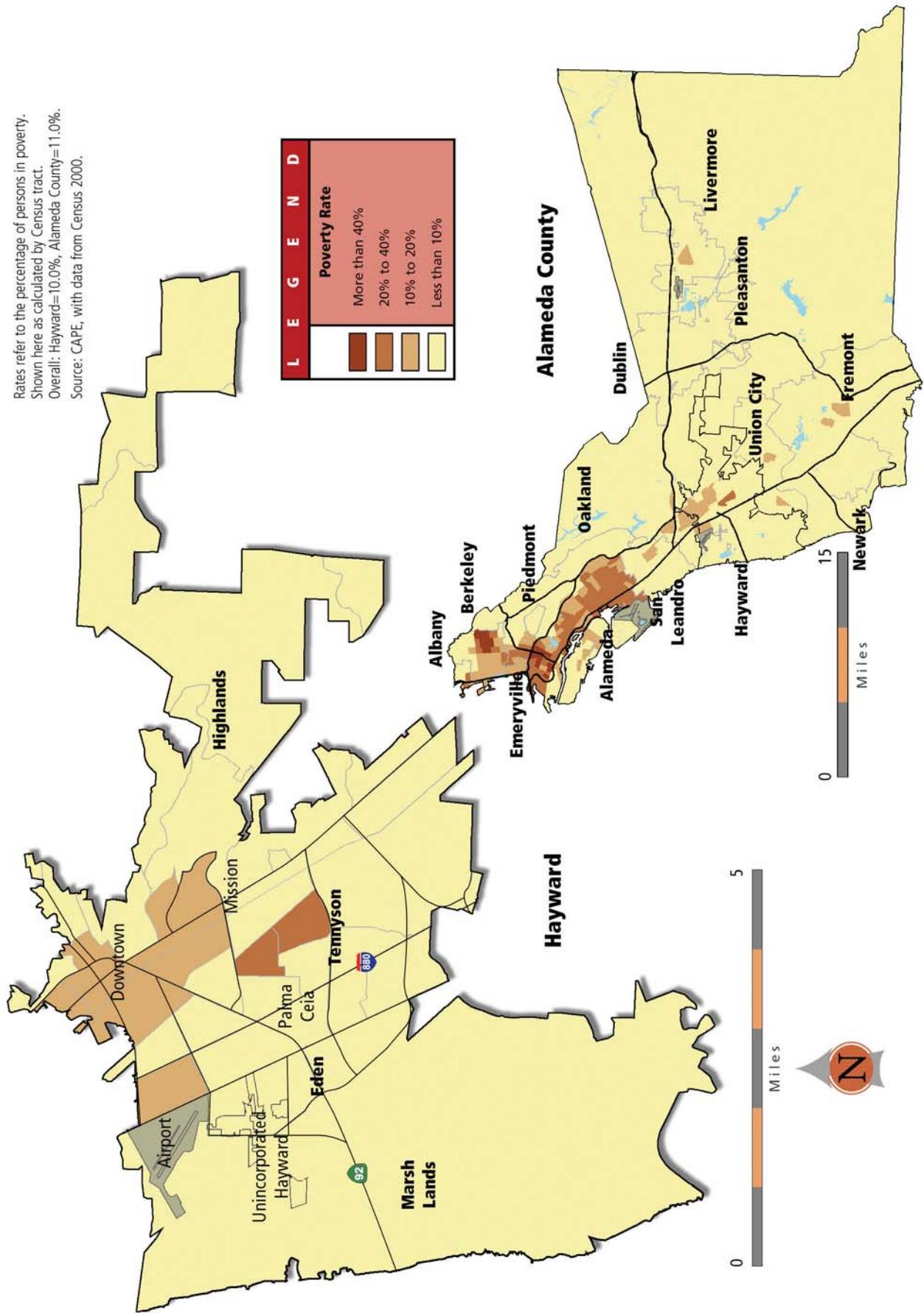
The number and percentage of individuals living in poverty is another measure used to describe economic conditions in a population. Individuals living in poverty in 1999 comprised 10.0% of Hayward's population, slightly lower than in the county (11.0%). Non-elderly adults aged 18 to 64 years comprise 60.3% of persons living in poverty in Hayward (Table 1.2). Young children five years and under comprise a slightly higher proportion of persons living in poverty in Hayward (11.8%) than in the county (9.3%).

Among individuals living in poverty, rates of poverty vary by age group. In Hayward, children aged five years have



The high school dropout rate in Hayward has decreased substantially since the 1990s

Rates refer to the percentage of persons in poverty.
Shown here as calculated by Census tract.
Overall: Hayward=10.0%, Alameda County=11.0%.
Source: CAPE, with data from Census 2000.



the highest rates of poverty (14.7%), followed by children 12 to 17 years (12.9%), children under five years (11.9%), children 6 to 11 years (11.5%), non-elderly adults aged 18 to 64 years (9.5%), and the elderly (8%) as illustrated in Appendix table 1B.6.

The distribution of persons living in poverty by geographic location in Hayward is shown in Map 1.2. Hayward does not have areas of extreme poverty rates (over 40%). There are small areas of high poverty (20% to 40%) in the northern part of Tennyson. Areas of medium poverty (10% to 20%) are in Downtown and just east of the airport. The rest of Hayward has a relatively low poverty rate—less than 10% of people live in poverty.

Income Inequality

Inequality in the distribution of income is of importance to the health of a community.^{1,13} Income inequality measures the relative share of income among poor and rich people. One measure of income inequality—the Gini ratio—compares how close the distribution of income is to a perfect distribution; a perfect distribution means every recipient of income receives exactly the same amount.¹⁴ The ratio is always between zero and one, where zero means all income is perfectly distributed and one means one household has all the income.

Hayward has a fairly equitable income distribution, based on household income data from Census 2000.¹⁵ It has lower income inequality (0.384) compared to the county (0.448), the state (0.472) and the nation (0.462). It also has lower income inequality than several cities in the county such as Berkeley, Oakland, or Emeryville (Appendix table 1B.7).

Cost of Living

Hayward's cost of living and housing costs are higher than the rest of the country but moderate for the Bay Area.¹⁶ Using an index for this relative cost, the United States is represented as 100. The index is made up of housing, food, transportation, utilities, health, and other miscellaneous items.

Hayward has an index of 142; this means that the overall cost of living in Hayward is 1.42 times the average cost in the United States. The average cost of living is also higher than the United States in Alameda County (160), Berkeley (176), and Fremont (184) as defined by this index. In the Bay Area, housing is the component that drives the other costs. The index for housing for Hayward is 183, compared to 177 in Oakland, 286 in Berkeley, 310 in Fremont, and 390 in San Francisco. The costs of health care, transportation, and food are also higher in Hayward than in the United States (Appendix table 1B.8).

Mobility

The population in Hayward and in the county was more stable in the 1990s than in the 1970s and 1980s. Fifty percent of persons five years and older were in the same house in 1995 and 2000. In the past this was as low as 45%. However, of the newer residents of Hayward and the county, i.e., the population that moved into the area after 1995, an increasing proportion is from outside the East Bay and outside the United States. In 1980 persons from outside the East Bay or from other countries accounted for only 14% of new Hayward residents. In 2000 this population accounted for 23% of new residents.^{7,17,18}

Housing

Aspects of housing like affordability and quality are indicators of socioeconomic conditions in a community.



In 2003, Hayward's unemployment rate was 7% – similar to the county and the state

Home ownership in Hayward is 53.3%, similar to that in the county (54.7%) as seen in Appendix table 1B.1.

The national standard for housing affordability is that owner costs be less than 30% of household income. According to Census 2000, 22% of households in the nation and 31.5% of households in California pay less than 30%. Despite the relatively lower cost of housing in Hayward compared to cities in the Bay Area, affordability is low because of relatively lower salaries. Although housing in Hayward is generally cheaper than in other Bay Area cities, it is less affordable than the other places for its own residents. Hayward households have to pay more of their income compared to other cities in Alameda County. The proportion of households with owner costs above 30% has been rising steadily in Hayward. It went from 18.0% in 1980 to 27.4% in 1990, similar to the pattern in the county (17, 18). In 2000 this proportion was 32.3% in Hayward and 30.9% in Alameda County. The proportion in Hayward is comparable to that in Oakland (32.8%) and more than Fremont (30.5%) or Berkeley (28.6%).⁷

The proportion of households spending over 35% of their income on rent increased in Hayward between 1980 and 1990, from 29.3% to 36.8%, a pattern similar to that in the county. In 2000, 33.5% of Hayward renters spent more than 35% of their income on rent, similar to the proportion in the county (34.0%).⁷

Between 1980 and 2000 housing costs increased almost three times in the Bay Area. The rate of inflation was less for all other items, which doubled in cost in this time period. Other items include food, health care, education, transport, utilities, and recreation.¹⁹ Rent increased just

over three times in Hayward between 1980 and 2000, as in the county. For owners, overall housing costs have gone up 4.5 times in Hayward, similar to that in the county (4.4) in this time period.^{17,18}

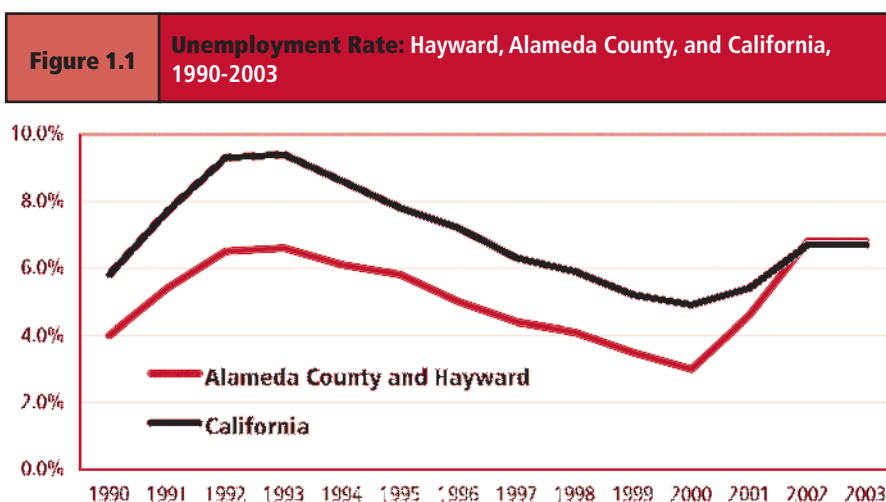
In Hayward, only 39.9% of the housing was built before 1960, compared to 45.5% of the housing in the county. More people live in each housing unit in comparison to the county. The percentage of housing units with more than one person per room is 19.7% in Hayward compared to 12.2% in the county.⁷

Unemployment

Unemployment puts the health of individuals in a community at risk. The health effects of unemployment are linked to both its psychological consequences and the financial problems it poses to individuals and families.^{2,3} One of the many consequences of unemployment is lack of health insurance, which can limit access to essential medical care and adversely affect health status.¹²

The official unemployment rate is the percentage of people in the workforce that are out of work. Note that if an unemployed person is not actively looking for work, he/she is not considered in the workforce and so is not counted in the unemployment rate. For this reason the official unemployment rate is an underestimate of persons out of work. Nevertheless, it is a good measure to observe changes over time and to compare between regions.

Figure 1.1 illustrates the trend of unemployment rates since 1990. As expected, unemployment in Hayward, Alameda County, and California follow the general national economic cycle. At about the height of the last two



cycles, 1990 and 2000, the unemployment rates were the lowest.²⁰ The rate then rose rapidly for two years and leveled off. During the recovery period, the unemployment rate generally comes down more slowly than it rises.

During the 1990s, the unemployment rate of California was higher than that of Alameda County. Sub-county unemployment rates are calculated as an index of the county rate. Hayward's unemployment rate was virtually the same as that of the county between 1990 and 2003. For the rise part of the current cycle, between 2000 and 2003, Hayward and Alameda County's unemployment rates approached that of California at almost 7%.

Occupation

In Hayward, the lowest paying occupations—those least likely to offer health insurance or other benefits—are a bigger part of the workforce and are growing more quickly than the same sectors in the county. In 1980, these relatively low-paying occupations were about 41% of the workforce, the same as in the county. In 2000, the share of these occupations was 40% in Hayward, compared to 35% in the county. Production (or manufacturing) occupations, which tend to drive the economy, have fallen both in numbers and even more as a portion of the economy in Hayward and the county, as in the rest of the United States. However, growth in some of the high-paying sectors has been strong, especially professional occupations.^{7, 17, 21}

Commute to Work

Reducing driving and encouraging more walking and cycling backed by public transport are considered an important health promotion strategy.^{2,3}

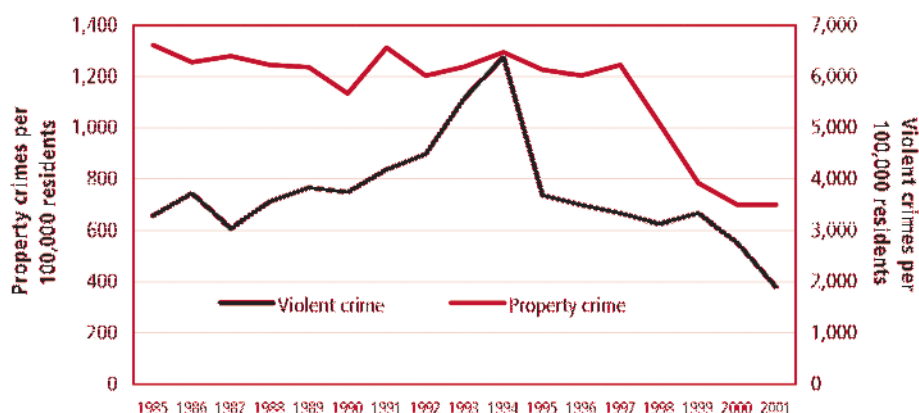
Hayward workers are more likely to commute in a vehicle (87.3%) than county residents (80.2%). They are less likely to use public transportation to get to work (6.7%) than workers countywide (10.6%) as seen in Appendix table 1B.9. In most large cities in the state, less than 4% use public transportation. Among Bay Area cities, San Francisco workers have the highest use in the state—more than 31%. Daly City (17.8%) and Berkeley (18.6%) also have higher rates of public transport use among workers.

Of the large cities in the state, most have more than 58% of their workers needing 30 minutes or less to arrive at work. In Hayward, 49.5% need 30 minutes or less, similar to the proportion in the county (52.6%).⁷

Crime

Crime poses a threat to health and has an impact on the demand for health services. Violent crime can result in physical and psychological injury and theft and burglary can materially affect the people involved psychologically or financially. The fear of crime in a community can lead to health consequences and affect quality of life, e.g., limitations in outdoor recreation. Violent crime disproportionately affects certain groups in society, including young people and those who are economically deprived.²²

Figure 1.2 Property and Violent Crime Rate: Hayward, 1985-2001



Standardized measures of violent and property crime rates are used to compare crime statistics across widely different geographic areas. **Figure 1.2** on the previous page illustrates the trend of violent and property crime rates in Hayward since 1985. Hayward's violent crime rate rose sharply through the early 1990s, and peaked in 1994 like that of several large cities in the nation. It then declined steadily and dropped below pre-1990 levels by 1998. The rate was about 656 violent crimes per 100,000 inhabitants in 1985, decreased to 607 in 1987, then rose sharply to 1,277 in 1994 before decreasing to about 379 in 2001.²³

Unlike the trend in violent crime, Hayward's property crime rate fluctuated only somewhat between 1985 and 1997. It declined sharply between 1998 and 2000. The 1985 property crime rate of 6,618 crimes per 100,000 residents declined to 5,088 in 1998 and fell dramatically to 3,494 in 2000, where it remained in 2001.

Access to Health Care

Health insurance is one measure of access to health care. Poor access to health care can negatively impact health status. Alameda County, like most Bay Area counties, has among the lowest percentage of persons who are uninsured in the state—8.4%.¹² Hayward has among the highest proportion of uninsured adults among cities in the county. It is estimated that Hayward's uninsurance rate is 1.5 times the rate of uninsurance for the county.²⁴ The City of Hayward bears a greater burden of persons who lack adequate access to health care and are at risk for poor health as a result, compared to most cities in the county.

Summary

Hayward's population is comprised of a higher proportion of Latinos and multiracial persons, and a lower proportion of White, Asian, and African American persons than the county population. About half of Hayward residents speak English at home, one in four persons speak Spanish, and one in ten persons speak Asian languages at home.

Social and economic factors determine the health and well-being of communities and neighborhoods. Hayward residents are in general less educated than those in the county. The median household income in Hayward is about the same as in the county. In 1999, about one in ten persons in Hayward were living in poverty, similar to that in the county. Two-thirds of adults 18 to 64 years were living in poverty.

Hayward's cost of living and housing costs are higher than the rest of the country but moderate for the Bay Area. The costs of health care, transportation, and food are higher than in the United States.

Home ownership in Hayward is about the same as in the county. Housing in Hayward is generally cheaper than in other Bay Area cities; however, it is less affordable than other places for its own residents. Among those who rent, a third of Hayward residents spent more than 35% of their income on rent in 2000. The cost of housing has been on the rise in Hayward in the last two decades, and has increased at a higher rate than other commodities.

Low-paying jobs make up a larger part of the workforce and have increased at a faster rate in Hayward than in the county since 1980. High-paying jobs make up a smaller part of the workforce in Hayward and have grown at a slower rate than in the county. In 2003 Hayward's unemployment rate was 7%, similar to the county and the state.

Hayward's population was more stable in the 1990s than in the previous two decades. Twenty-three percent of new residents in Hayward are from other countries or outside the East Bay.

Hayward workers are less likely to use public transportation to get to work compared to workers in the county, and about half need 30 minutes or less to commute to work.

Hayward's violent crime rate peaked in 1994 and decreased dramatically in 2001. Hayward's property crime rate declined sharply in 1998, but reached a low point in 2001.

Hayward has a greater burden of persons who lack health insurance and have inadequate access to health care as a result, compared to most cities in the county.

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Mortality

Measures of mortality are important tools for monitoring progress in preventing disease and improving health. Understanding why and how people die is necessary in order to prevent premature death. By understanding how and why some people die earlier than others, we can focus our efforts on reducing certain preventable causes of death and can help people better manage the conditions with which they currently live.

Certain causes of death have shown a decline over time. In the early 1900s, the predominant threats to public health in the United States were diseases associated with poor hygiene and sanitation; poor nutrition; poor maternal, infant, and child health; and unsafe working conditions. The impact of these diseases has decreased significantly over the last 50 years due to the success of public health interventions and health promotion efforts, and biomedical advances.¹⁻⁵

There have been recent declines in many leading causes of death largely due to the influence of healthier life styles, greater use of preventive care, public health efforts, and advances in medicine.⁶⁻¹⁰ Currently, five chronic diseases account for over two-thirds of all deaths in the United States—heart disease, cancer, stroke, chronic lower respiratory disease, and diabetes. Heart disease and cancer combined account for more than half of all deaths.¹¹

Despite overall declines in mortality, large inequities by race/ethnicity and by sex persist.¹²⁻¹⁵ Low-income groups, African Americans, and men continue to have higher mortality rates than the population as a whole.

Mortality refers to measures of death from all causes. The impact of death and its various causes can be measured in several different ways: by the number of persons who die due to different diseases, years of potential life lost due to deaths from various causes, or the number of years that persons in a population are expected to live.

This chapter presents findings on measures of mortality for the residents of Hayward for the years 1999 to 2001. Detailed information on Hayward and Alameda County is in Appendix 2. Due to a change in classification and reporting of race/ethnicity on death certificates, race-specific findings are based on deaths for 2000 and 2001 only. The measures described include: all-cause mortality rates, leading causes of death, leading causes of premature death, and life expectancy.

All-Cause Mortality Rates

The number of deaths in a defined group of people during a given period is called the mortality (or death) rate. When the number of deaths is simply divided by the number of individuals in the group, the rate is called the “crude” mortality (or death) rate. Researchers in public health use a method called “age-adjustment” to compare groups of people with different age compositions. Almost all diseases or health outcomes occur at different rates in different age groups. Most chronic diseases, including most cancers, occur more often among older people. Other outcomes, such as many types of injuries, occur more often among younger people. The age composition determines the most common health problems in a community. Age-adjusted rates, in contrast to crude rates, aid comparisons across groups with different age compositions over geographic areas and over time. In this chapter the terms “mortality rate” and “death rate” are used interchangeably.

In 2002, a total of 2,447,864 deaths occurred in the United States, and the age-adjusted death rate was 846.8 deaths per 100,000. This was lower than the 2001 rate of 854.5.^{16,17} The age-adjusted death rate for men (1,015.3) was 42% greater than that for women (716.7).¹⁷ There were disparities in age-adjusted death rates for the major race/ethnic groups; African Americans had the highest rates and Asians the lowest rates. White, American Indian, and Hispanic/Latino populations had the second, third and fourth highest rates respectively in the nation.

Key features of mortality from all causes in Hayward are presented in this section. Detailed information on Hayward and Alameda County is in Appendix 2.

The annual average death rate from all causes in Hayward was 1,068.1 per 100,000. This is 36% higher than the county rate of 786.9. Mortality from all causes in Hayward was 43% higher among males compared to females. Sex differences in mortality in the county were about the same as in Hayward; males had a rate 41% higher than females (945.5 and 670.6 respectively).

Figure 2.1 shows the death rate from all causes by race/ethnicity for Hayward and Alameda County. African Americans had a rate of 1,631.7 per 100,000, 2.5 times the rate of Asians (644.1), almost twice the rate for Latinos (882.7) and 30% higher than the rate for the White population (1,259.5). The Native Hawaiian and Other Pacific Islander (NHOPI) population^a had the highest death rate; however, the rate is based on a small number of deaths and may not be reliable.

From 1990 to 2001 mortality from all causes in Hayward declined from 1,253.5 per 100,000 to 1,039.2, a 17% decrease (**Figure 2.2** on the following page). Although there was a similar decline (16%) in the county, Hayward death rates were consistently higher in this time period. The decline in all-cause mortality rates in the last decade can be attributed largely to the decline in death rates from three of the most common causes of death—coronary heart disease, cancer, and stroke, described in Chapter 3.

Within Hayward the areas with the highest rates of death from all causes (ranging from 983.6 to 1180.4 per 100,000) are concentrated in central Tennyson, along the southern end of Mission Boulevard, and just south of Downtown (**Map 2.1**). Hayward has large areas including the marsh lands, Highlands, and neighborhoods south of Tennyson Road with death rates that are slightly higher than county

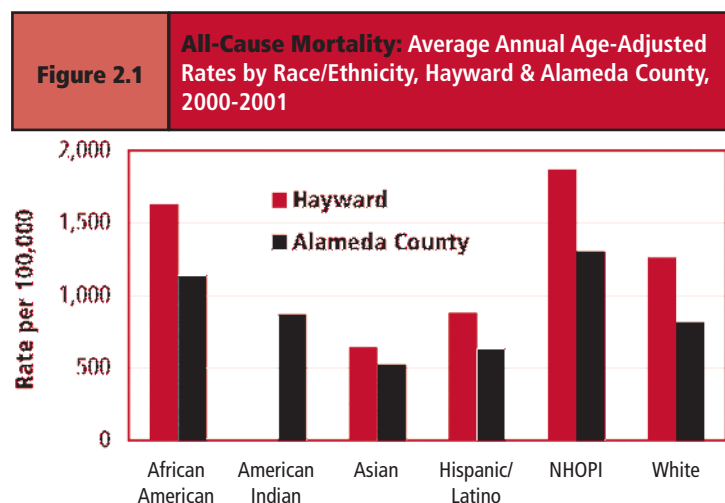
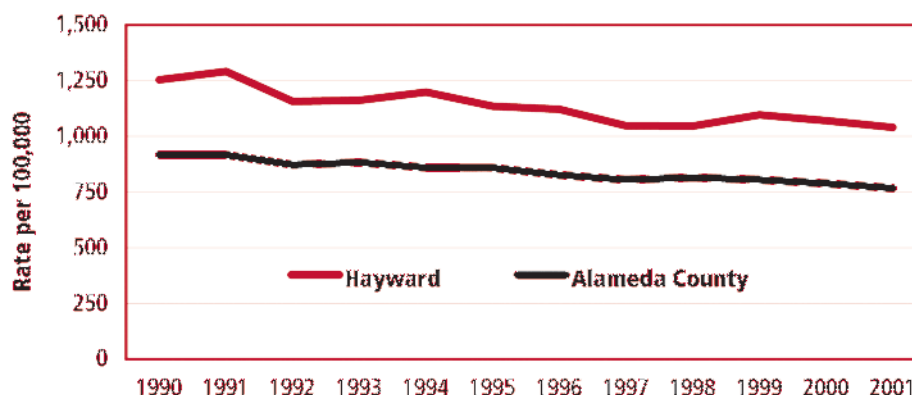


Figure 2.2**All-Cause Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001**

rates (786.9 to 983.6 per 100,000). Other areas such as Downtown, parts of Tennyson around Jackson Street, and Harder Road have death rates that are lower than or about the same as county rates (393.5 to 786.9 per 100,000).

Leading Causes of Death

Leading causes of death are the most common causes of death that occur in a population group. The frequency and ranking of causes of death and how they vary by sex, race/ethnicity, and age are important for identifying contributors to disease burden and priorities for preven-

tion. Causes of death are ranked according to number of deaths.^b

In 2001, the ten leading causes of death accounted for about 79% of all deaths occurring in the United States. The five chronic diseases account for over two-thirds of all deaths in the United States—heart disease, cancer, stroke, chronic lower respiratory disease, and diabetes. Heart disease and cancer combined account for more than half (51.9%) of all deaths (17). Decreasing trends continued for the three leading causes—heart disease, cancer, and stroke.

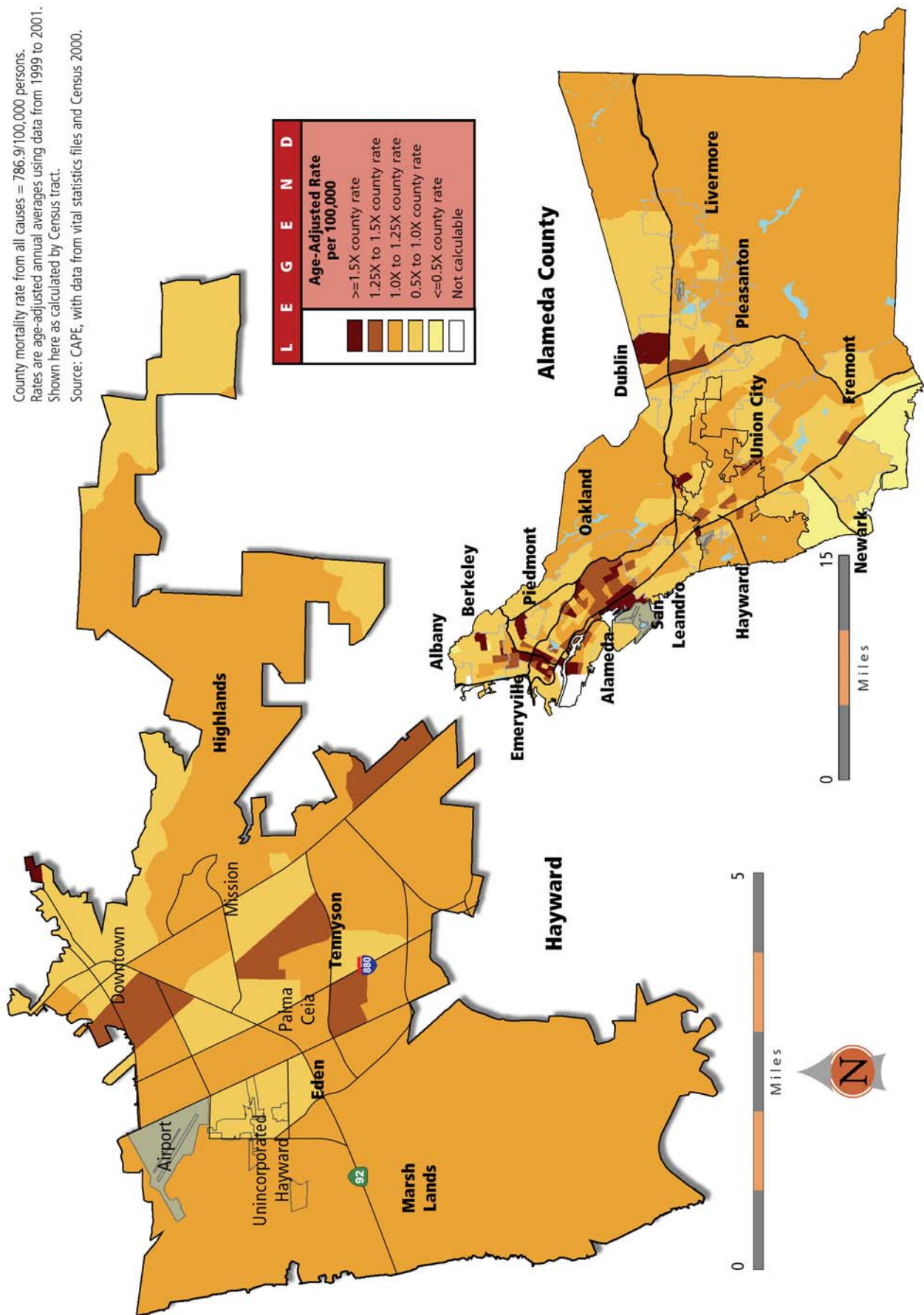
Table 2.1**Leading Causes of Death: Average Annual Count, Percent of All Deaths, Hayward 1999-2001**

Rank	Cause of Death	Count	%
1	Diseases of the Heart	362.7	29.2
2	Cancer	279.3	22.5
3	Stroke	101.3	8.2
4	Chronic Lower Respiratory Diseases	71.7	5.8
5	Unintentional Injuries	42.7	3.4
6	Diabetes Mellitus	42.0	3.4
7	Influenza & Pneumonia	38.3	3.1
8	Alzheimer's Disease	26.0	2.1
9	Chronic Liver Disease & Cirrhosis	21.7	1.7
10	Pneumonitis Due to Solids & Liquids	16.0	1.3
	Subtotal	1,001.7	80.6
	All Other	240.7	19.4
	Total	1,242.3	100.0

Map 2.1

All-Cause Mortality: Hayward and Alameda County, 1999-2001

County mortality rate from all causes = 786.9/100,000 persons.
Rates are age-adjusted annual averages using data from 1999 to 2001.
Shown here as calculated by Census tract.
Source: CAPE, with data from vital statistics files and Census 2000.



Heart disease and cancer combined account for more than half (51.9%) of all deaths.¹⁸ Decreasing trends continued for the three leading causes—heart disease, cancer, and stroke.

Table 2.1 on the previous page shows the annual average counts and percent for ten leading causes of death in Hayward. The average annual number of deaths between 1999 and 2001 in Hayward was 1,242. Eighty-one percent of these deaths were attributable to the ten leading causes of death. Major chronic diseases—heart disease, cancer and stroke, were the three leading causes of death and accounted for 50% of all deaths in this time period. The fourth leading cause of death in Hayward was chronic lower respiratory diseases, followed by unintentional injuries then diabetes.

The nine leading causes of death in the county were the same as for Hayward. The ranking was reversed for the sixth and seventh cause.

Leading Causes of Death by Sex

Males and females in Hayward had the same four leading causes of death as the total population (Appendix table 2B.1). These four causes accounted for 63% of deaths among males and 68% of deaths among females. For males, the fifth leading cause of death was unintentional injuries, followed by diabetes, influenza and pneumonia, and chronic liver disease and cirrhosis. For females, the fifth leading cause of death was diabetes, followed by influenza and pneumonia, Alzheimer's disease, and unintentional injuries.

Leading Causes of Death by Race/Ethnicity

The three leading causes of death for all race/ethnic groups were the same—heart disease, cancer, and stroke. However, the ranking of the first and second leading causes

of death were reversed for Asians. Diabetes was among the five leading causes of death for African Americans, Latinos, and Asians. Unintentional injuries ranked fourth among Asians and Latinos, but did not rank in the five leading causes for the African American and White populations. Influenza and pneumonia was among the five leading causes of death for African American and White populations (Appendix table 2B.2 and Table 2B.3).

Leading Causes of Death by Age

The pattern of leading causes of death by age group indicates clear differences among older and younger persons in the population in Hayward and Alameda County. Each of the age groups had distinctly different ranks for the most common causes of death (Appendix table 2C.1 and Table 2C.2). Due to the relatively small number of deaths among infants through persons 25 to 34 years of age, the findings on leading causes of death for these age groups should be used with caution.

Infants

Congenital malformations, sudden infant death syndrome, and disorders related to premature birth were the three leading causes of death among infants (children below twelve months of age) in Hayward. They accounted for 46% of deaths in this age group. In the county, these were also the three leading causes of infant death, and accounted for 48% of deaths.

1 to 14 years

While there are very few deaths among the 1 to 14 age group, congenital malformations were the leading cause of death in Hayward. Unintentional injuries were the leading causes of death among children 1 to 14 years in the county.



*Life expectancy
in Hayward was
74.4 years, lower than
in the county*

15 to 24 years

The leading cause of death among youth 15 to 24 years in Hayward was unintentional injuries followed by homicide and suicide. These three injury-related causes of death accounted for 75% of all deaths for this age group. In Alameda County, 72% of all deaths in this age group were also attributable to homicides, unintentional injuries, and suicide. While homicide ranked as the second leading cause of death in Hayward for this age group, it was the leading cause in the county.

25 to 34 years

Heart disease was the leading cause of death among persons 25 to 34 years in Hayward, accounting for 16% of all deaths in this age group. Unintentional injuries were the second leading cause of death and accounted for 14% of the deaths in this age group. Although the ranking was different, the five leading causes of death for this age group in Hayward—diseases of the heart, unintentional injuries, homicide, cancer, and suicide—were the same as in the county. Unintentional injuries and homicide ranked first and second in the county, respectively.

35 to 44 years

Unintentional injuries was the leading cause of death among adults 35 to 44 years in Hayward, while cancer was the leading cause of death for this age group in Alameda County. Chronic liver disease and cirrhosis was among the five leading causes of death in Hayward, while HIV disease was among the five leading causes in the county.

45 to 54 years

Cancer was the leading cause of death among persons 45 to 54, and accounted for 30% of the deaths in this age group in Hayward. The four leading causes of death in Hayward—cancer, diseases of the heart, unintentional injuries, and chronic liver disease and cirrhosis—were the same as in the county. Diabetes was the fifth leading cause in Hayward, while stroke ranked fifth in the county.

55 to 64 years

Cancer and heart diseases were the most common causes of death, accounting for 35% and 26% of deaths for this age group in Hayward, respectively. Both in Hayward and Alameda County, chronic diseases accounted for over 75% of deaths in this age group. Diabetes was the third leading cause of death in Hayward, while it was fifth in the county.

65 to 74 years

Among seniors and the elderly 65 to 74 years in Hayward, cancer was the leading cause of death and accounted for 32% of deaths. Heart disease, the second leading cause, accounted for 28% of deaths, followed by chronic lower respiratory disease, stroke, and diabetes. Although the ranking was different, the five leading causes of death were the same as in Alameda County for this age group.

75 years and over

Among those 75 and older, the five leading causes of death in Hayward—diseases of the heart, cancer, stroke, chronic lower respiratory diseases, and influenza and pneumonia—were the same as in the county and accounted for 73% of all deaths in this age group.

Table 2.2		Leading Causes of Premature Death: Average Annual Years of Potential Life Lost (YPLL) and Rate per 1,000, Hayward, 1999-2001	
Rank	Disease/Condition	YPLL	Rate
1	Malignant Neoplasms (Cancer)	4,854.0	34.7
2	Diseases of Heart	4,562.1	32.6
3	Unintentional Injuries	1,482.8	10.6
4	Stroke (Cerebrovascular Disease)	1,089.1	7.8
5	Chronic Lower Respiratory Diseases	983.8	7.0
6	Diabetes Mellitus	727.3	5.2
7	Congenital Malformations & Chromosomal Abnormalities	609.0	4.3
8	Chronic Liver Disease & Cirrhosis	560.1	4.0
9	Certain Conditions Originating in the Perinatal Period	547.2	3.9
10	Homicide	494.5	3.5

Causes of Premature Death

According to the National Vital Statistics System, the average life expectancy at birth in 2001 was 79.8 years for females and 74.4 years for males.¹⁵ Death before this age is considered premature. In addition to being tragic, early death represents a loss to society in terms of lost years of productivity.¹⁹

“Years of potential life lost” (YPLL) is a measure used to describe the total burden of mortality from a particular cause. The YPLL sums the years lost due to premature death (the years prior to the end of life expectancy) for each death in a group. The younger the age at death, the greater the YPLL. Since many deaths to young people can be prevented by public health interventions, this measure indicates the potential for prevention in a population. It can be used to monitor progress toward the critical public health goal of preventing premature death.²⁰

Table 2.2 on the previous page shows the ten leading causes of premature death in Hayward. The YPLL for each of these causes and the rate—YPLL per 1,000 persons—are also presented. In Hayward, cancer was the leading cause of premature death followed closely by heart disease, unintentional injuries, stroke, and chronic lower respiratory diseases. Cancer and heart disease were by far the major contributors to premature mortality, and had the most impact in terms of lost years of productive life for the overall population. Stroke and diabetes ranked fourth and sixth, respectively. This finding indicates the need to prioritize and focus prevention efforts on some of the major risk factors for these chronic diseases such as unhealthy diet, physical inactivity, and overweight and obesity. Homicide ranked as the tenth leading cause of premature death in Hayward. In the county it ranked sixth, possibly due to the high number of homicide deaths among youth and young adults. Unintentional injuries ranked third among the major causes of premature death in Hayward; this suggests that they need to be a priority for prevention.

Leading Causes of Premature Death by Race/Ethnicity

The most significant contributors to premature death vary by race/ethnic group in Hayward (Appendix table 2D.1). Details of YPLL by race/ethnicity in Alameda County are shown in Appendix table 2D.2. The number of deaths in Hayward was too small in some racial groups to show the findings. Cancer was the most common cause

of premature death among all race/ethnic groups except the White population in Hayward. Heart disease was the most common cause of premature death among the White population and the second highest contributor to years of potential life lost among all other race/ethnic groups.

Homicide was the third leading cause of premature death among African Americans in Hayward, followed by unintentional injuries and diabetes. Unintentional injuries were the third most common cause of premature death for Latinos and Asians and the fifth leading cause of premature death among the White population.

Suicide, the seventh leading cause of premature death, was ranked higher among the Asian population than in any other race/ethnic group in Hayward.

These data reveal that certain race/ethnic populations in Hayward are experiencing a disproportionate burden of premature death from certain diseases. The findings on leading causes of premature death by race suggest the need to prioritize and specifically target the White population for heart disease prevention, Latinos and Asians for injury prevention strategies, and the African American community for violence prevention, to reduce the burden of premature mortality.

Life Expectancy

One of the ultimate measures of health for most people is the length and overall quality of one's life. Life expectancy is used to estimate the number of years left in the life of a person at birth or at a given point in the life span. Life expectancy at birth is a measure of how long a baby born at the present time could be expected to live if he or she

Table 2.3	Life Expectancy at Birth: Expected Years of Life by Sex and Race/Ethnicity, Hayward and Alameda County, 1999-2001	
	Hayward	Alameda County
Total	74.4	78.4
Sex		
Male	71.8	75.9
Female	76.9	80.8
Race/Ethnicity		
African American	68.5	71.6
Asian	81.1	83.8
Hispanic/Latino	77.5	81.4
White	71.6	78.4

grew up being subject to current mortality rates. It is a good measure of mortality differences in a group over time or among groups, and of the impact of premature death in a population. Life expectancy at birth is strongly influenced by infant and child mortality.

In the United States, life expectancy improved from 47.3 in 1900 to 77.2 years in 2001.^{15,21,22} In the year 2001, life expectancy at birth was 79.8 years for females and 74.4 years for males. The race/ethnic disparities are pronounced: African Americans had a life expectancy of 72.2 years compared to 77.7 years in the White population.^{21,22} According to preliminary estimates life expectancy at birth for the total United States population in 2002 reached a record high of 77.4 years. The difference between male and female life expectancy at birth has been generally decreasing since its peak of 7.8 years in 1979.¹⁷

Table 2.3 on the previous page shows the expected years of life at birth among residents of Hayward and Alameda County. Life expectancy at birth in Hayward was 74.4 years, which is lower than in the county (78.4 years).

Life Expectancy by Sex

Males in Hayward had a lower life expectancy (71.8 years) than females (76.9). These sex differences in life expectancy were about the same as those for the county—males had 75.9 years of expected life and females had a life expectancy of 80.8 years.

Life Expectancy by Race/Ethnicity

Life expectancy at birth in Hayward was highest among Asians (81.1 years). African Americans had the lowest life expectancy among all race/ethnic groups (68.5). Hayward's White population had a life expectancy of 71.6 years, while the Latino population had a life expectancy of 77.5 years. The differences between the highest and lowest life expectancy were greater in Hayward compared to the county. Though all race/ethnic groups in Hayward had lower life expectancy than these groups in the county, the difference between Hayward and county life expectancy among the White population was the greatest (6.8 years).

Summary and Recommendations

The impact of death from all causes can be measured in several different ways: by the number and rate of death, years of potential life lost due to death, or the number of years persons in a population are expected to live.

The average annual death rate from all causes in Hayward was significantly higher than the county rate between 1999 and 2001. Males had significantly higher mortality from all causes compared to females. African Americans in Hayward had the highest rate of death from all causes among all race/ethnic groups, except NHOPI. From 1990 to 2001 the overall mortality rate in Hayward decreased by 17%, a significant decline. Within Hayward, the areas with the highest death rates (ranging from 983.6 to 1,180 per 100,000) are concentrated in central Tennyson and just south of Downtown.

Major chronic diseases—heart disease, cancer, and stroke, were the three leading causes of death, and accounted for 50% of all deaths. Unintentional injuries was the leading cause of death in the 15 to 24 year age group in Hayward, accounting for 35% of all deaths, and the leading cause of death among the 35 to 44 year age group, accounting for 22% of all deaths. Cancer was the leading cause of death for each of the ten-year age groups between 45 and 74 years. It accounted for over 30% of all deaths for each age group in Hayward.

Cancer and heart disease were by far the major contributors to premature mortality, and have the most impact in terms of lost years of productive life for the overall population.

Life expectancy at birth in Hayward was highest among the Asian population. African Americans in Hayward have the lowest life expectancy among all race/ethnic groups. The differences between the highest and lowest life expectancy at birth among different race/ethnic groups were greater in Hayward than in the county.

Major race/ethnic disparities in mortality from all causes exist in Hayward as was consistently shown by the range of measures presented earlier. These findings point to the need to explore underlying environmental, behavioral, and social risk factors for disease in specific race/ethnic groups that explain these disparities. Future efforts at reducing mortality will require prevention strategies that address individual behaviors as well as the social and environmental contexts in which they occur to make an impact.

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Endnotes

- NHOPI = Native Hawaiian and Other Pacific Islander in figures showing rates by race.
- A list of 50 “rankable” causes has been recommended by the National Center for Health Statistics for use with ICD-10. These are broad disease categories that are groupings of the 113 more specific “selected causes of death”.²³



Chronic diseases such as heart disease, cancer, and diabetes are leading cause of disability and death in the United States. Every year chronic diseases claim the lives of more than 1.7 million Americans. These diseases are responsible for 7 of every 10 deaths in the United States. Chronic diseases cause major limitations in daily living for more than 1 of 10 Americans. These diseases account for 75% of the \$1 trillion spent on health care each year in the United States.

Although chronic diseases are among the most prevalent and costly health problems, they are also among the most preventable. Effective measures exist today to prevent or delay much of the chronic disease burden and curtail its devastating consequences.

Chronic diseases are generally not prevented by vaccines or cured by medication, nor do they just disappear. To a large degree, the major chronic diseases killers—heart disease, cancer, stroke, chronic obstructive pulmonary disease and diabetes—are an extension of what people do, or do not do, in their daily living, or life styles. Health-damaging behaviors—in particular tobacco use, lack of physical activity, and poor eating habits—are major contributors to heart disease and cancer, the nation's leading killers. These behaviors also increase people's risk for other serious chronic diseases such as diabetes. Promoting healthy behavior choices through education and community policies and practices is essential to reducing the burden of chronic diseases.

Regular screening can detect certain chronic diseases at their early stages when treatment can have the greatest impact. Screening can detect cancers of the breast, cervix, colon, and rectum. It is also critical for prevention of the complications of diabetes, including blindness, kidney disease, and lower-extremity amputations. Screening and appropriate follow-up for high blood pressure and elevated cholesterol can save the lives of those at risk for heart disease and stroke. Access to high-quality and affordable prevention measures for all persons are essential to save lives and reduce medical care costs of chronic disease.^{1,2}

Socioeconomic status is an important determinant of chronic disease burden. Persons living in low-income households are more likely to have worse outcomes from chronic disease than those in higher income households. Social conditions can affect a person's outcome from chronic diseases by their connection with inadequate nutrition, unhealthy lifestyles, decreased access to and use of health care services, substandard housing, or exposure to environmental hazards.^{3,4} Health insurance coverage is an important measure of access to health care for chronic disease. Lack of adequate health care to manage chronic disease can adversely affect chronic disease outcome.³ Recent studies have also shown that there are major race/ethnic disparities in chronic disease burden.^{1,5} The extent to which people make healthy behavior choices and change individual behaviors is influenced by social and environmental factors, as suggested by a growing body of research.⁴

This chapter describes five major chronic diseases—coronary heart disease, stroke, diabetes, cancer, and asthma—that pose a significant burden of illness or death to Hayward's population. The measures of disease burden presented are morbidity and mortality. Morbidity includes hospitalization rates and incidence rates (for cancer). Age-adjusted death rates are presented to describe mortality. Hospitalization and mortality rates are based on data

for 1999 through 2001. Incidence rates for cancer are based on data for 1996 through 2000. Mortality rates by race/ethnicity are for the years 2000 and 2001 due to a change in classification and reporting of race/ethnicity on death certificates in 2000. Mortality trends—or annual death rates over time—are also presented in this chapter. Recent trends in chronic disease mortality should be interpreted with caution due to changes in classification of deaths since 1999.^a Hayward findings are included in this chapter; detailed information on Hayward and Alameda County is contained in Appendix 3.

Coronary Heart Disease

Coronary heart disease (CHD) is a group of conditions that reduce the blood supply to heart muscle. It develops when the arteries of the heart become narrowed and cannot supply enough blood to the heart. Blood supplies oxygen and nutrients the heart needs to function. The most common manifestations of CHD are angina (chest pain), heart attack, and sudden death. A person might experience angina if the blood supply to parts of the heart is restricted. A heart attack occurs when the blood supply to parts of the heart is cut off completely.

Most deaths from heart disease are due to CHD. Other forms of heart disease include hypertensive heart disease and rheumatic heart disease.⁶ An estimated 101 million Americans have high blood cholesterol levels, which put them at increased risk for heart disease.¹

Deaths from heart disease have declined steadily over the past 50 years, in large part because of more effective medical treatment, prevention efforts to reduce controllable risk factors (such as hypertension, smoking, high blood cholesterol, physical inactivity, overweight and obesity, and diabetes), and better treatment for heart attack.

CHD is the single most common cause of death in the United States. In 2001 it is estimated that 13.2 million people (6.4%) in the United States had CHD and the age-adjusted death rate was 177.8 deaths per 100,000. African American males (262.0) have the highest rates of death from CHD, followed by White males (228.4), African American females (176.7), and White females (137.4). In 1999 death rates for CHD were 138.4 per 100,000 for Latinos, 123.9 for American Indians, and 115.5 for Asian/Pacific Islanders.⁷

Although CHD mortality has shown a decline in recent years, it continues to be a major cause of disability and premature death in the United States. From 1991 to 2001 the death rate from CHD in the United States declined

26%. The actual number of deaths declined only 9.4% in this time period. More than 80% of people who die of CHD are age 65 and older. The estimated average number of years of life lost due to a heart attack is 11.5. CHD is the leading cause of premature and permanent disability in the United States, accounting for 19% of disability allowances by the Social Security Administration.⁷⁻⁹

The prevalence of major risk factors for CHD increased in the United States between 1991 and 2001. This suggests that the burden of heart disease will increase in the future.¹⁰ Prevalence of CHD is two to three times greater among persons with diabetes than persons without diabetes. Cardiovascular disease deaths are two to four times higher for adults with diabetes than adults without diabetes.¹¹

The risk of coronary heart disease and stroke can be reduced by not smoking, adopting a healthy diet, becoming physically active and reducing or controlling high blood pressure, high blood cholesterol, and diabetes. Other important factors in the development of the disease are socioeconomic status (including income, education level, and occupation), environment, and culture.^{12,13}

CHD-Related Hospitalization

There was an annual average of 2,439 CHD-related hospitalizations in Hayward from 1999 to 2001 (**Table 3.1** on the following page). The age-adjusted rate was 1,711.9 per 100,000—significantly higher than the county rate of 1,455.9 (Table 3A.1 in the Appendix). In Hayward the rate among males (2,188.4) was 1.6 times the rate among females (1,348.3).

Age-adjusted rates of CHD-related hospitalization in Hayward were significantly higher among the White population (1,867.6) compared to the African American (1,483.8), Asian^b (1,348.4), and Latino (1,330.4) populations. The CHD hospitalization rate for African Ameri-

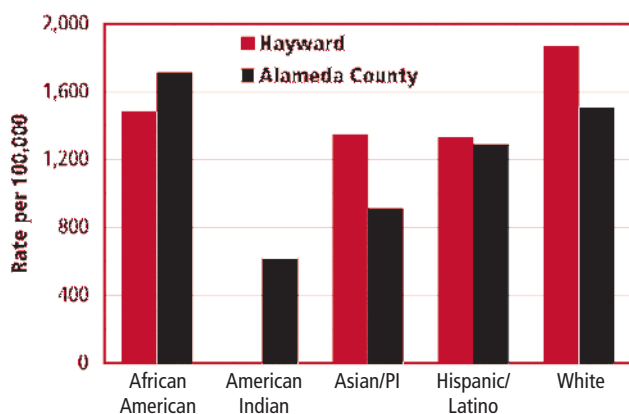
Table 3.1 Coronary Heart Disease: Average Annual Counts and Rates of Hospitalization and Mortality by Sex and Race/Ethnicity, Hayward, 1999-2001

Hospitalization			Mortality		
	Count	Rate		Count	Rate
Total	2,439.3	1,711.9	Total	297.0	260.8
Sex			Sex		
Male	1,322.0	2,188.4	Male	142.0	319.2
Female	1,117.3	1,348.3	Female	155.0	219.2
Race/Ethnicity			Race/Ethnicity		
African American	153.7	1,483.8	African American	22.0	428.3
American Indian	2.3	*	American Indian	<1	*
Asian/Pacific Islander	325.0	1,348.4	Asian	22.0	141.7
			NHOPI	4.0	*
Hispanic/Latino	316.7	1,330.4	Hispanic/Latino	28.5	167.7
White	1,514.3	1,867.6	White	213.5	305.9
			Two or more races	<1	*

Notes: Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Figure 3.1

CHD-Related Hospitalization: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 1999-2001

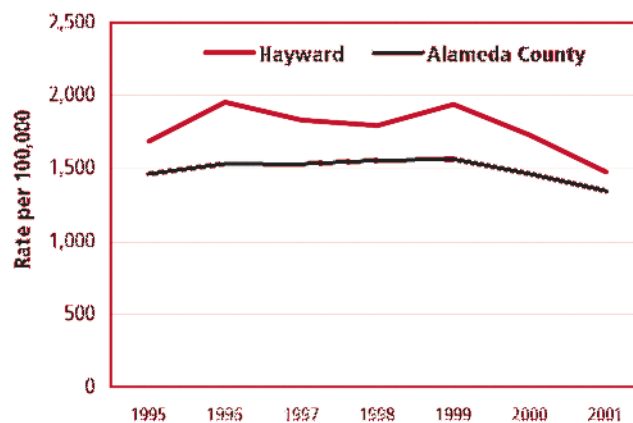


cans in Hayward was significantly lower than for African Americans in the county (**Figure 3.1**).

CHD-related hospitalizations in Hayward fluctuated between 1995 and 2001, from a high of 1,951.7 in 1996 to a low of 1,472.7 in 2001 (Appendix table 3A.2). A similar pattern was observed in the county with the rate reaching a low of 1,342.4 in 2001. CHD-related hospitalization rates were higher in Hayward than in the county throughout this time period (**Figure 3.2**). Additional years of data are

Figure 3.2

CHD-Related Hospitalization: Annual Age-Adjusted Rates, Hayward & Alameda County, 1995-2001



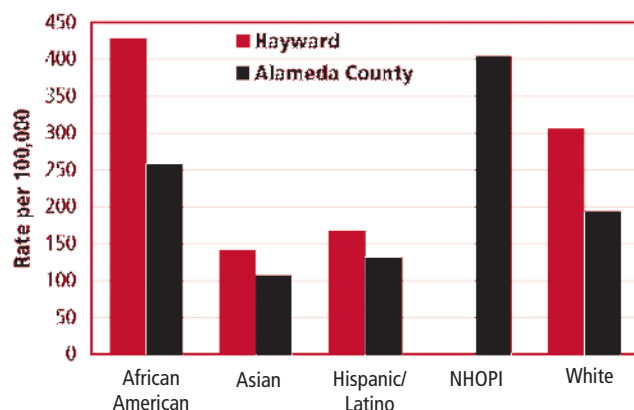
needed to determine if the apparent decline in 2001 is part of a downward trend.

CHD Mortality

The average annual number of CHD-related deaths in Hayward between 1999 and 2001 was 297.0 (**Table 3.1**). The age-adjusted mortality rate was 260.8 per 100,000—significantly higher than the county rate (Appendix table 3A.3). Males had a CHD mortality rate of 319.2 per 100,000, 1.5 times the rate for females (219.2).

Figure 3.3

CHD Mortality: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 2000-2001



In the county, rates for males and females were lower than in Hayward; however the sex difference was the same as in Hayward.

African Americans were the most likely to die due to CHD in Hayward, with a mortality rate of 428.3 per 100,000 (**Figure 3.3**). This was higher than the rate among those who were White (305.9), and significantly higher than rates among Asians (141.7) or Latinos (167.7). In the county, Native Hawaiian and Other Pacific Islanders (NHOPI)^c had the highest CHD mortality rate. CHD mortality rates were significantly higher in Hayward than in the county for each race/ethnic group.

CHD mortality showed a significant decline in Hayward between 1990 and 2001 (**Figure 3.4**). The death rate declined from 352.3 per 100,000 in 1990 to 243.2 in 2001, a 31% decrease (Appendix table 3A.4). A similar decline occurred in the county in this time period. These findings are generally consistent with national trends, and can be explained by advances in pre-hospital care and medical treatment of heart attack as well as prevention efforts to reduce CHD risk factors.

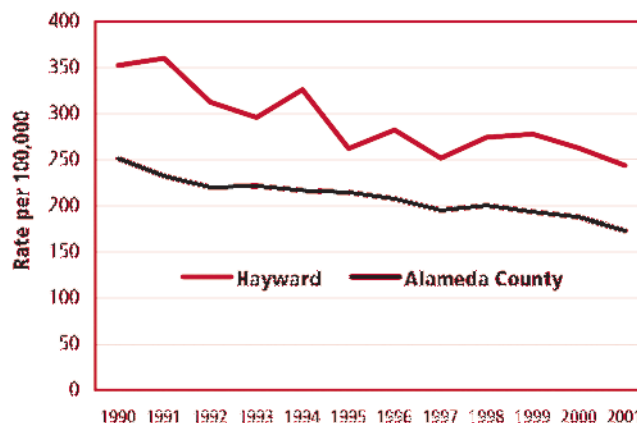
Stroke

A stroke occurs when a blood vessel supplying oxygen and nutrients to the brain ruptures or is clogged by a blood clot or some other particle. Without oxygen, nerve cells in the brain cannot function and begin to die within minutes, resulting in disability or death.

The major risk factors for stroke are tobacco use and uncontrolled hypertension. Preventing stroke and controlling its risk factors are essential to reducing health

Figure 3.4

CHD Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001



care costs and improving the quality of life among older Americans.¹²

Stroke is the third leading cause of death in the United States and a leading cause of serious, long-term disability among adults. Age-adjusted stroke death rates have declined steadily since the early part of the twentieth century. Currently, it is estimated that about 700,000 people experience a new or recurrent stroke each year in the United States.^{3,7,9} In 2001 the age-adjusted death rate for stroke was 57.9 per 100,000.^{3,14} African American males (85.4) and African American females (73.7) have the highest rates of death from stroke, followed by White males (56.5), and White females (54.5). In 1999, death rates for stroke were 52.4 among Asian/Pacific Islanders, 40.0 among Latinos, and 39.7 among American Indians.⁷ National data shows that a person's chance of having a stroke more than doubles for each decade of life after age 55.

From 1991 to 2001 the death rate from stroke declined 3.4%. The actual number of deaths rose 7.7%.⁷

Because women live longer than men, more women than men die of stroke each year. Women accounted for 61.4 % of United States stroke deaths in 2001.^{3,7} Stroke is the third leading cause of death, after diseases of the heart and cancer.¹⁵ Stroke is the third leading cause of death, and fourth leading cause of premature death in Hayward.

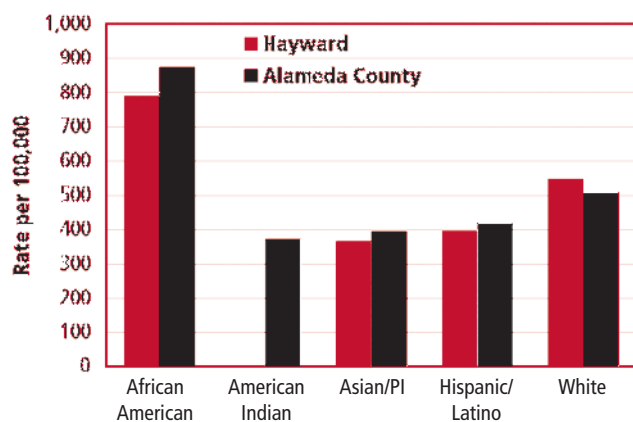
As with CHD, the prevalence of major risk factors for stroke is on the rise in the United States, suggesting that the burden of stroke is expected to increase in the future.¹⁰ Prevalence of stroke is two to three times greater among persons with diabetes than persons without diabetes, and

Table 3.2 Stroke: Average Annual Counts and Rates of Hospitalization and Mortality by Sex and Race/Ethnicity, Hayward, 1999-2001					
Hospitalization			Mortality		
	Count	Rate		Count	Rate
Total	762.7	531.6	Total	101.3	88.7
Sex			Sex		
Male	346.0	587.7	Male	41.3	95.8
Female	416.7	496.8	Female	60.0	84.4
Race/Ethnicity			Race/Ethnicity		
African American	77.7	789.5	African American	6.5	*
American Indian	3.7	*	American Indian	0.0	*
Asian/Pacific Islander	85.0	366.5	Asian	12.5	75.2
			NHOPI	16.0	99.3
Hispanic/Latino	94.7	396.2	Hispanic/Latino	2.5	*
White	466.0	547.1	White	67.0	90.2
			Two or more races	0.0	*

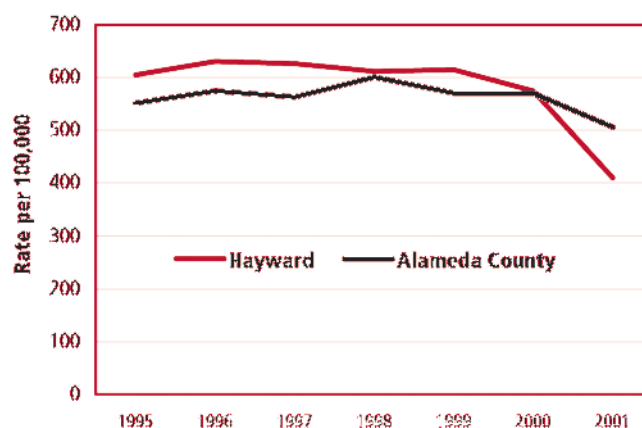
Notes: Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Figure 3.5

Stroke Hospitalization: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 1999-2001

**Figure 3.6**

Stroke Hospitalization: Annual Age-Adjusted Rates, Hayward and Alameda County, 1995-2001



stroke deaths are two to four times higher for adults with diabetes than adults without diabetes.¹¹

Stroke-Related Hospitalization

There was an annual average of 763 stroke-related hospitalizations in Hayward from 1999 to 2001. The annual average age-adjusted rate of stroke-related hospitalization was 531.6 per 100,000, slightly lower than the county rate of 549.4 (Appendix table 3B.1). The rate among males was higher than that among females in Hayward (587.7 and

496.8, respectively). A similar sex difference was observed in the county.

As seen in **Figure 3.5**, among African Americans, the age-adjusted rate of stroke-related hospitalization in Hayward was 789.5 per 100,000, twice the Asian^b and Latino rates (366.5 and 396.2, respectively), and 1.4 times the rate for those who were White (547.1). Stroke hospitalization was higher in Hayward than in the county only among the White population.

Annual rates of stroke-related hospitalization in Hayward fluctuated between 1995 and 2001, dropping from a high of 630.5 in 1996 to a low of 409.2 in 2001 (Appendix table 3B.2). A similar pattern was observed in the county (Figure 3.6).

Stroke Mortality

The average annual number of deaths from stroke in Hayward between 1999 and 2001 was 101.3 (Table 3.2 on the previous page). The stroke mortality rate was 88.7 per 100,000, significantly higher than the county rate of 70.1 (Appendix table 3B.3). The stroke mortality rate among males was 95.8 per 100,000, slightly higher than among females (84.4), and higher than county rates for each group. There was a similar sex difference for the county.

Significant race/ethnic differences in mortality were observed in Hayward (Figure 3.7). Latinos had higher stroke death rates 999.9 per 100,000 compared to those who were White (90.2) or Asian (75.2). In the county, African Americans had significantly higher stroke death rates than those who were White, Latino, or Asian.

Stroke mortality rates were variable between 1990 and 2001 and did not change substantially in Hayward or in the county (Appendix table 3B.4). The highest death rates were seen in Hayward in 1991 and 1995, and the lowest in 1993 (Figure 3.8). These findings suggest the need to monitor major risk factors for stroke in Hayward and the county, and focus prevention efforts on reducing these risk factors in vulnerable populations.

Figure 3.7 Stroke Mortality: Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 2000-2001

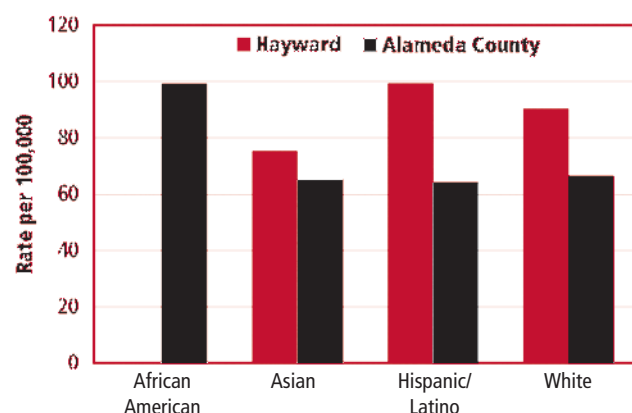
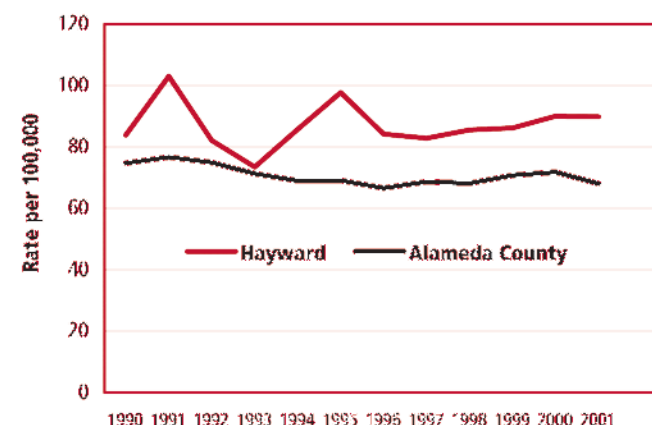


Figure 3.8 Stroke Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001



CHD mortality declined 31% between 1990 and 2001 in Hayward; stroke mortality did not change substantially

Diabetes

Diabetes is a disease in which blood glucose (sugar) levels are too high. This is generally due to the body's inability to produce insulin (the hormone produced by the pancreas to regulate blood sugar) or use it properly. There are two main types of diabetes—Type 1 and Type 2.

Type 1 diabetes is called juvenile or insulin-dependent diabetes. It requires treatment with insulin in order to live because the body does not make adequate amounts. It can occur at any age, but it usually starts in people younger than 30. Type 1 diabetes accounts for 3% of all new cases of diabetes each year. There is 1 new case per every 7,000 children per year. New cases are less common among adults older than 20.

Type 2 diabetes is often called adult or noninsulin-dependent diabetes. Type 2 diabetes is related to insulin resistance (lack of the ability of the body to respond to insulin properly) and is often accompanied by obesity and high cholesterol. Type 2 diabetes accounts for 90% of all cases.

In the past, Type 2 diabetes primarily affected adults over 40 years of age. Risk factors include age greater than 45 years, obesity, high blood pressure, being a member of certain race/ethnic groups, and a family history of diabetes.

In recent years, Type 2 diabetes has been diagnosed with increasing frequency in children and adolescents. Diabetes is a serious, costly, and increasingly common chronic disease that can cause devastating complications including heart disease and stroke; kidney failure, leg and foot amputations, and blindness—that often result in disability and death.^{12,16} Adults with diabetes are twice as likely to die of cardiovascular disease—which includes CHD and stroke—than adults without diabetes.¹¹

Diabetes is the sixth leading cause of death in the United States. It is estimated that 18.2 million people in the United States or 6.3% of the total population has diabetes. It is also estimated that 13.0 million people have been diagnosed and 5.2 million people are undiagnosed.¹⁷⁻¹⁹ The direct and indirect costs of diabetes total nearly \$100 billion a year.²

Diabetes prevalence varies by race/ethnicity. It is estimated that 14.9% of adult American Indians or Alaskan Natives, 11.4% of African Americans, 8.2% of Latinos, and 8.4% of White persons have diabetes.¹⁸ The prevalence of diabetes has increased steadily over the past 20 years, most notably among African Americans, and in recent years, among Latinos.¹⁸ The number of United States adults with diagnosed diabetes has increased 61% since 1991 and is projected to more than double by 2050.¹⁹

Table 3.3 Diabetes: Average Annual Counts and Rates of Hospitalization and Mortality by Sex and Race/Ethnicity, Hayward, 1999-2001					
Hospitalization			Mortality		
	Count	Rate		Count	Rate
Total	2,146.3	1,474.6	Total	42.0	36.7
Sex			Sex		
Male	941.0	1,472.1	Male	20.7	42.2
Female	1,205.3	1,494.1	Female	21.3	32.2
Race/Ethnicity			Race/Ethnicity		
African American	248.7	2,114.2	African American	5.0	*
American Indian	3.7	*	American Indian	0.0	*
Asian/Pacific Islander	277.7	1,099.1	Asian	5.0	*
			NHOPI	1.0	*
Hispanic/Latino	407.3	1,456.1	Hispanic/Latino	10.0	56.4
White	1,092.0	1,469.9	White	23.5	36.6
			Two or more races	0.0	*

Notes: Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

The age-adjusted diabetes death rate in the United States in 2001 was 25.3 deaths per 100,000. There were 71,372 deaths from diabetes in the United States in 2001 and over 200,000 people die each year of related complications.¹⁵ Diabetes is the sixth leading cause of death and sixth leading cause of premature death in Hayward.

According to the 2001 California Health Interview Survey (CHIS), nearly 1.5 million California adults have been diagnosed with diabetes. At least another 1.8 million are at significant risk for the condition (including a large number who currently have diabetes but have not yet been diagnosed). CHIS data indicate that more than 12,000 adolescents age 12 to 17 have been diagnosed with diabetes. The estimated age-adjusted prevalence of obesity in Alameda County in 2001 was 17.3%. Approximately 6% of California's undiagnosed adolescent population is at risk for adult obesity—the predominant contributor to Type 2 diabetes. The likelihood of being diagnosed with diabetes increases with age, but more than half (53.5%) of California adults with diabetes are younger than 60 years of age. Diabetes is more than twice as common among adults who never attended high school (9.9%) as among college graduates (4.3%).²⁰

Early detection, improved delivery of care, and better self-management are key strategies from preventing much of the burden of diabetes. Type 2 diabetes is linked to two modifiable risk factors—obesity and physical inactivity.

Diabetes-Related Hospitalization

There was an annual average of 2,146 diabetes-related hospitalizations in Hayward from 1999 to 2001 (Table

3.3). The age-adjusted rate for diabetes-related hospitalization was 1,474.6 per 100,000—significantly higher than the county rate of 1,181.2 (Appendix table 3C.1). Males and females in Hayward had similar rates (1,472.1 and 1,494.1, respectively).

As seen in **Figure 3.9**, the African American population in Hayward had a diabetes-related hospitalization rate of 2,114.2 per 100,000—substantially higher than rates among the Asian^b (1,099.1), Latino (1,456.1), or White (1,469.9) populations. Rates among the Asian and White population in Hayward were notably higher than the rates for these groups in the county. The race/ethnic differences in rates of hospitalization are consistent with recent studies patterns of disease prevalence by race/ethnicity.²⁰ Recent literature also suggests that higher prevalence of diabetes among African Americans is associated with higher prevalence of underlying risk factors such as unhealthy diet, overweight and obesity, and physical inactivity.²¹ Among Latinos, higher prevalence is associated with low rates of medication use and glucose monitoring, indicators of poor disease management.²² Furthermore, within the Latino population, those born in Mexico, those living in poverty, and those who had lived in the United States for 20 years or longer had higher diabetes prevalence than other subgroups.²³ This body of research suggests that prevention of diabetes and its complications needs to address the disparities in underlying risk factors among different race/ethnic groups. Prevention efforts need to focus on major risk factors such as physical inactivity and obesity in low-income communities, and promote access to health care among persons at risk in specific race/ethnic groups.

Figure 3.9

Diabetes-Related Hospitalization: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 1999-2001

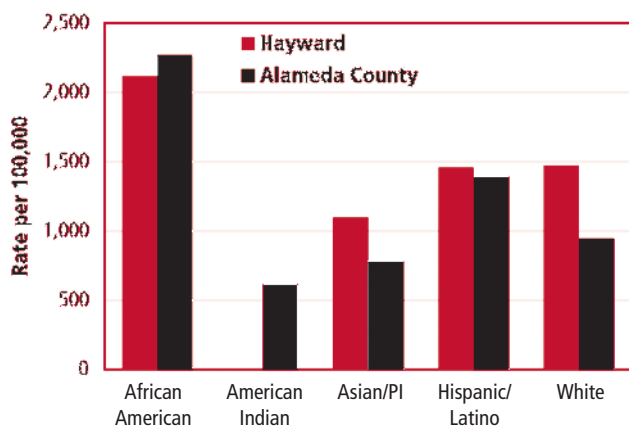
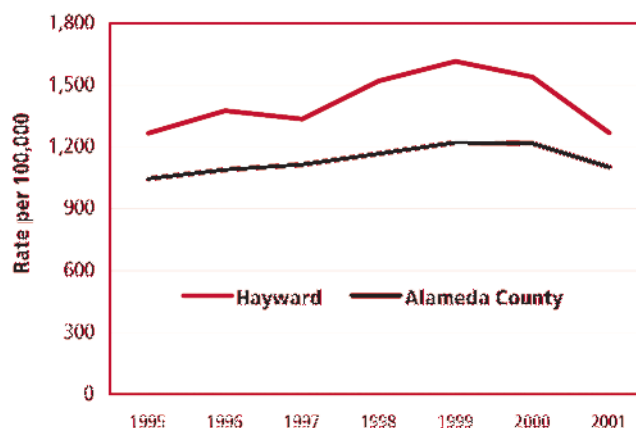


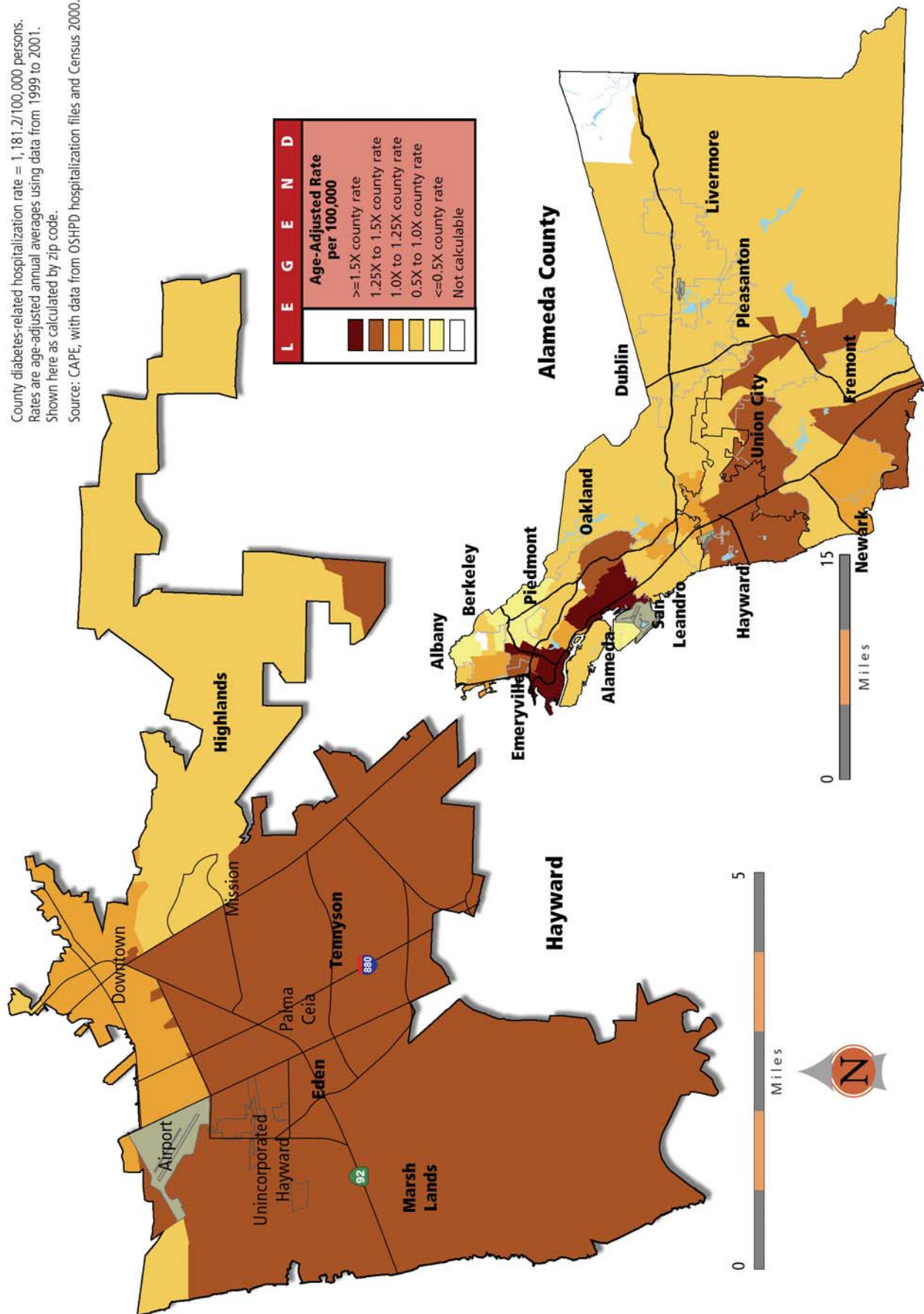
Figure 3.10

Diabetes-Related Hospitalization: Annual Age-Adjusted Rates, Hayward and Alameda County, 1995-2001



County diabetes-related hospitalization rate = 1,181.2/100,000 persons.
Rates are age-adjusted annual averages using data from 1999 to 2001.
Shown here as calculated by zip code.

Source: CAPE, with data from OSHPD hospitalization files and Census 2000.



Diabetes-related hospitalization rates in Hayward increased from 1,265.5 per 100,000 in 1995 to 1,615.1 in 1999 and dropped to 1,266.4 in 2001 (**Figure 3.10**). A similar pattern, with consistently lower rates, was observed in the county (Appendix table 3C.2). Additional years of data are needed to determine if the apparent decline in 2001 is part of a downward trend.

As in **Map 3.1** on the previous page, diabetes-related hospitalization rates are substantially higher than county rates (1476.5 to 1771.8 per 100,000) in large areas of Hayward that include the marsh lands and Tennyson, a more densely populated area of the city. Rates in Downtown are about the same as county rates (1181.2 to 1476.5 per 100,000). In the Highlands, rates are about the same or lower than county rates (590.6 to 1181.2 per 100,000).

Diabetes Mortality

Between 1999 and 2001 the average annual number of diabetes-related deaths in Hayward was 42.0 (**Table 3.3** on page 37). The age-adjusted mortality rate was 36.7 per 100,000. This is substantially higher than the county rate of 22.9 (Appendix table 3C.3). Males had a higher rate (42.2) than females (32.2).

Latinos in Hayward had a higher diabetes mortality rate (56.4) than those who were White (36.6). Rates could not be calculated for other racial groups due to the small number of deaths. For the county, African Americans had the highest diabetes mortality rates of all race/ethnic groups (**Figure 3.11**).

Between 1990 and 2001 diabetes mortality rates in Hayward showed a gradual increase, similar to the trend

Figure 3.11

Diabetes Mortality: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 2000-2001

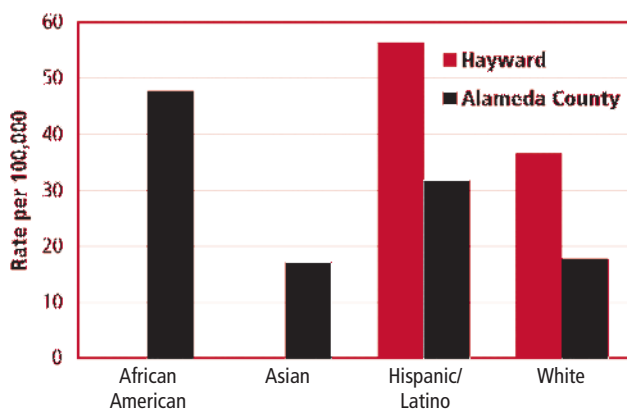
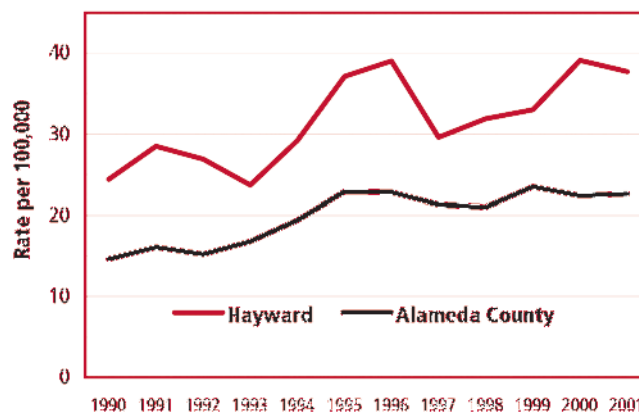


Figure 3.12

Diabetes Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001



Hayward has substantially higher diabetes hospitalization and mortality rates than the county

in the county (**Figure 3.12** on the previous page). Hayward rates rose from 24.4 per 100,000 in 1990 to 37.7 in 2001 and were generally higher than county rates in this time period (Table 3C.4 in the Appendix). The findings of an increased burden of diabetes mortality in Hayward suggest the need to make it a priority in local prevention efforts.

Cancer

Cancer is a large group of diseases characterized by uncontrolled growth and spread of abnormal cells. Cancer occurs when normal cells in the body mutate, or change, into abnormal cells, which then grow out of control. Most types of cancer cells form a lump or mass called a tumor. Cells from the tumor can break away and travel to other parts of the body where they can continue to grow and damage surrounding tissues and organs. If the spread is not controlled or checked, it results in death. However many cancers can be cured if detected and treated promptly, and many can be prevented by lifestyle changes.²⁴

Cancers are classified according to the location of origin, or site, and clinical features. They are also described by stage at diagnosis, or the extent to which the cancer has grown locally or invaded other tissues or organs. Cancer registries collect detailed information on cancer patients through hospitals and medical clinics. California has had a mandatory statewide cancer reporting system since 1988. The California Cancer Registry (CCR) gathers and maintains cancer data for the state.²⁵ CCR data are used for surveillance to evaluate cancer incidence patterns, identify cancer risk factors, and to describe effects of prevention and early detection efforts, survival patterns, and treatment effects.

Cancer surveillance data from the CCR are the source of cancer incidence data for this report. The sections that

follow present findings on incidence and mortality of all cancers combined, lung cancer, female breast cancer, and prostate cancer to describe the burden of cancer in Hayward. Detailed findings on Hayward and Alameda County are contained in Appendix 3.

All Cancer

Cancer is the second most common cause of death in the United States. Almost one in every four deaths in the nation is from cancer. In 2001 cancer accounted for 22.9% of total deaths in the United States. There were 553,768 deaths from cancer in the United States and the age-adjusted death rate for all cancers was 196.0 per 100,000 in 2001.¹⁴ According to the National Institutes of Health, each year cancer costs the nation an estimated \$180.2 billion, which includes health care expenditures and lost productivity from illness and death.² Cancer is the second most common cause of death and the leading cause of premature death in Hayward.

All cancers caused by cigarette smoking could be prevented. The American Cancer Society (ACS) estimates that at least one-third of cancer deaths that occur in the United States are due to cigarette smoking.²⁶ ACS also estimates that about two-third of expected cancer deaths expected to occur in 2003 will be related to nutrition, physical inactivity, obesity, and other lifestyle factors, and could also be prevented.²⁴

Nationally, overall cancer incidence and death rates began to stabilize in the mid to late 1990s. Cancer incidence rates for all cancer sites combined increased from the mid-1970s through 1992 and then decreased from 1992 through 1995. Incidence rates for all cancers combined were stable from 1995 through 2000. This is due in part to the fact that there were increases in the incidence rates of



The White population in Hayward had the highest lung cancer incidence and mortality of all race/ethnic groups

breast cancer in women and prostate cancer in men and a long-term decrease in lung cancer in men.^{3,27,28}

Death rates for all cancer decreased beginning in 1994 and stabilized from 1998 through 2000. However, recent trends show that death rates among men continued to decline throughout the 1990s, while trends in death rates among women were essentially unchanged from 1998 through 2000.³

From 1996 to 2000 the average annual age-adjusted incidence of all cancers was 472.3, and mortality was 202.3 per 100,000.²⁷ Some racial and ethnic groups are more affected by cancer than others. African Americans are more likely to die of cancer than any other race/ethnic group. Specific cancers affect different race/ethnic groups differently. For example, Hispanics have higher rates of cervical, esophageal, gallbladder, and stomach cancers than those in the non-Hispanic White population. Also, stomach and liver cancers among Asian Americans and colorectal cancer among Alaskan Natives are higher than in the rest of the United States population.¹³

In general, incidence and death rates for all cancer are lower among Asian or Pacific Islanders, American Indians, and Hispanic populations than among White and African American populations. National figures for the major cancer sites—lung, breast, and prostate cancer—show

growing disparities between White and African American populations.^{3,13,14,27,28}

According to the ACS the five-year survival for the cancer sites that can be screened (breast, colon, rectum, cervix, prostate, testes, oral cavity, and skin) would increase from 82% to more than 95% if these cancers were diagnosed at an early stage through regular cancer screenings. Cancers that can be detected by screening account for about half of all new cancer cases.

ACS has identified barriers to screening that may explain differences in incidence and survival among different subgroups in a population. Lack of screening is influenced by personal beliefs or lifestyle practices, or willingness to obtain preventive health care. Some of the other factors that are related to screening include doctors' recommendations or referrals, and access to affordable health care. Persons or groups with positive perceptions about surviving cancer and knowledge of one or more risk factors are more likely to participate in screening. Lower cancer screening rates are associated with low income, lower education, having language barriers, and being a member of certain ethnic or cultural groups.²⁶

Although the rates of cancer incidence and death have declined recently, the actual number of people diagnosed with cancer is expected to double in the next several

Table 3.4 All Cancer: Average Annual Counts and Rates of Incidence and Mortality by Sex and Race/Ethnicity, Hayward					
Incidence			Mortality		
	Count	Rate		Count	Rate
Total	496.9	444.1	Total	279.3	243.1
Sex			Sex		
Male	237.6	500.6	Male	136.3	287.1
Female	258.8	412.9	Female	143.0	214.9
Race/Ethnicity			Race/Ethnicity		
African American	35.6	457.2	African American	24.5	338.4
American Indian	<1	*	American Indian	1.5	*
Asian/Pacific Islander	61.6	270.5	Asian	28.0	143.3
			NHOPI	38.5	192.0
Hispanic/Latino	81.4	373.0	Hispanic/Latino	3.5	*
White	309.6	549.9	White	186.5	294.6
			Two or more races	1.0	*

Notes: Incidence rates are based on data for years 1996-2000. Mortality rates are based on data for 199-2001. Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

decades, as the population of older people increases.²⁹ Adequate access to cancer screening and the availability of high quality treatment among poor and underserved populations are critical to reducing the burden of cancer.¹⁵ Healthier lifestyles can significantly reduce a person's risk for cancer. According to the American Institute for Cancer Research, maintaining a healthy weight, exercising regularly, and not smoking can reduce an individual's risk of cancer substantially.³⁰

All-Cancer Incidence

The average annual number of new cases of all cancers combined between 1996 and 2000 in Hayward was 496.8 (Table 3.4 on the previous page). The age-adjusted incidence rate in this time period was 441.1 per 100,000—significantly higher than the county rate of 477.3 (Table 3D.1 in the Appendix). Males had a significantly higher rate (500.6 per 100,000) than females (412.9). Incidence rates for all cancers combined in Hayward are higher than for the Greater Bay Area Region.²⁵

Incidence of all cancers combined was significantly higher among the White population in Hayward (549.9 per 100,000) than among Asians^b (373.0) or Latinos (270.5). African Americans had the second highest incidence rate (457.2). The pattern of incidence by race/ethnicity in Hayward is similar to that in the county, and is consistent with that of the Greater Bay Area Region.²⁵

Incidence of all cancers combined in Hayward was variable between 1990 and 2000, and did not change substantially in this time period (Figure 3.13). In contrast, in the

county, incidence rates for all cancers combined declined significantly (Appendix table 3D.2).

All-Cancer Mortality

The average annual number of deaths from all cancers combined in Hayward between 1999 and 2000 was 279.3 (Table 3.4 on the previous page). The age-adjusted mortality rate was 243.1 per 100,000—significantly higher than in the county (189.6) (Appendix table 3D.9). Males in Hayward had a higher death rate from all cancers combined (287.1) than females (214.9). For the county, males had a substantially higher cancer death rate than females. Mortality rates for all cancers combined exceed those for the Greater Bay Area region.²⁵

Figure 3.14

All-Cancer Mortality: Average Annual Age-Adjusted Rates, by Race/Ethnicity, Hayward & Alameda County, 2000-2001

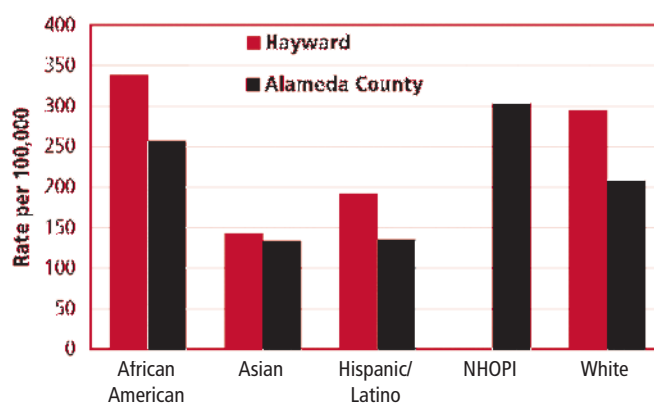


Figure 3.13

All-Cancer Incidence: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2000

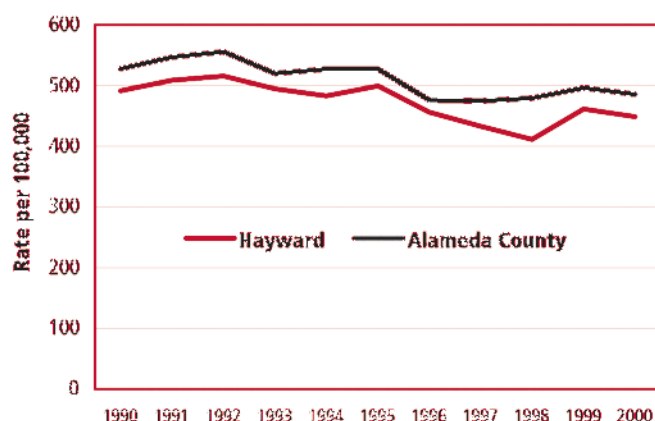
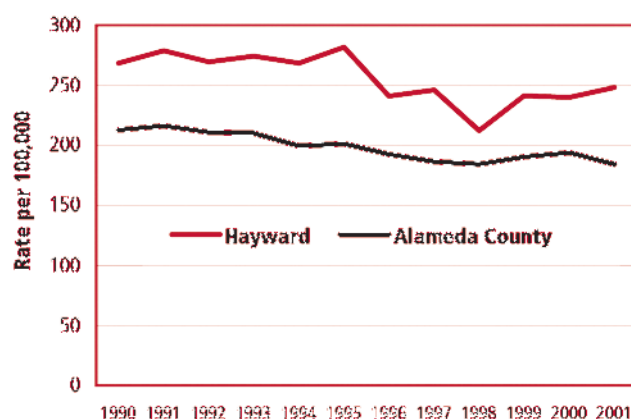


Figure 3.15

All-Cancer Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001



Race/ethnic differences in mortality from all cancers combined were seen in Hayward (**Figure 3.14** on the previous page). Between 2000 and 2001, African Americans had the highest average annual death rate among all race/ethnic groups. This was 2.4 times the rate among Asians (143.3), 1.8 times the death rate among Latinos (192.0), and slightly higher than the among those who were White (294.6). Rates could not be calculated for the NHOPI^c population in Hayward due to the small number of deaths. In the county this group had a notably higher all-cancer death rate than all other race/ethnic groups (Table 3D.9 in the Appendix). Rates among the Latino and White populations in Hayward were significantly higher than rates for these groups in the county. Mortality rates for all cancers combined by race/ethnicity are consistent with those of the Greater Bay Area Region.²⁵

All-cancer mortality did not change substantially in Hayward in the 1990s and were higher than in the county (**Figure 3.15** on the previous page). In contrast, mortality from all cancers combined in the county decreased significantly in this time period (Appendix table 3D.3).

Lung Cancer

Lung cancer is caused by an uncontrolled growth of abnormal cells in the lungs. The growing cells form a mass

called a tumor, which can invade and damage nearby tissues and organs.

Lung cancer is the leading cause of death from cancer in the United States for both men and women, accounting for 28% of all cancer deaths. More than 156,000 people in the United States died of lung cancer in 2001. The 2001 age-adjusted death rate in United States was 55.3 deaths per 100,000.³ The American Cancer Society (ACS) estimates that more than 169,400 new cases of lung cancer will be diagnosed in the United States in 2002. Although there has been some progress in methods of cancer treatment, the chances of full recovery after treatment are very low. Only about 14% of those treated for lung cancer survive five or more years.²⁴

The age-adjusted lung cancer incidence rate from years 1996 to 2000 was 62.6, and the death rate 56.8 per 100,000 at the national level. Lung cancer is the leading cause of cancer death among men; 59% of lung cancer deaths are among men.²⁸ National data shows that while lung cancer death rates have declined since 1990 among males, lung cancer death rates have continued to increase for females. Since 1987, more females have died from lung cancer than from breast cancer. Age-adjusted lung cancer death rates are approximately 40% higher among African American males than White males.¹³

Table 3.5 Lung Cancer: Average Annual Counts and Rates of Incidence and Mortality by Sex and Race/Ethnicity, Hayward					
Incidence			Mortality		
	Count	Rate		Count	Rate
Total	67.8	62.1	Total	77.7	68.4
Sex			Sex		
Male	34.4	73.8	Male	42.0	88.5
Female	33.4	53.9	Female	35.7	54.6
Race/Ethnicity			Race/Ethnicity		
African American	3.8	*	African American	8.0	*
American Indian	0.0	*	American Indian	<1	*
Asian/Pacific Islander	7.4	33.6	Asian	6.0	*
			NHOPI	<1	*
Hispanic/Latino	7.2	37.7	Hispanic/Latino	4.0	*
White	49.4	85.8	White	54.5	86.6
			Two or more races	<1	*

Notes: Incidence rates are based on data for years 1996-2000. Mortality rates are based on data for 199-2001. Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

According to the ACS a single behavior—cigarette smoking—is thought to be responsible for 8 out of 10 cases of lung cancer. In addition, non-smokers who breathe the smoke of others also have an increased risk of developing lung cancer. Thus, preventing and reducing cigarette smoking is essential to reducing illness and death from lung cancer.²⁴

Lung Cancer Incidence

The average annual number of new cases of lung cancer in Hayward between 1996 and 2000 was 67.8 (Table 3.5 on the previous page). The age-adjusted incidence rate was 62.1 per 100,000, similar to the county rate (Appendix table 3D.3). Males in Hayward had a lung cancer incidence rate of 73.8 per 100,000—significantly higher than the rate for females (53.9). Rates for males and females were similar to those for the county. Hayward's lung cancer incidence rates are higher than those of the Greater Bay Area region.²⁵

Lung cancer incidence was significantly higher among the White population in Hayward (858.8 per 100,000) than in other race/ethnic groups (Figure 3.16). This lung cancer incidence rate is 2.6 times that for Asian^b (33.6) and 2.3 times the rate for Latinos (37.7). For the county, African Americans had the highest lung cancer incidence rate of all race/ethnic groups.

From 1990 to 2000, lung cancer incidence in Hayward was variable, and did not change substantially (Figure 3.17). For the county, lung cancer incidence declined significantly in this time period (Appendix table 3D.4).

Lung Cancer Mortality

The average annual number of lung cancer deaths in Hayward between 1999 and 2000 was 77.7 (Table 3.5 on the previous page). The age-adjusted mortality rate was 68.4 per 100,000—significantly higher than the county rate (Table 3D.11 in the Appendix). Males in Hayward had a lung cancer death rate of 88.5 per 100,000, 1.6 times the rate for females (54.6). This is similar to the sex difference in the county; however rates for males and females were lower in Hayward than in the county. Lung cancer mortality rates in Hayward are higher than those for the Greater Bay Area Region.²⁵

The average annual lung cancer mortality rate among the White population between 2000 and 2001 in Hayward was 86.5 per 100,000. Rates could not be calculated for other race/ethnic groups due to the small number of deaths. For the county African Americans had a significantly

Figure 3.17

Lung Cancer Incidence: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2001

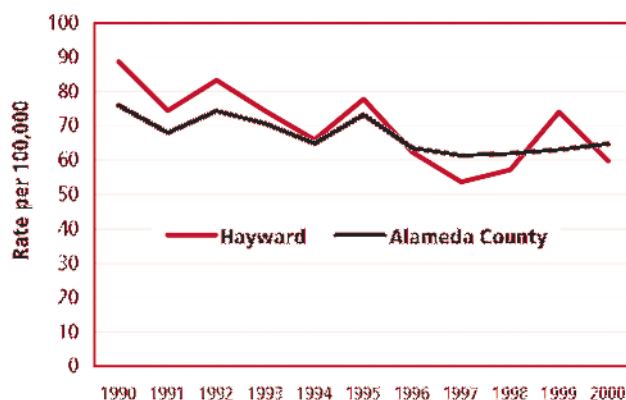


Figure 3.16

Lung Cancer Incidence: Average Annual Age-Adjusted Rates, by Race/Ethnicity, Hayward & Alameda County, 1996-2000

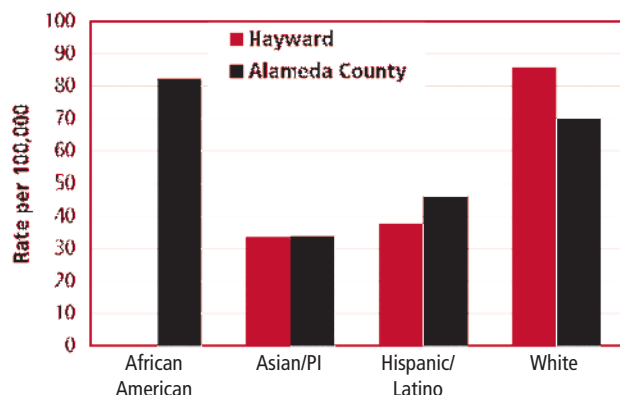
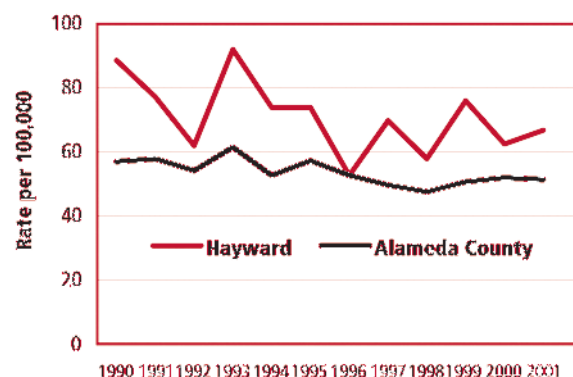


Figure 3.18

Lung Cancer Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001



higher lung cancer mortality rate than all other race/ethnic groups.

Lung cancer death rates declined slightly, but not substantially in Hayward in the 1990s. They were 88.6 per 100,000 in 1990 and 66.7 in 2000 (**Figure 3.18** on the previous page). A similar pattern was seen in the county (Appendix table 3D.12).

Breast Cancer

Female breast cancer is a disease in which cancer (malignant) cells are found in the tissues of the breast. In its early stages the cancer cells stay in the breast as a tiny nodule or lump. In later stages, some cells from the lump spread to other parts of the body and cause tumors to grow in these new sites. Women comprise the vast majority of individuals with breast cancer. Mammography is the best available method to detect breast cancer in its earliest, most treatable stage—about one to three years before a woman can feel the lump.

Breast cancer is the second leading cause of cancer death among women and the most commonly diagnosed cancer among women in the United States. Among the risk factors are older age, later age at birth of first child, and family history of breast cancer.¹¹

In 2001, 41,394 women died of breast cancer in the United States. The age-adjusted death rate from breast cancer among United States women in 2001 was 26.0 per 100,000. At the national level, breast cancer death rates are

35% higher among African American women (34.4) than among White women (25.5). Among American women, breast cancer is the most common cancer and the second leading cause of cancer-related deaths.¹⁴ Between 1996 and 2000 the average annual breast cancer incidence rate was 135.0, and death rate was 27.7 per 100,000 in the United States. There was a greater decline in mortality among White women in 1990s compared to African American women.²⁸

Seventy percent of all diagnosed cases of breast cancer are among women 50 years of age or older. The American Cancer Society (ACS) estimates that in 2002, 203,500 women will be diagnosed with breast cancer in the United States and about 20% of those women will die of the disease.¹

Since 1990 the breast cancer death rate has decreased for White females. The trend for other race/ethnic groups does not appear to be clear. Deaths due to breast cancer for African Americans continued to increase until 1995 and then showed a gradually decreasing trend. However, for other race/ethnic groups the death rates have leveled off since the mid-1990s. This difference is due in part to the fact that breast cancer tends to be diagnosed at later stages in African Americans and Hispanics compared to non-Hispanic White females.^{3,13,31}

In the Greater Bay Area, African American women continue to have poorer breast cancer survival compared with to White women, whereas the survival of Latino and

Table 3.6 Breast Cancer: Average Annual Counts and Rates of Incidence and Mortality by Race/Ethnicity, Hayward					
Incidence			Mortality		
	Count	Rate		Count	Rate
All Females	85.4	138.2	All Females	21.3	32.6
Race/Ethnicity			Race/Ethnicity		
African American	35.0	127.6	African American	3.0	*
American Indian	<1	*	American Indian	<1	*
Asian/Pacific Islander	13.6	98.4	Asian	3.5	*
			NHOPI	0.0	*
Hispanic/Latino	11.6	87.7	Hispanic/Latino	4.5	*
White	52.0	172.1	White	12.5	34.5
			Two or more races	0.0	*

Notes: Incidence rates are based on data for years 1996-2000. Mortality rates are based on data for 1999-2001.

Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*)

= Rate not calculated due to small numbers.

Asian women does not differ from White women. These disparities in survival could not be explained based on differences in clinical and socioeconomic factors.³²

Breast cancer can be detected early through a combination of regular self-breast examination, clinical breast examination, and mammography. It is estimated that timely mammography screening among women older than age 40 could prevent 15% to 30% of all deaths from breast cancer.¹

Recent studies on utilization of screening among diverse populations indicate that lack of screening may be influenced by lifestyle practices or willingness to obtain preventive health care, e.g., smokers are less likely to get a mammogram. As mentioned earlier, barriers to screening explain differences in incidence and survival among different subgroups in a population.²⁶ In California, racial and ethnic disparities in breast cancer screening have been observed.³³

Breast Cancer Incidence

The average number of new cases of breast cancer in Hayward between 1996 and 2000 was 85.4 per 100,000 (Table 3.6 on the previous page). The breast cancer incidence rate was 138.2 per 100,000—significantly lower than the county rate of 159.7 (Table 3D.5 in the Appendix). This suggests that women in Hayward are less likely to be diagnosed with breast cancer and might not have adequate opportunities to access or utilize screening services such as mammography than women in the county.

White females had the highest breast cancer incidence rate (172.1 per 100,000), followed by African American (127.6), Asian^b (98.4) and Latino (87.7) women (Figure

3.19). For the county, White and African American women had significantly higher incidence rates than Latino or Asian women. The patterns of incidence by race/ethnicity are consistent with the regional pattern.²⁵ The race/ethnic differences in incidence may be explained in part by disparities in screening practices as suggested by recent literature. Specifically, screening mammography rates are reportedly lower among certain subgroups of Asian women (Cambodian, Korean) and among Latino women than the California average.³⁴

From 1990 to 2000 breast cancer incidence in Hayward increased slightly but did not change significantly (Figure 3.20). Incidence rates fluctuated from a low of 117.6 per 100,000 in 1990 to a high of 156.3 in 1994, subsequently declining in 1998 before increasing to 142.0 in 2000.

Figure 3.20

Breast Cancer Incidence: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2000

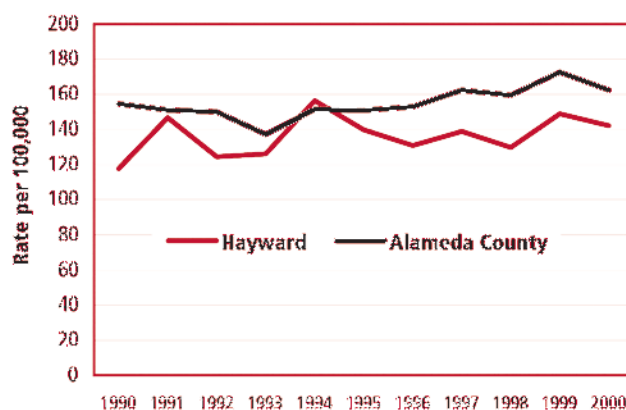


Figure 3.19

Breast Cancer Incidence: Average Annual Age-Adjusted Rates, by Race/Ethnicity, Hayward & Alameda County, 1996-2000

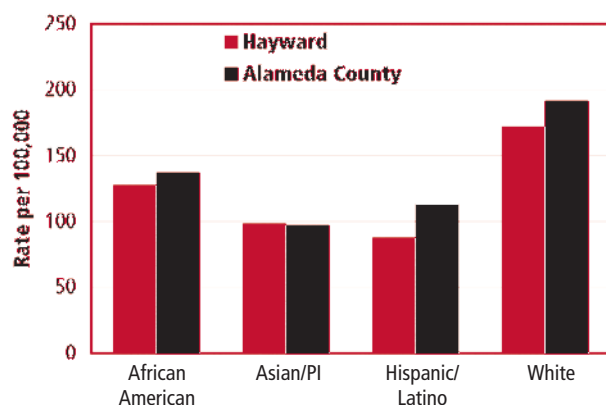
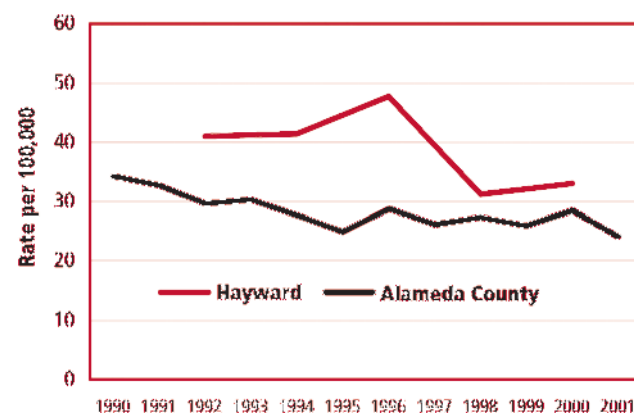


Figure 3.21

Breast Cancer Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001





The proportion of women diagnosed at an early stage improved in this time period—from 66% in 1990 to 70% in 2000.

Breast Cancer Mortality

The average number of breast cancer deaths between 1999 and 2000 in Hayward was 21.3 (**Table 3.6** on page 46). The age-adjusted death rate was 32.6 per 100,000, comparable to the county rate of 26.1 (Table 3D.13 in the Appendix). Hayward's breast cancer mortality rate far exceeds that for the Greater Bay Area Region.²⁵

Between 2000 and 2001, White women in Hayward had a breast cancer mortality rate of 34.5 per 100,000. Rates could not be calculated for other race/ethnic groups due to the small number of deaths. In the county White and African American women had significantly higher death rates than Asian or Latino women.

Breast cancer mortality did not change significantly in Hayward in the 1990s^d (**Figure 3.21** on the previous page). In contrast, breast cancer mortality declined significantly in the county in this time period (Table 3D.14).

Prostate Cancer

Prostate cancer is a malignancy that develops in the prostate gland, the walnut-shaped gland deep in the pelvis, between the bladder and the penis that produces the fluid part of semen. Prostate cancer occurs almost exclusively in middle-aged and older men. Unlike other cancers, it often lies dormant for many years. But once it begins to spread it progresses rapidly, with a life expectancy of two to three years from the time of diagnosis.

Between 1996 and 2000 the age-adjusted prostate cancer incidence rate was 170.1, and death rate was 32.9 per 100,000 in the United States.²⁸

Prostate cancer is the second leading cause of cancer death among men in the United States, as well as the most commonly diagnosed cancer among men. It is estimated that in 2002 there will be 189,000 new cases of prostate cancer in the United States and that more than 30,000 men will die from the disease. Significantly more African American men (272.1) than White men (164.3) are diagnosed with prostate cancer.^{3,31}

The age-adjusted prostate cancer death rate in 2001 was 29.1 deaths per 100,000 United States. About 70% of prostate cancers are diagnosed among men who are 65 years or older. Prostate cancer mortality rates are declining since 1990 for White men and since mid-1990s for other race/ethnic groups. However, the death rates among African American men continue to be two times higher than those among White men. In year 2001, the prostate cancer death rate was 26.6 for White men and 66.1 for African American men. Among those whose cancer is detected in the early stages, the five-year survival rate is nearly 100%.³¹

In the 1980s the introduction and widespread use of the prostate specific antigen (PSA) screening test resulted in a sharp increase in prostate cancer incidence. Consistent with the rapid introduction with this new, sensitive screening method, incidence rates peaked and then started to decline in 1999.^{28,31}

Prostate Cancer Incidence

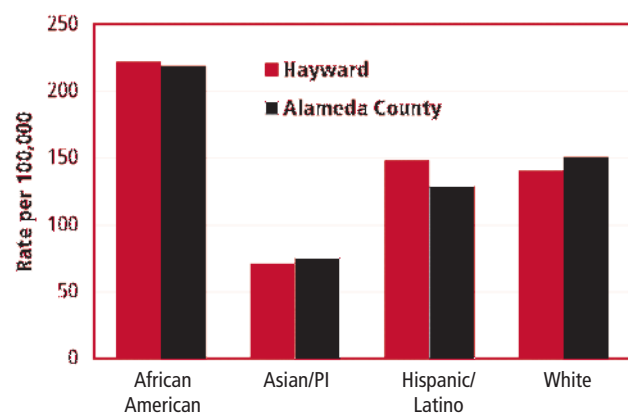
The average number of new cases of prostate cancer in Hayward between 1996 and 2000 was 62.8 (**Table 3.7** on the previous page). The age-adjusted prostate cancer incidence in Hayward was 137.5 per 100,000, comparable to the county rate of 153.7 (Table 3D.7 in the Appendix). Hayward's prostate cancer incidence rate is lower than the regional rate for the Greater Bay Area.²⁵

Table 3.7 Prostate Cancer: Average Annual Counts and Rates of Incidence and Mortality by Race/Ethnicity, Hayward					
	Incidence			Mortality	
	Count	Rate		Count	Rate
All Males	62.8	137.5	All Males	13.3	32.6
Race/Ethnicity			Race/Ethnicity		
African American	7.2	221.9	African American	1.0	*
American Indian	0.0	*	American Indian	0.0	*
Asian/Pacific Islander	6.2	71.2	Asian	<1	*
			NHOPI	0.0	*
Hispanic/Latino	12.2	148.0	Hispanic/Latino	1.5	*
White	34.2	140.1	White	11.0	40.7
			Two or more races	0.0	*

Notes: Incidence rates are based on data for years 1996–2000. Mortality rates are based on data for 1999–2001. Mortality figures by race/ethnicity are for 2000–2001 only. NHOPI=Native Hawaiian and Other Pacific Islander.

(*) = Rate not calculated due to small numbers.

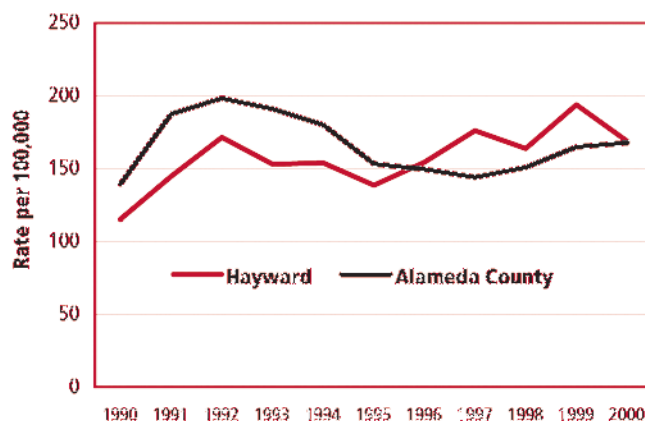
Figure 3.22 Prostate Cancer Incidence: Average Annual Age-Adjusted Rates, by Race/Ethnicity, Hayward & Alameda County, 1996–2000



African American men in Hayward had the highest prostate cancer incidence rate (221.9 per 100,000), compared to Latino (148.0), White (140.1), or Asian^b (71.2) men (Figure 3.22). African American rates were 3.1 times Asian rates, 1.6 times the rate for White men, and 1.5 times the rate for Latino men. These patterns are consistent with regional findings on race/ethnic differences in screening and in incidence of prostate cancer.^{25,33}

Between 1990 and 2000 prostate cancer incidence in Hayward was variable (Figure 3.23). After peaking in 1992, there was a slight decline and then a gradual increase in incidence in the mid to late 1990s (Table 3D.8 in the Appendix). The rate then declined to 168.6 in 2000. The proportion of men being diagnosed with prostate cancer

Figure 3.23 Prostate Cancer Incidence: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990–2000



at an early stage improved substantially in the 1990s—from 60% in 1990 to 72% in 2000. These findings mirror the trends of early-stage diagnosis in the county.

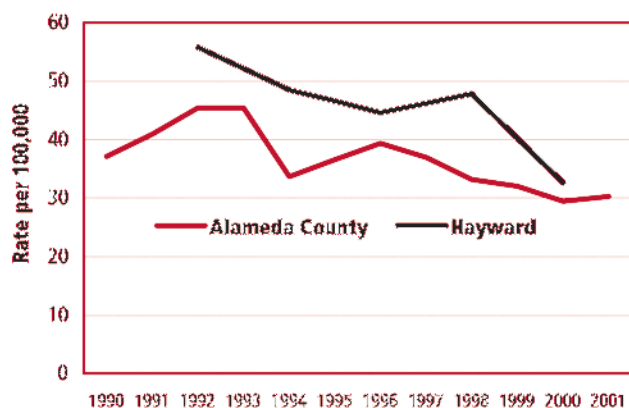
Prostate Cancer Mortality

The average annual number of prostate cancer deaths between 1999 and 2001 in Hayward was 13.3 (Table 3.7). The age-adjusted death rate was 32.6 per 100,000, comparable to the county rate of 30.5 (Table 3D.15 in the Appendix). Hayward's prostate cancer mortality rate is slightly higher than that for the Greater Bay Area region.²⁵

White males had a prostate cancer mortality rate of 40.7 per 100,000 between 2000 and 2001. Rates could not be calculated for other race/ethnic groups due to the small

Figure 3.24

Prostate Cancer Mortality: Annual Age-Adjusted Rates, Hayward & Alameda County, 1990-2001



number of deaths. In the county, African Americans had a notably higher prostate cancer death rate than White or Asian men (Table 3D.15 in the Appendix).

Prostate cancer mortality showed a slight decline in Hayward^d in the 1990s, similar to the trend in the county (Figure 3.24 and Table 3D.16 in the Appendix).

Asthma

Asthma is a chronic lung condition that causes swelling, excess mucus, and narrowing of the airways. An asthma attack occurs when the airways become so swollen and clogged that the person has trouble getting enough breath. The number of people afflicted with asthma has more than

doubled over the last 15 years. It is a disease influenced by both genetic and environmental factors.

It is estimated that 14 million people in the United States have asthma and that 11 million have had an asthma attack in the past year. In general, asthma rates are higher among females and children five to 14 years of age. Rates are also higher among African Americans than in the White population. There are approximately 460,000 asthma hospitalizations per year nationally. Rates of asthma hospitalization are highest among children under age five, followed by children five to 14 and adults 65 and older. In the United States asthma hospitalization rates are 1.5 times higher among females than males and three times higher among African Americans than in the White population. There are approximately 5,000 deaths nationally per year from asthma. The death rate among African Americans is approximately 2.5 times higher than in the White population, and approximately 1.5 times higher among females than males. Asthma death rates increase with age.^{13, 35}

Asthma prevalence and control characteristics such as ED visits, visits to the doctor, urgent care visits, presence of asthma symptoms or episodes, use of medication, and activity limitation vary by race/ethnicity³⁶. Findings based on the Behavioral Risk Factor Surveillance System (BRFSS) data for selected areas in the United States showed that in 2002 current asthma prevalence was highest among the persons of two or more races (15.6%) followed by those who were American Indian or Alaskan Native (11.6%), African American (9.3%), White (7.6%), persons of 'other' races (7.2%), Hispanic/Latino (5.0%), Asian (2.9%) and

Table 3.8

Asthma Hospitalization: Average Annual Counts and Rates by Sex and Race/Ethnicity, Hayward, 1999-2001

	All Ages		Children Under Age 15	
	Count	Rate	Count	Rate
Total	279.0	167.5	109.7	271.6
Sex				
Male	124.0	150.5	72.3	350.5
Female	155.0	182.9	37.3	189.0
Race/Ethnicity				
African American	54.7	265.4	25.3	451.7
American Indian	<1	*	<1	*
Asian/Pacific Islander	41.0	131.8	10.0	122.1
Hispanic/Latino	60.3	117.2	36.3	187.6
White	100.3	181.0	22.0	303.6

Note: (*) = Rate not calculated due to small numbers.

Native Hawaiian and Pacific Islander (1.3%). Among persons with current asthma, ED visits were reported with greater frequency among African Americans and Hispanic/Latinos. White and Asian persons were least likely to report doctor's office visits for urgent care, and had a generally more positive asthma control profile than African Americans, American Indian or Alaskan Natives, multiracial persons, and Hispanic/Latinos.

In 2001, the total cost of asthma in the United States was \$14 billion; more than double what it was 10 years ago. It is estimated that only one-tenth of one percent of this cost goes directly into prevention. Direct costs (hospital care, physician services, medications—were \$9.4 billion in 2002 dollars, and indirect costs) school days lost, work days lost, lifetime earnings lost due to mortality—were \$4.6 billion. Indirect cost estimates are based on 14 million lost school days, 14.5 million lost work days, and productivity loss of the 5,000 people who die each year from asthma. Asthma patients and their families bear a disproportionate burden of out-of-pocket medical costs compared to other illnesses.³⁷

Asthma is a manageable chronic condition given proper medications and environmental remedies. It is uncontrolled asthma that results in emergency department (ED) visits and hospitalizations, the most costly medical treatments. Nationally, the rate of ED visits and hospitalizations for asthma in 1999 among African Americans was three times that in the White population.³⁵ National data also indicate that low-income populations have higher asthma prevalence than those at higher incomes.³⁸ There

is substantial evidence that environmental exposures play a major role in triggering asthma symptoms.³⁹

Effective management of asthma is essential to reduce its impact among those diagnosed with the condition. Strategies to control asthma involve: 1) controlling exposure to asthma triggers (for example, dust, smoke, air pollution, colds and flu); 2) adequately managing asthma with medications; 3) monitoring lung function; and 4) educating asthma patients to work with medical providers as partners in their own care.

Asthma Hospitalization: All Ages

From 1999 to 2001, in Hayward, there was an average of 279 asthma hospitalizations per year (Table 3.8 on the previous page). The annual average age-adjusted rate of asthma hospitalization in Hayward was 167.5 per 100,000, lower than the county rate of 178.0 per 100,000 (Appendix table 3E.1). The rate among females (182.9) was higher than the rate among males (150.5).

The age-adjusted rate of asthma hospitalization in Hayward was 265.4 per 100,000 among African Americans, twice the rate among Asians^b and Latinos (131.8 and 117.2, respectively) and 1.5 times the rate among those who were White (181.0). Rates among both White and Asian populations in Hayward exceeded those of the same groups in the county (Figure 3.25). Rates among African Americans in Hayward, on the other hand, were about half the rates for African Americans at the county level. The finding of excessive rates of hospitalization and greater burden of asthma among African Americans compared to other race/ethnic groups is consistent with national

Figure 3.25

Asthma Hospitalization (All Ages): Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 1999-2001

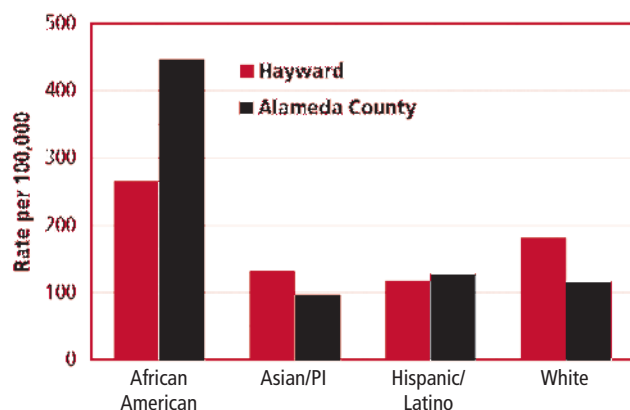
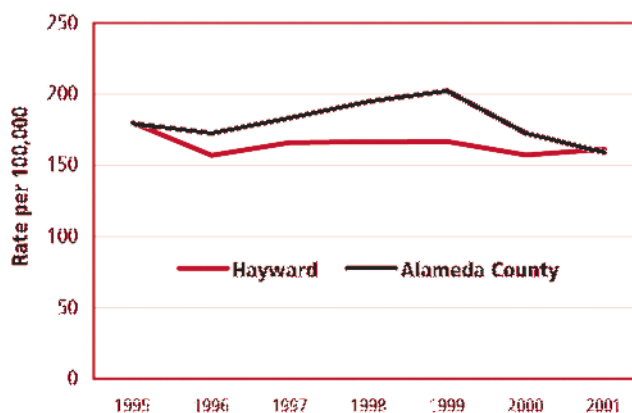


Figure 3.26

Asthma Hospitalization (All Ages): Annual Age-Adjusted Rates, Hayward & Alameda County, 1995-2001



data. Several studies suggest that higher rates of asthma hospitalization among some race/ethnic groups indicate inadequate medical management, and lack of access to prevention services.^{36, 40}

As seen in **Figure 3.26** on the previous page the age-adjusted rate of asthma hospitalization in Hayward was highest in 1995 (179.5) and then relatively stable during the period 1996 (156.7) to 2001 (161.0). Alameda County's rate reached a high of 202.1 in 1998 and dropped to a low of 158.8 per 100,000 in 2001 (Appendix table 3E.2).

Childhood Asthma Hospitalization

An average of 110 Hayward children under 15 were hospitalized each year for asthma between 1999 and 2001 (**Table 3.8**). The annual average age-adjusted rate of asthma hospitalization among children in this age group was 271.6 per 100,000 (Appendix table 3E.3). The Hayward rate was well below the county rate of 398.1 but exceeded the Healthy People 2000 objective of 225 per 100,000.

An average of 110 Hayward children under 15 were hospitalized each year for asthma between 1999 and 2001, two-thirds of them male. The rate among males under 15 years of age was 350.5 compared to 189.0 among females.

Among African American children in Hayward, the age-adjusted rate of childhood asthma hospitalization was 451.7, nearly four times the Asian^b rate (122.1), over twice the rate among Latinos (187.6) and 1.5 times that among the White population (303.6). Of all race/ethnic groups only the rate among White children exceeded that of their counterparts in the county (**Figure 3.27**).

Childhood asthma hospitalizations fluctuated greatly between 1995 and 2001, dropping from a high of 339.9 per 100,000 in 1995 to 234.7 in 2000 and increasing to 277.8 in 2001 (Figure 3.28 on page 50). A similar pattern was seen in the county with the rate dropping to a low of 346.4 in 2001 (Appendix table 3E.4).

Most areas of Hayward have childhood asthma hospitalization rates that are similar to, or below county rates (199.1 to 398.1 per 100,000). The eastern area of the Highlands has rates less than half the county rates (199.1 per 100,000 or lower). See **Map 3.2** on the facing page.

Figure 3.27

Childhood Asthma Hospitalization:
Average Annual Age-Adjusted Rates by
Race/Ethnicity, Hayward & Alameda County,
1999-2001

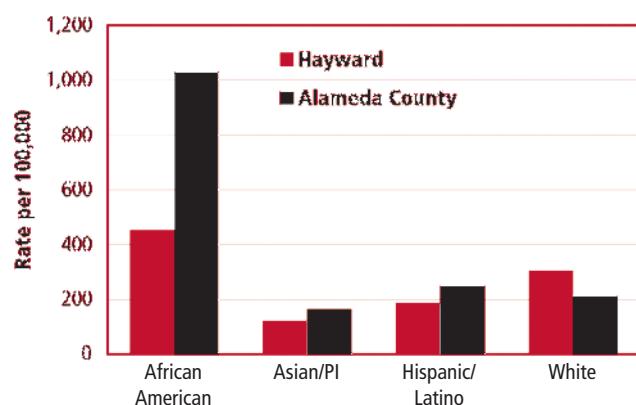
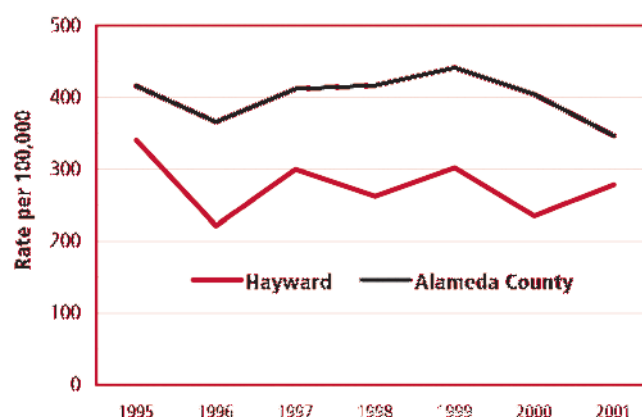
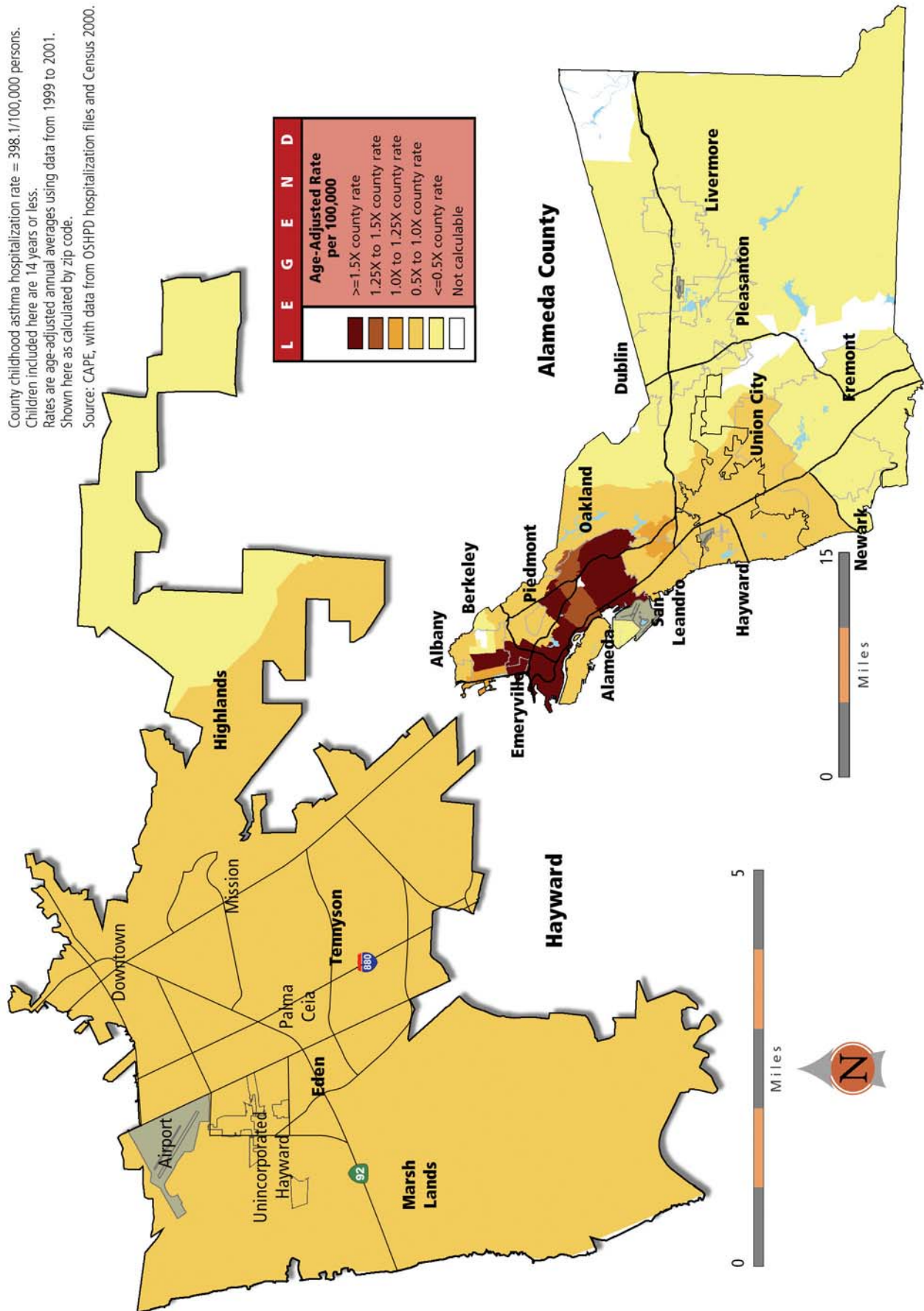


Figure 3.28

**Childhood Asthma Hospitalization: Annual
Age-Adjusted Rates, Hayward & Alameda
County, 1995-2001**



County childhood asthma hospitalization rate = 398.1/100,000 persons.
Children included here are 14 years or less.
Rates are age-adjusted annual averages using data from 1999 to 2001.
Shown here as calculated by zip code.
Source: CAPE, with data from OSHPD hospitalization files and Census 2000.



Summary and Recommendations

Major chronic diseases—heart disease, cancer, stroke, and diabetes account for about 63% of deaths each year in Hayward.

CHD

Hayward had a significantly higher hospitalization rate and higher mortality rate from coronary heart disease (CHD) than Alameda County. Males were hospitalized more frequently and were more likely to die of CHD in Hayward than females. The White population had substantially higher rates of CHD-related hospitalization than other race/ethnic groups. African Americans were over three times as likely to die due to CHD compared to Asians, and over twice as likely to die due to CHD as Latinos. CHD hospitalizations and mortality in Hayward did not change substantially in the 1990s. These data suggest that prevention efforts are needed to address the significant sex and race/ethnic disparities in the burden of CHD in Hayward. Strategies for prevention need to include reduction of risk factors for CHD in vulnerable populations. Specific interventions to improve access to acute care for heart attack and treatment of CHD risk factors such as high cholesterol and high blood pressure are warranted in these populations.

Stroke

Hayward had a substantially higher rate of hospitalization and death from stroke than the county. Males were more likely to be hospitalized following a stroke and more likely to die from stroke than females. African Americans had the highest stroke hospitalization rate compared to other race/ethnic groups. Latino and White persons were more likely to die following a stroke than Asians. Stroke hospitalization and death rates did not change substantially in Hayward in the 1990s. The lack of progress in reduction of stroke morbidity and mortality in the last decade suggests that it needs to get greater prominence in local chronic disease prevention efforts. Stroke prevention strategies should target older populations to reduce the prevalence of underlying risk factors for stroke such as high blood pressure. Increased awareness of stroke, enhanced access to acute care, and better access to prevention and health care services among vulnerable groups is essential to local efforts at reducing the burden of stroke.

Diabetes

Hayward had a substantially higher rate of hospitalization for diabetes-related illness and notably higher rate of diabetes-related death than the county. Males had a substantially higher rate of hospitalization and death from diabetes than females. African Americans had higher rates of diabetes-related hospitalizations than all other race/ethnic groups. Latinos had higher diabetes death rates than those who were White. Diabetes-related hospitalization and mortality increased substantially in the 1990s in Hayward. Diabetes hospitalizations were concentrated in the marshlands and Tennyson area of Hayward. These data suggest a significant and increasing burden of diabetes in Hayward. Local chronic disease prevention efforts need to prioritize reduction of modifiable risk factors—physical inactivity and obesity—as key strategies to reducing the impact of diabetes. These efforts should include monitoring risk factors among vulnerable populations—low-income African Americans and Latinos—and targeted strategies to address these risk factors. Development of programs for improved access to early detection among those at risk for diabetes, and improved delivery of care and better self-management for those living with diabetes are also important for local diabetes prevention.

All Cancer

Hayward had lower incidence, and higher mortality from all cancers combined than the county. Males had a notably higher rate of all-cancer incidence and mortality than females. All-cancer incidence was substantially higher in Hayward's White population compared to that for African Americans or Latinos. African Americans had substantially higher all-cancer mortality compared to Asians and Latinos. All-cancer incidence and mortality remained stable in the 1990s in Hayward.

Lung Cancer

Lung cancer incidence in Hayward was similar to that in the county. Lung cancer mortality in Hayward was significantly higher than in the county. Males had substantially higher incidence and mortality from lung cancer than females. White persons in Hayward were significantly more likely to have lung cancer than Latinos or Asians in Hayward. Lung cancer incidence and mortality remained stable in the 1990s. These data suggest a higher burden of lung cancer among the White population in Hayward. Targeted local interventions and prevention programs focusing on reduction of lung cancer risk factors such as tobacco use among vulnerable groups in the White population are warranted.

Breast Cancer

Hayward's breast cancer incidence was significantly lower than the county. Hayward females were more likely to die from breast cancer than females in the county. White women had a higher breast cancer incidence and mortality rate compared to other race/ethnic groups. Breast cancer incidence and mortality did not change substantially in Hayward in the 1990s. The race/ethnic differences in incidence and higher burden of mortality can be attributed in part to disparities in screening and resulting disparities in survival. These data suggest the need to develop targeted local breast cancer prevention efforts in Hayward. These efforts need to focus on increasing access to screening and early detection among African American, Latino, and Asian women.

Prostate Cancer

Hayward had a prostate cancer incidence rate higher than the county, and a prostate cancer death rate similar to the county. African American men had higher incidence rates than all race/ethnic groups. Prostate cancer incidence did not change substantially in 1990s. These data point to the need for continued local efforts to reach vulnerable populations, i.e., men over 40, for screening and early diagnosis of prostate cancer, to improve survival and reduce the burden of prostate cancer mortality in Hayward.

Asthma

Hayward bears a burden of asthma hospitalizations comparable to that of the county. The asthma hospitalization rate for in Hayward among persons of all ages was lower than the county rate. Both Hayward and county rates far exceeded the national Healthy People 2000 objectives for asthma hospitalization rates. Females had substantially higher rates of hospitalization than males. Rates of asthma hospitalization were significantly higher among African Americans compared to all other race/ethnic groups in Hayward. Asthma hospitalizations in Hayward remained stable in the 1990s.

Among children, the rate of asthma hospitalization in Hayward was lower than the county rate. However, Hayward and county rates far exceeded the national Healthy People 2000 objectives for asthma hospitalization rates. Males had a substantially higher rate of hospitalization than females. Significant race/ethnic disparities exist in the burden of childhood asthma. African American children were significantly more likely to be hospitalized for asthma than White, Asian, or Latino children. Childhood asthma rates declined slightly in recent years. Local asthma prevention efforts need to target vulnerable populations in Hayward and consider control of environmental exposures as a strategy to reduce asthma burden among these population groups.

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Endnotes

- a. Mortality data for deaths from all causes and specific causes of death in this report are classified and coded according to the World Health Organization's (WHO) tenth revision of the International Classification of Diseases (ICD-10) implemented in the United States in 1999. Mortality data for 1990 to 1998, used to describe trends, are based on ninth revision of International Classification of Disease (ICD-9). Introduction of ICD-10 creates discontinuities in trends for specific causes of death, because of the reclassification of diseases and changes in the coding rules. Annual rates of mortality from specific causes between 1990 and 1998 are not directly comparable to those for 1999 to 2001; for this reason changes in mortality trends should be interpreted with caution (41). A more detailed description of ICD-10 is presented in Technical Notes contained in Appendix 7.
- b. Refers to Asian/Pacific Islanders. This group is labelled as "Asian/PI" in figures.
- c. Native Hawaiian and Other Pacific Islander is labelled as "NHOPi" in figures.
- d. Two-year average annual rates were calculated to get stable rates for this trend. See Appendix 7: Technical Notes for a description of reliability of rates.



The health of mothers, infants, children, and adolescents is important, both as an indicator of population health and as a predictor of the next generation's health. Maternal, child, and adolescent health (MCAH) indicators include those that affect pregnant and postpartum women, as well as the health and survival of their infants and children. The national Healthy People 2010 objectives serve as a benchmark to monitor progress on several MCAH indicators. These objectives include reducing infant deaths, decreasing low birth weight births, increasing the number of mothers who receive early prenatal care and decreasing the number of teenage births. This chapter covers key MCAH indicators: profile of live births, infant mortality, low birth weight, prenatal care, and births to teens.

The sections below present findings for Hayward on these indicators and discuss comparisons with the county as well as status on achieving the Healthy People 2010 objectives.

Births

Table 4.1		Characteristics of Live Births: Average Annual Counts, Rate per 1,000, and Percent, Hayward and Alameda County, 2000-2002				
	Hayward			Alameda County		
	Count	Rate	%	Count	Rate	%
Births	2,999.3	20.9	100.0	21,982.3	14.9	100.0
Race/Ethnicity of mother						
African American	284.3	18.7	9.5	3,037.0	14.1	13.8
American Indian	9.7	16.6	0.3	55.0	10.1	0.3
Asian	554.7	20.7	18.5	5,486.3	18.4	25.0
Hispanic/Latino	1,497.3	30.6	49.9	6,379.3	22.8	29.0
NHOPI	71.0	27.6	2.4	211.3	24.5	1.0
White	509.0	12.2	17.0	6,235.0	10.3	28.4
Two or more races	58.3	8.8	1.9	354.3	6.1	1.6
Other	15.0		0.5	224.0		1.0
Age of mother						
≤19 years	261.0		8.7	1,560.7		7.1
20–34 years	2,322.7		77.4	16,055.7		73.0
≥35 years	415.7		13.9	4,364.3		19.9
Mother's education ≥12 years	2,108.0		71.6	11,630.7		81.0
Deliveries paid by Medi-Cal	977.0		32.6	3,780.7		26.4

Note: Birth rates are based on 1,000 population.

Table 4.1 shows the profile of births in Hayward and Alameda County. In Hayward, the annual average number of births between 2000 and 2002 was 2,999, which is almost 14% of the births in Alameda County. The birth rate for Hayward was significantly higher than that for the county as a whole—20.9 and 14.9 per 1,000 persons, respectively (Appendix table 4A.1).

As seen in **Table 4.1**, the Latino population in Hayward has the highest birth rate (30.6 per 1,000 population) of any race/ethnic group, followed by Native Hawaiian and Pacific Islander (NHOPI) (27.6), Asian (20.7), African American (18.7), American Indian (16.6), and White (12.2). The birth rate of the Latino population in Hayward is significantly higher than the county rate for this group (Appendix table 4A.1). Half (50%) of live births in Hayward were to Latino women, 17% to White, 19% to Asian women, and 10% to African American women.

Hayward also had a higher proportion of births to mothers younger than 19 years (8.7% versus 7.1%) and a lower proportion of mothers who completed high school (71.6% versus 81.0%) than Alameda County.

Hayward had a higher proportion of births paid by Medical, an indicator of low income or poverty, than the county

(32.6% versus 26.4%). Younger mothers, lower education, and poverty have been shown to be associated with poor birth outcomes.

The birth rate in Hayward has dropped by 20.2%, from 1990 to 2002. The rate decreased from 25.7 live births per 1,000 people to 20.5. The current birth rate in Hayward continues to be higher than that of Alameda County and has been decreasing at about the same rate as the county (Appendix table 4A.2).

The sections that follow present findings on select indicators of maternal, child, and adolescent health. **Table 4.2** shows findings on infant mortality, low birth weight, early prenatal care, and teen births by race/ethnicity and age group.

Infant Mortality

The infant mortality rate, defined as the number of deaths to children less than one year old per 1,000 live births, has been declining over the past several decades. Advancements in medical care have been responsible in large part for these decreases, but public health efforts have also played a role in preventing infant deaths. During the 1990s, campaigns promoting placing babies to sleep

Table 4.2		Select MCAH Indicators: Average Annual Counts, Rates or Percent by Race/Ethnicity, and Age Group, Hayward, 2000-2002						
	Infant Mortality		Low Birth Weight		Early Prenatal Care		Teen Birth	
	Count	Rate	Count	%	Count	%	Count	Rate
Total	17.3	5.8	183.0	6.1	2,528.3	84.3	258.7	55.1
Race/Ethnicity								
African American	2.5	*	30.3	10.7	254.3	89.4	27.7	46.0
American Indian	0.0	*	0.0	*	8.0	82.8	0.3	*
Asian	2.0	*	38.0	6.9	487.0	87.8	19.0	21.1
Hispanic/Latino	6.5	*	77.0	5.1	1,226.3	81.9	169.0	95.4
NHOPI	<1	*	4.3	*	51.3	72.3	5.3	*
White	3.5	*	27.3	5.4	445.0	87.4	29.0	30.4
Two or more races	1.0	*	4.3	*	45.3	77.7	6.7	23.3
Other	0.0	*	1.7	*	11.0	73.3	1.7	*
Age group								
≤19 years	—		17.3	6.6	186.3	71.4	—	
20-34 years	—		135.0	5.8	1,978.7	85.2	—	
≥35 years	—		30.7	7.4	363.3	87.4	—	

Notes: Infant mortality rates are per 1,000 live births. Overall infant mortality rates are based on 1999-2001 data & race-specific rates on 2000-2001 data. Teen birth rates are per 1,000 female population ages 15-19 years. (*) = Rate not calculated due to small numbers. (—) = Not applicable.

on their back were successful in decreasing the number of sudden infant death syndrome (SIDS) cases by more than 50%.¹

Some of the risks associated with infant mortality are substance abuse by the mother, young age of the mother (less than 17 years), pre-term birth, low birth weight, poverty, stress, exposure to second-hand smoke, inadequate prenatal care, infections, and other complications during pregnancy.

One of the persistent challenges to MCAH public health programs remains the inequities in infant mortality by race/ethnicity. African American infants are over twice as likely to die before their first birthday as White infants.² The reasons for differences in birth outcomes are complicated. Some of the differences have been explained by variations in income, race, and stress levels. Other research has suggested that answers can be found in the study of women's health and risk factors throughout the life span and not just during pregnancy. This body of research suggests that a series of events affect African American and White women differently throughout their lives, which impact not only their overall health but their reproductive health as well.³

Of the annual average 2,968 live births in Hayward between 1999 and 2001, 17 infants died before their first birthday (**Table 4.2**). Hayward's infant mortality rate of 5.8 deaths per 1,000 live births is about the same as the rate for the county as a whole (5.3), and does not meet the Healthy People 2010 objective of 4.5 infant deaths per 1,000 live births. In the county, the infant mortality rate in the African American population was three times that for the White or Asian populations, and over twice that for the Latino population (Table 4B.1 in the Appendix). Rates could not be calculated by race/ethnic group for

Hayward due to the small number of infant deaths in these groups.

Between 1999 and 2001, a total of 52 infants in Hayward died before their first birthday. About half of those deaths were due to three causes: birth defects (28.8%), SIDS (11.5%), and disorders related to short gestation and low birth weight (5.8%), as shown in Appendix table 2C.1 and Table 2C.2.

Hayward has had a significant decrease in the rate of infant deaths in the last decade, from 8.7 deaths per 1,000 live births in 1990 to 5.6 deaths per 1,000 live births in 2001 (Appendix table 4B.2).

Low Birth Weight

Infants weighing less than 2,500 grams (5 lbs 8 oz) at birth are considered low birth weight (LBW). LBW infants are at much greater risk of illness (e.g. physical and development complications) and death. Improvements in birth weight could contribute substantially to reducing infant mortality.

In the past decade, infant mortality has declined overall largely due to improved survival rates of LBW babies, and not a decrease in the number of LBW babies.¹ Many factors increase the risk of low weight at birth. Examples include pre-term delivery, maternal smoking and illicit drug use, poor maternal nutrition, young maternal age, low maternal educational attainment, low family income, late or no prenatal care for the mother, and multiple births.⁴ Smoking accounts for 20 to 30% of all LBW births in the United States.⁵ Some research also shows that cumulative stress, racism, and maternal infections affect the weight of babies.³



African American mothers in Hayward are twice as likely to have a low birth weight baby as White or Latino mothers

As shown in **Table 4.2** Hayward had an annual average of 183 live births, or 6.1%, that were low birth weight between 2000 and 2002. This is slightly lower than the county rate of 6.8% (Appendix table 4C.1). It is also much higher than the Healthy People 2010 objective of 5.0% of live births. African American mothers in Hayward were twice as likely to have a LBW baby than White or Latino mothers. Mothers aged 20 to 34 years are less likely (5.8%) to have LBW babies than mothers 19 years or younger (6.6%) or those 35 and older (7.4%).

During the 1990s, the proportion of births in Hayward that was low birth weight did not improve, fluctuating between 5.5% and 7.2%. The county rate also did not change significantly, staying between 6.5% and 7.5% in this time period (Appendix table 4C.2).

Prenatal Care

Prenatal care refers to pregnancy-related health care provided to a woman during pregnancy. It is recommended that a woman start receiving prenatal care as soon as she knows she is pregnant, at least within the first trimester of pregnancy (before 12 weeks). This is considered early or timely prenatal care. Comprehensive prenatal care can help prevent poor birth outcomes that may endanger the health of the mother or the fetus. Prenatal care can identify treatable medical conditions (such as hypertension and sexually transmitted diseases) or modifiable risk factors (such as the use of alcohol, tobacco, or other drugs).⁶ Factors related to late entry into prenatal care include low income, young maternal age or teen pregnancy, low maternal education level, race/ethnicity, a high number of previous pregnancies, and substance abuse.⁷

As shown in **Table 4.2**, 84.3% of pregnant women in Hayward began prenatal care during the first trimester.

This is lower than the county rate of 88.9% (Appendix table 4D.1), and is lower than the Healthy People 2010 objective of 90.0%.

The proportion of women who receive early prenatal care has been increasing among all race/ethnic groups. In Hayward, Native Hawaiian and Other Pacific Islander women were the least likely to seek early prenatal care; only 72.3% sought early prenatal care compared to 87.4% of White and 89.4% of African American women.

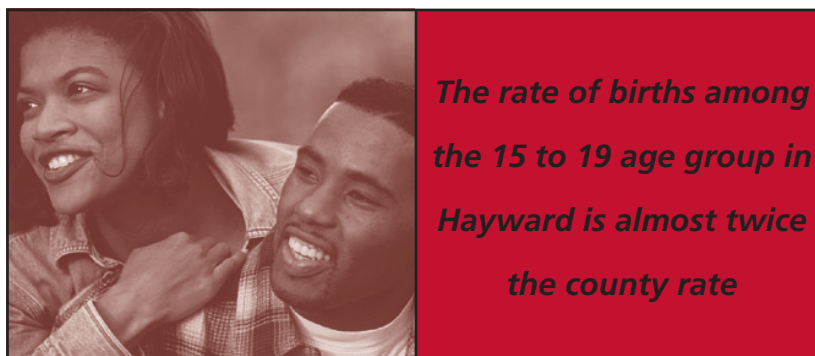
As the age of the mother increases, so does the likelihood of early entry into prenatal care. Women in Hayward aged 35 and above were most likely to start early prenatal care (87.4%), whereas adolescents aged 19 and under were least likely (71.4%) to obtain timely prenatal care.

Since 1990, there has been only a small increase in the percent of pregnant women starting prenatal care on time. The rate for early prenatal care in Hayward has increased slightly from 82.4% in 1990 to 85.6% in 2002. Rates of early prenatal care showed a more steady increase in the county (Appendix table 4D.2).

Teen Births

Teen birth is an important public health issue because of the effect on the future well-being of the mother. Furthermore, teen mothers often have difficulty meeting the financial and emotional needs of the baby. Finally, the majority of teen pregnancies are unplanned.⁸

Teen mothers typically have more difficulty completing their education, have fewer employment opportunities, and are more likely to require public assistance and to live in poverty than their peers. They also are at high risk for poor birth outcomes and having another pregnancy



The rate of births among the 15 to 19 age group in Hayward is almost twice the county rate

while still in their teens.⁹ Children born to teen mothers are more likely to have behavioral and cognitive problems, be less healthy, be abused, and be placed in foster care.¹⁰ It is not clear from the literature if many of these differences are due to preexisting conditions, such as poverty, rather than differing parental practices of younger parents.

Many factors increase the risk for teen pregnancy: lack of knowledge about and poor access to birth control, poor access to health care, low income, lack of emotional support and positive role models, lack of education, unsatisfactory adult relationships, lack of after-school and community activities, substance abuse, and low self-esteem.¹¹

The teen birth rate used in this report is the number of live births to mothers aged 15 to 19 years per 1,000 female population of that age group. As seen in **Table 4.2** there were an average of 259 live births to teenage girls ages 15 to 19 in Hayward between 2000 and 2002, accounting

for 8.6% of all births. The rate of teen births among the 15 to 19 age group (55.1 per 1,000) in Hayward is almost twice the county rate (33.4 per 1,000), as illustrated in Appendix table 4E.1.

As shown in **Figure 4.1**, all race/ethnic groups in Hayward had higher teen birth rates than the county, except African Americans in Hayward who had rates lower than in the county (Appendix table 4E.1). The rate of teen births among Latinos was 4.5 times that for Asian and 3 times that for White teens in Hayward.

Births to teens were slightly more likely to be low birth weight than births to all mothers (6.6% versus 6.1%) and more likely than births to mothers aged 20 to 34 (5.8%). Low income is a good indicator of prevalence of teen births; in Hayward, 58.0% of births to teen girls were paid for by Medi-Cal as compared to 32.6% for all age groups.

Research suggests that poverty rates have a strong association with teen birth rates.¹⁰ **Map 4.1** on the following page shows the geographic distribution of teen births versus poverty in Hayward and Alameda County. The relationship between teen birth and poverty rates is evident in the county map with Oakland having a high percent of poverty and a high concentration of teen births. Conversely, the Highlands area of Hayward, which has a low poverty rate (less than 10%), has only a few teen births.

Figure 4.2 shows that the teen birth rate among the 15 to 19 age group in Hayward decreased by a third in the last decade from 78.9 in 1990 to 51.6 births per 1,000 teen girls in 2002 (Appendix table 4E.2). This decrease is good news. Similar drops have been seen in Alameda County and nationwide.

Figure 4.1

Teen Births: Average Annual Rates by Race/Ethnicity, Hayward & Alameda County, 2000-2002

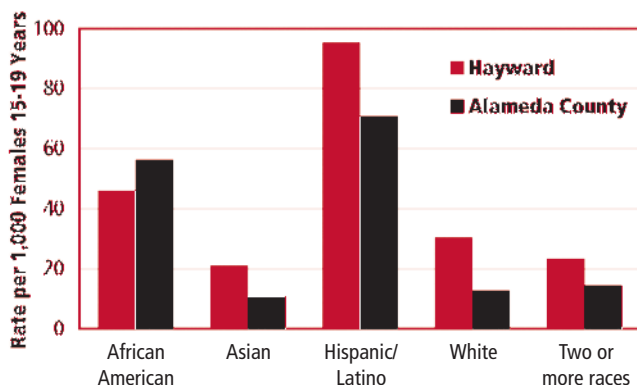
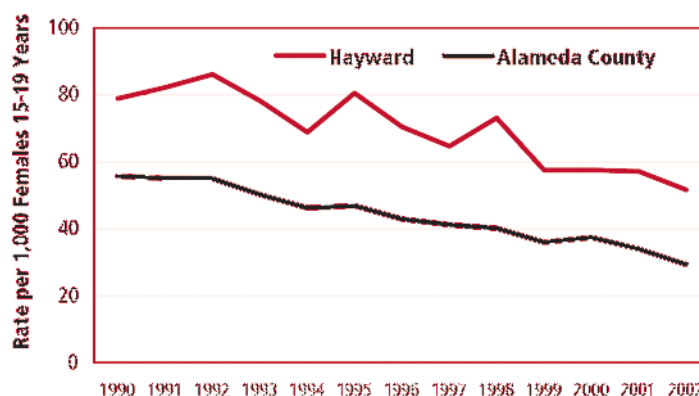


Figure 4.2

Teen Births: Annual Rates, Hayward & Alameda County, 1990-2002



LEGEND

- Single teen birth
- Poverty Rate**
 - More than 40%
 - 20% to 40%
 - 10% to 20%
 - Less than 10%

Alameda County

Hayward

Scale: 0 to 5 Miles

Scale: 0 to 15 Miles

North Arrow

Map Labels: Airport, Unincorporated Hayward, Eden, Cerrito, Palmdale, Mission, Downtown, Highlands, Albany, Emeryville, Berkeley, Piedmont, Oakland, Alameda, San Leandro, Haywards, Union City, Fremont, Newark, Pleasanton, Livermore, Dublin, Marsh Lands, 92, 880.

Summary and Recommendations

In Hayward, Several maternal, child, and adolescent health indicators have shown improvement over the past decade. Infant mortality declined by 35%. The proportion of pregnant women who start prenatal care early increased from 82.4% to 85.6%. Finally, the teen birth rate decreased by a third between 1990 and 2002. Unfortunately, low birth weight has not improved during the last twelve years.

It is apparent that many health inequities remain in Hayward and elsewhere. One of the objectives of Healthy People 2010 is the elimination of race/ethnic inequities in health. African Americans have the worst birth outcomes: they have the highest rates of infant mortality and low birth weight. Other visible minorities have specific issues as well. The Native Hawaiian and Other Pacific Islander population has the lowest rates of entry into first trimester prenatal care and Latinos have the highest teen birth rate by far.

Prevention efforts aimed at improving MCAH outcomes will require focused strategies in prenatal and perinatal care targeting high-risk populations. Some of the approaches might include: reducing the number of unwanted pregnancies, encouraging women to breast feed, and interventions aimed at helping pregnant women to avoid cigarette smoking and other substance use. However, future prevention efforts will also need to address the social determinants of health—stress, racism, environment, economic status, and access to and quality of health care—to make a broader and lasting impact on prenatal and perinatal outcomes.¹²

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Injury

Injury is the term for physical injury to a person from bodily harm or damage. Injuries are a major and preventable public health problem. They are a major cause of premature death and lifelong disability.

Injuries are commonly classified based on two characteristics—the mechanism, and the manner or intent of the injury.^{1,2} The mechanism involves the circumstances of the injury (e.g., fall, motor vehicle accident, and poisoning). The manner or intent of the injury describes whether the injury was inflicted purposefully or not (i.e., intentional or unintentional), and when intentional, whether the injury was self-inflicted (e.g. suicide) or inflicted upon another person (e.g. assault).

Causes of death involving injury are prominent in the United States. In 2001 there were 157,078 deaths due to injury in the United States. Sixty-five percent of these deaths were from unintentional injuries, 20% from suicides, and 13% from homicides. Persons aged 75 and over had the highest injury death rates. The five leading mechanisms accounted for 78% of injury deaths. Motor vehicle traffic-related injuries accounted for 27%, firearms 19%, poisonings 14%, falls 10%, and suffocation 8% of injury deaths.³

Injuries create a major burden on society in terms of medical resources used for treating the injured, loss of productivity due to disability or premature death, and pain and suffering of injured persons and their caregivers.⁴

This chapter presents a profile of unintentional and intentional injuries in Hayward. Findings on the most important injuries are summarized by mechanism, hospitalizations, and deaths. Data are presented by sex, age, race, and year. Recent trends in injury mortality should be interpreted with caution due to the change in classification of deaths since 1999.^a Findings on Hayward are presented in this chapter; detailed tables showing findings on Hayward and Alameda County are in Appendix 5.

Unintentional Injury

Injury that is not purposely inflicted is unintentional injury. Unintentional injuries are commonly thought of as accidents, or as happening as a result of chance. However, most unintentional injuries are preventable.

Unintentional injuries account for the majority of all injuries. About two-thirds of injury deaths are unintentional, and 94% of nonfatal injuries treated in emergency departments (EDs) are unintentional.^{3,5,6} In 2001, 101,537 people died of unintentional injuries; they were the fifth leading cause of death in the United States.³

Nationally, the age-adjusted rate of unintentional injury death was 35.7 per 100,000. The death rate of unintentional injury among males in 2001 was over two times the rate for females.³ Unintentional injury was the leading cause of death among those under 35 years, and accounted for 28% of deaths in this age group.⁷

In 2001 motor vehicle crashes were the single most common cause of unintentional injury death; poisonings and falls ranked second and third.⁵ Of unintentional nonfatal injuries seen in EDs in 2000, falls were the most common mechanism. The next most common was being struck by or against an object, followed by motor vehicle crashes, overexertion, and cuts.⁶

Poisonings accounted for 14.2% of injury deaths in 2001. Of these, 63.3% were unintentional. The majority (93%) of unintentional poisonings were drug-related. Narcotics were involved in about half of unintentional poisonings. Falls accounted for 10% of injury deaths in 2001. The majority (95.3%) were unintentional.⁵

Unintentional injuries are the fifth leading cause of death, and third leading cause of premature death in Hayward.

This section presents unintentional injury by mechanism, as well as hospitalizations and deaths from unintentional injuries. Hospitalization and mortality rates of all unintentional injuries and motor vehicle crashes by sex, race, age, and year are discussed.

Unintentional Injury by Mechanism

During the period 1998 to 2000, 47% of unintentional injury hospitalizations were due to falls, and 27% a result of motor vehicle crashes—these were the two most common mechanisms by far in Hayward. A similar pattern was seen at the county level (Appendix table 5A.1).

The three most common causes of death from unintentional injury in Hayward were poisoning (which includes drug overdose), accounting for 31% of deaths, followed by motor vehicle crashes (23%) and falls (18%). In contrast,

motor vehicle crashes were the most common cause of unintentional injury death in the county (Appendix table 5A.2).

Unintentional Injury Hospitalization

The average annual number of unintentional injury hospitalizations in Hayward 1998 to 2000 was 801 (Table 5.1). The annual average age-adjusted rate was 506.1 per 100,000 in Hayward—significantly higher than the county rate of 439.8 (Appendix table 5A.3). Rates for males significantly exceeded those for females (533.8 and 453.0, respectively). Hayward rates significantly exceeded county rates for both males and females.

The age-adjusted rate of unintentional injury hospitalization among the White population in Hayward (652.5 per 100,000) significantly exceeded that for the African American (371.5), Latino (346.8), and Asian^b (163.7) populations. Rates among White and Latino populations were higher in Hayward than in the county. However, the rate for African Americans in Hayward was lower than in the county.

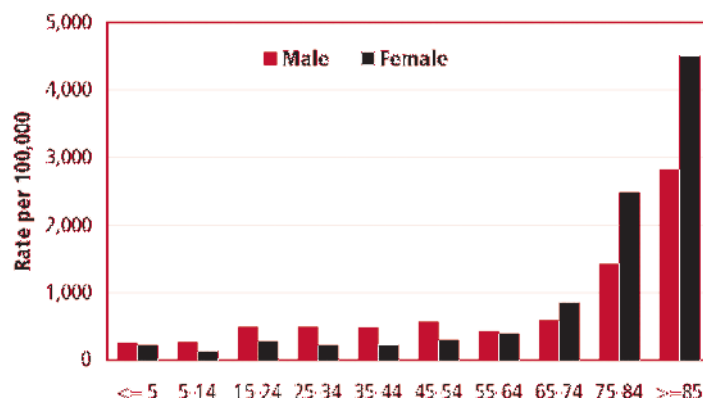
The impact of unintentional injury varies by age group. This is because certain types of unintentional injuries are more common among certain age groups. For instance, injuries due to falls are more common among

Table 5.1 Unintentional Injury: Average Annual Counts and Rates of Hospitalization and Mortality by Sex and Race/Ethnicity, Hayward, 1998-2000					
Hospitalization			Mortality		
	Count	Rate		Count	Rate
Total	801.0	506.1	Total	42.7	33.1
Sex			Sex		
Male	415.7	533.8	Male	26.0	43.6
Female	385.3	453.0	Female	16.7	24.0
Race/Ethnicity			Race/Ethnicity		
African American	65.3	371.5	African American	3.5	*
American Indian	2.7	*	American Indian	0.0	*
Asian/Pacific Islander	46.3	163.7	Asian	7.5	*
			NHOPI	1.5	*
Hispanic/Latino	165.7	346.8	Hispanic/Latino	10.5	32.9
White	444.3	652.5	White	19.5	38.3
			Two or more races	0.0	*

Notes: Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Figure 5.1

Unintentional Injury Hospitalization:
Average Annual Age-Specific Rates by Sex, Hayward,
1998-2000



the elderly, especially elderly females due to their more brittle bones. Injuries due to motor vehicle crashes are more common among young people 15 to 24, especially males. In Hayward, nearly half (47%) of hospitalizations for unintentional injury were due to falls, 27% to motor vehicle accidents, 5% to poisoning, and a small remainder to other causes.

Those 85 years of age and older had exceedingly high rates of unintentional injury hospitalization in Hayward (Figure 5.1). The rate was much lower for persons 75 to 84 and those 65 to 74. Rates among females exceeded rates for males in these three age groups.

Under the age of 65, rates of hospitalization for unintentional injury were higher among males than females in each age group. Males between the ages of 5 and 54 had

rates of unintentional injury approximately twice the rate for females in the same age groups.

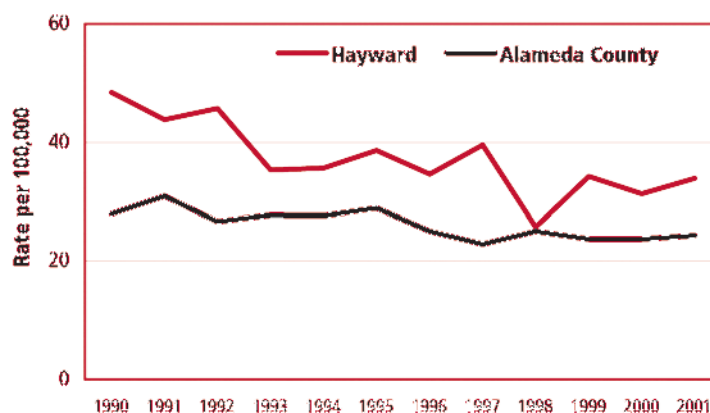
Hospitalization rates for unintentional injury in Hayward did not change substantially between 1995 and 2000. It remained between 452.0 per 100,000 in 1995 to 506.7 in 2000 (Appendix table 5A.4). This decline is contrary to the national trend of decreasing hospitalization rates for unintentional injury, a decrease largely attributed to the success of motor vehicle injury prevention efforts.^{8,9}

Unintentional Injury Mortality

During the period 1999 to 2001, there were 42.7 deaths from unintentional injury in Hayward (Table 5.1 on previous page). The annual average death rate was 33.1 per 100,000—significantly higher than the county rate of

Figure 5.2

Unintentional Injury Mortality: Average Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2001



23.9 (Appendix table 5A.5). Males had a mortality rate of 43.6 per 100,000, and were significantly more likely to die of unintentional injuries than females (24.0). These sex differences mirror those seen in the county.

The White population had a rate of 38.3 per 100,000, comparable to the rate of Latinos (32.9) in Hayward.

Death rates from unintentional injury in Hayward did not change substantially from 1990 to 2001. They decreased 48.4 per 100,000 in 1990 to of 33.9 in 2001 (**Figure 5.2** on previous page). A similar trend with less fluctuation was noted in the county during the same time period (Appendix table 5A.6). Due to a change in disease classification in mortality data rates for years 1999 through 2001 are not directly comparable to rates for previous years.^a

Motor Vehicle Crashes

Motor vehicle crashes are the leading cause of unintentional injury in the United States. In 2001 there were 43,443 deaths from motor vehicle crashes in the United States. The age-adjusted death rate was 14.9 per 100,000.¹

There has been a significant decline in deaths attributable to motor vehicle crashes, especially in the 1990s. Prevention of motor vehicle-related injuries have focused on environmental interventions such as highway and vehicle

safety, reduction of risky behaviors such as alcohol-impaired driving, and legislation vehicle occupant protection such as helmet and seat belt laws. These strategies have substantially reduced the burden of injury morbidity and mortality.^{8,9}

Motor Vehicle Crash Hospitalization

Twenty-seven percent of all unintentional injury hospitalizations among Hayward residents were due to motor vehicle crashes, a slightly higher proportion than in the county (22%).

There was an annual average of 219 motor vehicle crash hospitalizations in Hayward from 1998 to 2000 (**Table 5.2**). The annual average age-adjusted rate of hospitalization for a motor vehicle crashes was 130.3 per 100,000—significantly higher than in the county (Appendix table 5A.7). The rate among males was 161.4—substantially higher than the rate for females (100.2). Rates in Hayward exceeded county rates for both males and females.

The motor vehicle crash hospitalization rate was significantly higher in the White population (164.0), than in African American (115.8) Latino (83.0) or Asian populations (30.2) in Hayward. Rates among the White and Latino populations were higher in Hayward than in the county.

Table 5.2 Motor Vehicle Crashes: Average Annual Counts and Rates of Hospitalization and Mortality by Sex and Race/Ethnicity, Hayward, 1998-2000					
Hospitalization			Mortality		
	Count	Rate		Count	Rate
Total	218.7	130.3	Total	10.7	7.7
Sex			Sex		
Male	133.3	161.4	Male	9.0	13.3
Female	85.3	100.2	Female	1.7	*
Race/Ethnicity			Race/Ethnicity		
African American	23.0	115.8	African American	1.0	*
American Indian	1.3	*	American Indian	0.0	*
Asian/Pacific Islander	10.7	30.2	Asian	4.0	*
			NHOPI	0.0	*
Hispanic/Latino	46.0	83.0	Hispanic/Latino	3.5	*
White	95.3	164.0	White	1.5	*
			Two or more races	0.0	*

Notes: Mortality figures by race/ethnicity are for 2000-2001 only. NHOPI=Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Age and sex are factors that can help predict the risk of being injured in a motor vehicle crash. Motor vehicle crash hospitalization rates in Hayward were higher among males than females in all age groups (Figure 5.3).

Motor vehicle crash hospitalization rates in Hayward did not change substantially between 1995 and 2000. They fluctuated from a high of 168.3 per 100,000 in 1995 to 117.3 in 1996 and increased to 139.7 in 2000. In the county, there was a significant decline in motor vehicle crash hospitalizations in this time period (Appendix table 5A.8).

Motor Vehicle Crash Mortality

From 1999 to 2001 there were an average of 10.7 deaths per year from motor vehicle crashes in Hayward (Table 5.2). The average annual death rate was 7.7 per 100,000, comparable to the county rate of 7.5 (Appendix table 5A.9).

Males in Hayward had a slightly higher death rate from motor vehicle crashes than males in the county. Rates for females and race/ethnic groups could not be calculated due to the small number of deaths.

Although the annual number of deaths due to motor vehicle crashes was small in Hayward, the overall trend during last decade^c was a decreasing one, from a high of 15.7 per 100,000 during 1991 to 1992 to a low of 8.0 during 1999 to 2000 (Figure 5.4). In the county there was a significant decline in motor vehicle crash death rates in this time period (Appendix table 5A.10). This decline is consistent with national trends and can be attributed to significant advances in motor vehicle safety.^{8,9} Due to a change in disease classification in mortality data, rates for years 1999 through 2001 are not directly comparable to rates for previous years.^a

Figure 5.3 Motor Vehicle Crash Hospitalization: Annual Average Age-Specific Rates by Sex, Hayward, 1998-2000

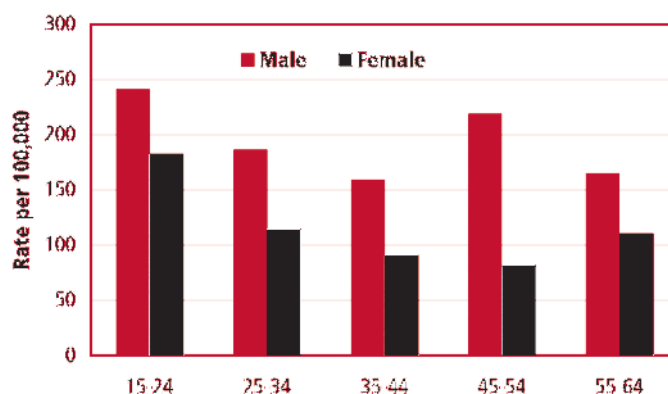
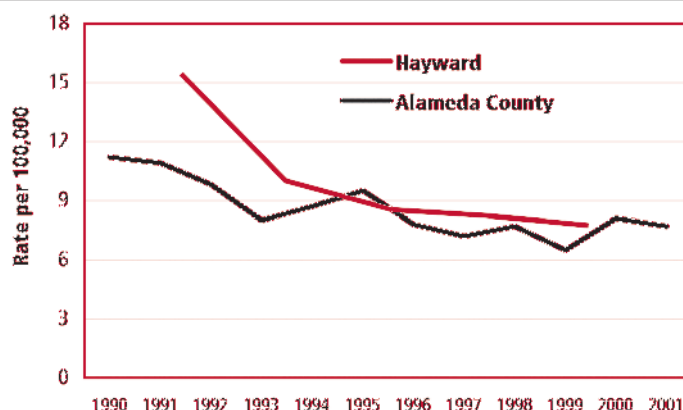


Figure 5.4 Motor Vehicle Crash Mortality: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2001





Hayward had substantially higher unintentional injury hospitalization than the county

Intentional Injury

Injury that is purposely inflicted is intentional injury. Intentional injuries can be self-inflicted or inflicted upon another person, and may be fatal or nonfatal.

This section describes the profile of hospitalizations (a large proportion of which are nonfatal injuries) and deaths due to both of these types of intentional injuries.

Intentional Injury by Mechanism

During the period 1998 to 2000, 48% of assault hospitalizations were caused by being struck by, or against an object, 23% caused by cutting or piercing, and 18% a result of firearms—the three most common mechanisms (Appendix table 5B.1).

The most common causes of homicide in Hayward during the period of 1999 to 2001 were firearms; accounting for 67% of intentional injury deaths, followed by cutting or piercing (13%).

During the period 1998 to 2000, poisonings were the most common cause of hospitalizations for self-inflicted harm in Hayward, accounting for 86% of hospitalizations (Appendix table 5B.2). Cutting or piercing was the second most common cause of self-inflicted injury (10%).

Forty-two percent of suicides in Hayward during 1999 to 2001 involved firearms, 33% were a result of suffocation or strangulation, and 17% due to poisonings.

Assault

Assault is intentionally inflicted injury to another person that may or may not involve intent to kill. Homicide is any intentionally inflicted fatal injury to another person and,

in this report, excludes deaths caused by law enforcement officers in the line of duty.

In 2001, there were 20,308 homicides in the United States and the age-adjusted rate was 7.1 per 100,000.³ Homicide is the second leading cause of death, after unintentional injury, among those 15 to 24 in the United States. Homicide rates among males 20 to 24 are three times the rate for females in this age group. In 2001 57% of homicides involved the use of firearms.⁵ Significant race/ethnic disparities exist in the impact of homicide among different groups in the United States.^{3,11} African Americans have a homicide rate that is over four times the rate for the White population. Hispanics have a homicide rate over twice the rate in the White population.

Homicide was the second leading cause of death among adolescents and young adults 15 to 24 in Hayward and the third leading cause of premature death in Hayward.

The sections that follow describe assault hospitalization, and homicide deaths by sex, race, age, and year in Hayward.

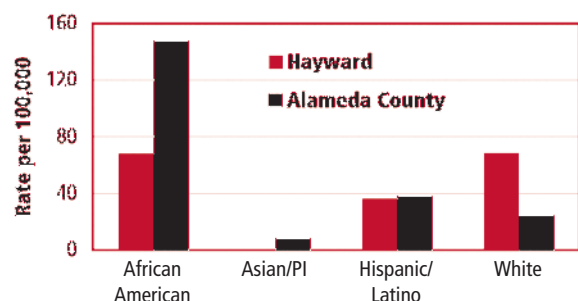
Assault Hospitalization

The average annual number of assault hospitalizations between 1998 and 2000 in Hayward was 89, 13% of those in the county (Appendix table 5B.3). About half (48%) of these assault-related injury hospitalizations were a result of being struck by or against an object, 23% due to cutting and piercing, and 18% due to firearm-related injuries. A similar pattern was noted in the county.

The annual average age-adjusted rate of hospitalization for assault in Hayward was 49.3 per 100,000, only slightly higher than the Alameda County rate of 45.7. The rate for males was 82.9—six times that for females (13.7). The assault hospitalization rates for both males and females in

Figure 5.5

Assault Hospitalization: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward & Alameda County, 1998-2000



Hayward were about the same as the county rates (77.2 and 14.1, respectively).

As shown in **Figure 5.5** the age-adjusted rate of assault hospitalization in Hayward was essentially the same for African Americans (68.0 per 100,000) and those who were White (68.6). The rate for Latinos was close to half this rate (36.2). The number of hospitalizations for Asians^b and American Indians were too small to calculate reliable rates. The assault hospitalization rate was higher in Hayward than in the county only among those who were White.

Hospitalization rates for assault vary by age group. The highest rate of assault hospitalization was the highest among males 15 to 24 (238.9 per 100,000), followed by males 25 to 34 (141.1), 35 to 44 (128.0), and declined with each successive age group. Age-specific rates could not be calculated for females due to the small number of hospitalizations in these age groups.

Rates of assault hospitalization in Hayward fluctuated between a low of 34.4 per 100,000 in 1996 and a high of 55.3 in 1998. In 2000 the rate was 50.1 (Appendix table 5B.4).

Homicide Deaths

The overall homicide rate for Hayward was 7.1 per 100,000, which was the same as the county rate (Appendix table 5B.5). Males in Hayward had a homicide rate of 12.7 per 100,000, similar to the county rate. Rates for females and by race/ethnicity could not be calculated due to the small number of homicide deaths.

Homicide rates in Hayward^c have declined since the mid 1990s, from a high of 12.0 during 1995 to 1996 to a low of 7.2 during 1999 to 2000 (**Figure 5.6**). A significant decline was noted in the county in this time period (Appendix table 5B.6). Rates for years 1999 through 2001 are considered comparable to homicide rates for previous years.^a

Self-Inflicted Injury

Self-inflicted injury is bodily harm or physical injury purposely inflicted on oneself that may or may not result in death. Suicide is any purposely self-inflicted injury that is fatal. Non-fatal self-inflicted injury of the type seen in emergency departments is often, but not always, the result of a suicide attempt.

Nationally, suicide is the second leading cause of death among those 25 to 34, and the third leading cause of death among those 15 to 24. Among those 25 to 34, for all races combined, the rate for males exceeds the rate for females

Figure 5.6

Homicide Deaths: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2001

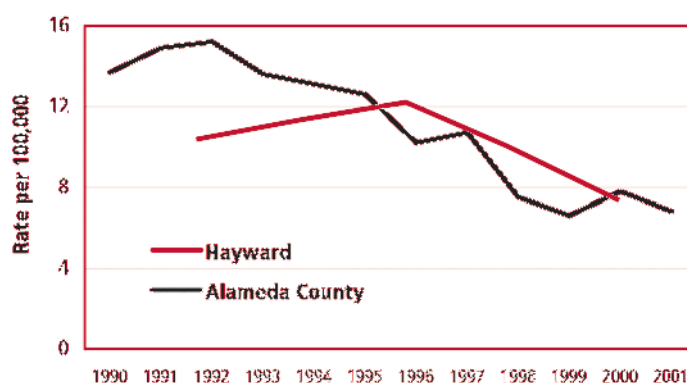
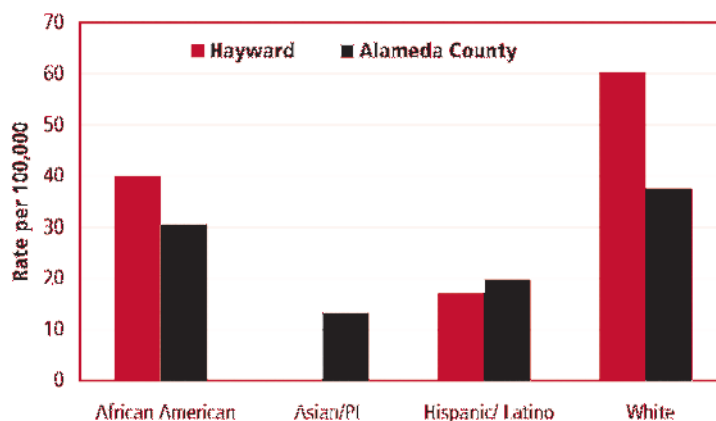


Figure 5.7

Self-Inflicted Injury Hospitalization: Average Annual Age-Adjusted Rates by Race/Ethnicity, Hayward and Alameda County, 1998-2000



by more than four to one (22.3 per 100,000 compared to 4.8 in 1999).⁵

In 2001, there were 30,622 suicides in the United States. Overall, the age-adjusted suicide rate was 10.7 per 100,000. Thirty-eight percent of suicides involve the use of a firearm.⁵ In 2000, of the self-inflicted injuries treated in hospital emergency departments, over half (56%) were female.⁶ Males have a suicide rate 4.6 times the rate for females. The White population has a suicide rate twice that for African American or Hispanic populations in the United States.⁵

Suicide was the third leading cause of death among adolescents and young adults 15 to 24 in Hayward, and the tenth leading cause of premature death in Hayward.

This section describes hospitalizations resulting from self-inflicted injury, and suicide deaths by sex, race, age, and year in Hayward.

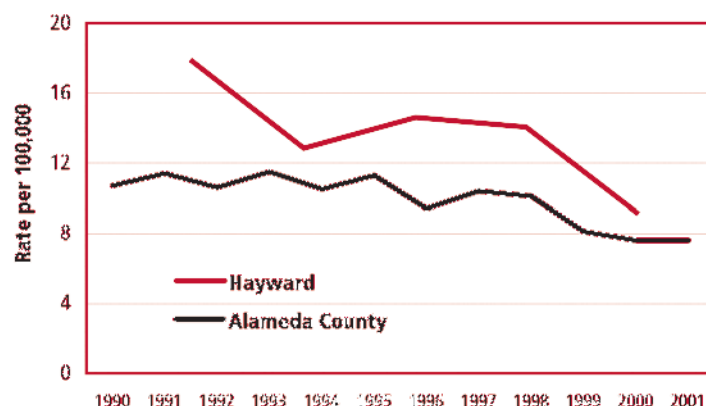
Self-Inflicted Injury Hospitalization

In Hayward, an annual average of 63 hospitalizations occurred as a result of self-inflicted harm during 1998 to 2000. The great majority (86%) of these hospitalizations were caused by poisonings, most often drugs that were toxic in high doses. In contrast, a much smaller percentage of self-inflicted injury hospitalizations were due to cutting (10%) and firearms (2%). This pattern was similar to that in the county (Appendix table 5B.1).

From 1998 to 2000, the annual average age-adjusted rate of hospitalization for self-inflicted injury was 37.3 per 100,000 in Hayward—significantly higher than the county

Figure 5.8

Suicide Deaths: Annual Age-Adjusted Rates, Hayward and Alameda County, 1990-2001



rate of 29.5 (Appendix table 5B.7). The rate among females was 44.9—higher than the rate among males (29.6). The county rate among both females and males was lower than in Hayward (36.1 and 23.2, respectively).

As shown in **Figure 5.7** on the previous page the rate of hospitalization for a self-inflicted injury in Hayward was significantly higher among those who were White (60.4 per 100,000) or African American (40.0) than Latino (17.1). The numbers for Asians and American Indians were too small to calculate reliable rates.

Self-inflicted injury hospitalization rates among Hayward females were highest among those 15 to 24 (78.6 per 100,000), followed by 35 to 44 (63.4) and 45 to 54 (62.5). Rates among males were highest among those 35 to 44 (58.0) followed by those 15 to 24 (50.4) and 45 to 54 (40.4).

The rate of self-inflicted injury hospitalization in Hayward fluctuated over a six-year period between 1995 and 2000 and did not change substantially (Appendix table 5B.8).

In the county a similar trend was noted during this time period.

Suicide Deaths

From 1999 to 2001, the annual average age-adjusted rate of suicide was 9.2 per 100,000, slightly higher than the county rate of 6.9 (Appendix table 5B.9). Hayward males had a slightly higher suicide rate than those in the county. More than 40% of suicides in Hayward involved firearms.

Rates for females and by race/ethnicity could not be calculated due to the small number of deaths.

In Hayward, the overall trend of suicide^c during the last decade was a decreasing one, from a high of 17.8 per 100,000 during 1991 to 1992 to a low of 8.9 during 1999 to 2000—a 50% decrease (**Figure 5.8** on previous page). A similar trend was noted in the county (Appendix table 5B.8). Rates for years 1999 to 2001 are considered comparable to suicide rates for previous years.^a

Summary and Recommendations

Unintentional Injury

Falls were the cause of nearly half of unintentional injury hospitalizations and 18% of unintentional injury deaths in Hayward. Motor vehicle crashes were the cause of 27% of hospitalizations and 23% deaths from unintentional injury in Hayward. Poisonings accounted for one-third of the deaths from unintentional injuries in Hayward.

Hayward had unintentional injury hospitalization and death rates that significantly exceeded the county rate. Males were significantly more likely to be hospitalized and to die from unintentional injuries compared to females. The rate of unintentional injury death was substantially higher in the White population than any other race/ethnic group. Unintentional injury hospitalization and death rates did not change substantially in Hayward between 1995 and 2001.

Motor vehicle crash hospitalization and death rates for Hayward were significantly higher than county rates. Males were significantly more likely to be hospitalized for a motor vehicle-related injury than females. The White population had a higher rate of hospitalization following a motor vehicle crash than all other race/ethnic groups. The motor vehicle crash death rate did not decline substantially in Hayward between 1995 and 2001.

The profile of unintentional injury in Hayward suggests the need to focus on local strategies for prevention of motor vehicle-related injuries among elderly drivers and passengers. Other strategies might include enforcement of existing occupant safety laws and enhanced pedestrian safety for high-risk groups such as children, and the elderly. Building safer communities is also essential to local injury prevention efforts.

Continued efforts at prevention of falls among the elderly are warranted. Local efforts are also needed to monitor and prevent drug-related poisonings in Hayward.

Intentional Injury

Firearms were the cause of 18% of assault hospitalizations, 67% of Hayward homicides, and 42% of suicides in Hayward. Poisonings were the cause of 86% of self-inflicted injury hospitalizations, and 17% of suicides in Hayward.

Hayward has an assault hospitalization rate comparable to that in the county. Males are six times more likely to be hospitalized for assault than females in Hayward. African American and those who were White were twice as likely to be hospitalized for assault than Latinos. Males 15 to 24 had the highest assault hospitalization rate than any other age group.

Hayward's homicide rate was about the same as the county rate. African Americans and White persons had comparable homicide rates.

Assault hospitalizations and homicides did not change substantially between 1995 and 2001.

Hayward's hospitalization rate for self-inflicted injuries was significantly higher than the county rate. However, the suicide rate was similar to that in the county. White and African American populations had significantly higher rates of hospitalization from self-inflicted injury than Latinos in Hayward. Self-inflicted injury hospitalizations did not change substantially in Hayward between 1995 and 2001. Suicide rates declined in this time period.

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Endnotes

a. Mortality data for deaths from all causes and specific causes of death in this report are classified and coded according to the World Health Organization's (WHO) tenth revision of the International Classification of Diseases (ICD-10) implemented in the United States in 1999. Mortality data for 1990 to 1998, used to describe trends, are based on ninth revision of International Classification of Disease (ICD-9). Introduction of ICD-10 creates discontinuities in trends for specific causes of death, because of the reclassification of diseases and changes in the coding rules. Annual rates of mortality from specific causes between 1990 and 1998 are not directly comparable to those for 1999 to 2000; for this reason changes in some mortality trends should be interpreted with caution (10). A more detailed description of ICD-10 is presented in Technical Notes contained in Appendix 7.

b. Refers to Asian/Pacific Islanders. This group is labelled as "Asian/PI" in figures.

c. Two-year average annual rates were calculated to get stable rates for this trend. See Appendix 7: Technical Notes for a description of reliability of rates.



Communicable Disease

Communicable diseases are diseases that can be spread from one person to another. They are also referred to as infectious diseases. Deaths from communicable diseases have declined markedly in the United States during the 20th century. This decline contributed to a sharp decline in infant and child mortality and an increase in life expectancy of over 30 years. In 1900, the three leading causes of death were pneumonia, tuberculosis (TB), and diarrhea and enteritis, which caused about one-third of all deaths. Of these deaths, 40% were among children younger than five years. In 2001, major chronic diseases—heart disease, cancer and stroke—accounted for 58.7% of all deaths, and pneumonia and influenza accounted for only 2.6% of all deaths.

The control of communicable diseases resulted largely from improvements in sanitation and hygiene, discovery of specific drugs for treatment (such as antibiotics), and implementation of childhood vaccination programs. Despite the progress in reducing morbidity and mortality from communicable diseases, large epidemics have occurred and some diseases have emerged or re-emerged in the last two decades. HIV infection, first recognized in 1981, became widespread. Furthermore, new strains of TB have emerged causing an increase in infectious disease mortality during this time period. In consequence, infectious disease control efforts in the 21st century will require strategies that include development of diagnostic methods, drug treatment, and vaccines for continued success in combating emerging diseases and major epidemics.¹

Today, acquired immune deficiency syndrome (AIDS), TB, and sexually transmitted diseases (STDs) are among the communicable diseases that are a priority for prevention in the United States, California, and the county.²

Data collection and reporting of cases of communicable disease by local (county or city) health departments is mandatory. These efforts—also referred to as surveillance—help to monitor incidence (new cases) of disease, identify high-risk groups, and focus and monitor prevention efforts over time. The burden of specific communicable diseases is generally described as a “crude” incidence rate: this is the number of new cases divided by the size of the population. This chapter presents surveillance data on the major communicable diseases—AIDS, TB, and STDs—for Hayward. Findings on incidence by demographic characteristics, over time, exposure mode, and risk groups, are described. Alameda County counts, percents, and crude rates for TB and STDs that are used for comparison with Hayward exclude cases for the City of Berkeley.^a

AIDS

Acquired immune deficiency syndrome (AIDS) is caused by the human immunodeficiency virus, known as HIV. The term AIDS applies to the most advanced stages of HIV infection. HIV progressively weakens the body's immune system and thus the ability to protect itself from infection and disease.

HIV is spread from person to person through the exchange of bodily fluids, including blood, semen, vaginal secretions, and breast milk. The most common forms of transmission are sexual contact with infected people and the sharing of contaminated needles or syringes. HIV can also be transmitted from HIV-infected women to their babies during pregnancy, delivery, or breast-feeding.

HIV/AIDS is a severe, life-threatening condition that has reached epidemic proportions. Since the onset of the HIV/AIDS epidemic 20 years ago, more than 60 million people worldwide have been infected with HIV. In the United States, there have been 886,575 AIDS cases and 501,669 reported deaths from AIDS as of December 2002.³ It is estimated that 40,000 new HIV infections occur each year.⁴

Alameda County has required the confidential reporting of AIDS cases since 1983. This surveillance of AIDS cases has allowed for an understanding of the distribution and scope of the epidemic, which is essential for an efficient and effective disease control program. In Alameda County, the number of new AIDS cases increased from one case in

1980 to 627 cases at the height of the epidemic in 1992, and decreased to 183 cases in 2002. The use of antiretroviral therapies has contributed to slower and delayed progression from HIV infection to AIDS, and reduction in the number of AIDS deaths. Although 94% of individuals diagnosed prior to 1990 in Alameda County have died, deaths among AIDS cases in Alameda County have decreased dramatically in the last decade. The case fatality of AIDS cases in Alameda County diagnosed between 1990 and 2002 was 49%.

Beginning in July 2002, the State of California implemented mandatory reporting of confirmed HIV infection (without a diagnosis of AIDS) to supplement existing AIDS reporting. After full implementation of non-name

Table 6.1 AIDS: Average Annual Cases, Percent, and Rates by Sex, Race/Ethnicity, Age Group, and Mode of Exposure, Hayward and Alameda County, 2000-2002						
	Hayward			Alameda County		
	Count	%	Rate	Count	%	Rate
Total	17.3	100.0	12.1	210.3	100.0	14.3
Sex						
Males	13.7	78.8	19.2	161.3	76.7	22.3
Females	3.7	21.2	*	49.0	23.3	6.5
Race/Ethnicity						
African American	6.7	38.5	42.0	120.0	57.1	53.8
American Indian	0.0	0.0	*	0.7	0.3	*
Asian/Pacific Islander	1.7	9.6	*	9.7	4.6	3.0
Hispanic/Latino	1.7	9.6	*	31.3	14.9	11.2
White	7.3	42.3	16.7	48.0	22.8	7.7
Age Group						
≤12 years	0.8	4.6	*	1.3	0.6	*
13-19 years	0.3	1.9	*	1.3	0.6	*
20-29 years	1.0	5.8	*	19.0	9.0	8.5
30-39 years	7.3	42.3	30.0	84.3	40.1	32.7
40-49 years	4.7	26.9	*	64.7	30.7	29.7
≥50 years	4.0	23.1	*	39.7	18.9	11.8
Mode of Exposure						
MSM	9.3	53.8	—	88.3	42.0	—
IDU	0.7	3.8	—	36.0	17.1	—
MSM & IDU	0.7	3.8	—	8.0	3.8	—
Heterosexual	6.0	34.6	—	67.7	32.2	—
Other	0.7	3.8	—	10.3	4.9	—

Notes: (*) = Rate not calculated due to small numbers. (—) = Not applicable.

HIV reporting, the expanded surveillance data will provide a more complete characterization of HIV/AIDS, making it possible to more adequately track the epidemic and focus prevention efforts.

This section presents AIDS surveillance data describing the key features of the epidemic in Hayward.

AIDS Incidence

Table 6.1 on the previous page presents counts and rates of AIDS cases in Hayward and Alameda County by sex, race/ethnicity, age group, and mode of exposure. Hayward, which comprises less than 10% of the county population, accounted for 8% of AIDS cases in the county. The average annual number of Hayward AIDS cases between 2000 and 2002 was 17.3. Hayward's case rate of 12.1 per 100,000 is comparable to that of Alameda County (14.3) for the same time period.

AIDS Incidence by Sex

Hayward males accounted for 79% of cases, and had a case rate of 19.2 per 100,000. Females accounted for 21% of Hayward cases. Rates could not be calculated for females in Hayward due to the small number of cases. At the county level, males were over three times more likely to be diagnosed with AIDS than females (Appendix table 6A.1)

AIDS Incidence by Race/Ethnicity

Cases among the White population in Hayward comprised 42% of AIDS cases in Hayward, higher than in any other race/ethnic group. However, Hayward's African American population had a case rate of 42.0 per 100,000, 2.5 times

the rate for the White population (16.7). Rates could not be calculated for other race/ethnic groups due to the small number of cases. Rates for African Americans and White persons were similar to those in the county.

AIDS Incidence by Age Group

Adults aged 30 to 49 comprise the majority of cases (69%) in Hayward. The average annual case rate for Hayward AIDS cases 30 to 39 years of age is 30.0 per 100,000. Rates could not be calculated for other age groups due to the small number of cases.

AIDS by Mode of Exposure

Various behaviors can place an individual at risk for HIV/AIDS. Men having sex with men (MSM) was the most common mode of exposure among Hayward AIDS cases (54%) between 2000 and 2002, followed by heterosexual contact (35%). Injection drug use (IDU), males reporting both MSM and IDU, and other modes of exposure each accounted for less than 4% of the cases. The 'other' category includes hemophilia or coagulation disorder; receipt of blood or tissue; and pediatric cases with a mother with, or at risk for HIV infection. In the county, MSM accounted for 42%, heterosexual contact 32%, and IDU 17%. Other modes of exposure comprised 5%, and MSM and IDU 4% of AIDS cases in Alameda County.

Trends in the AIDS Epidemic

The AIDS epidemic has shown some changes over time, which has implications for prevention. **Figure 6.1** shows annual AIDS case rates for Hayward and the county from 1990 to 2002. Case rates in Hayward and Alameda

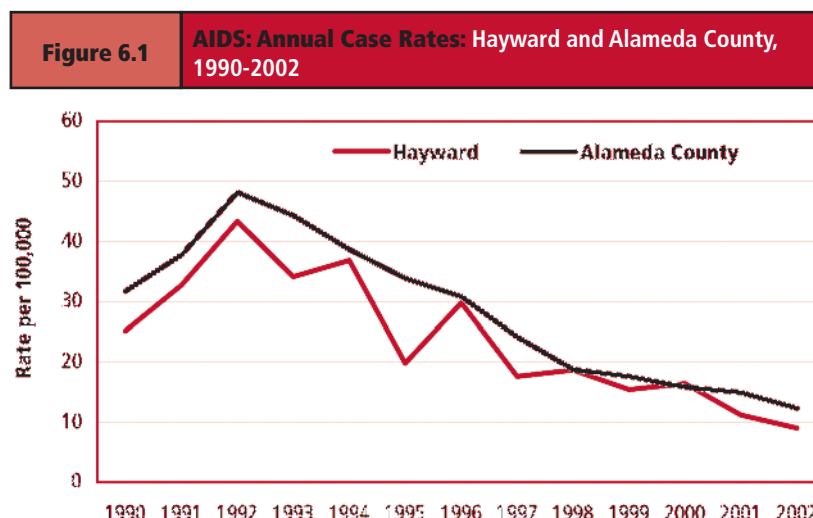
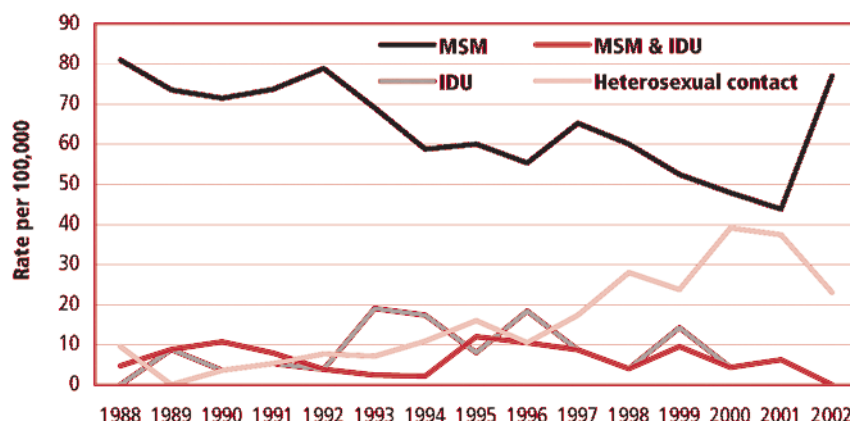


Figure 6.2

Percent Annual AIDS Cases by Mode of Exposure:
Hayward, 1988-2002



County peaked in the early 1990s, and showed a dramatic decline since 1996. This decline in case rates represents the slowing progression of HIV infection to AIDS and can be attributed largely to improved behavioral risk reduction interventions in the 1990s and the introduction of new drug therapies in 1996. Since historical data are not available on HIV infection rates, it is not possible to determine if a change in the rate of new infections might explain the declining trend. Case rates in Hayward were consistently lower than county rates in this time period (Appendix table 6A.2).

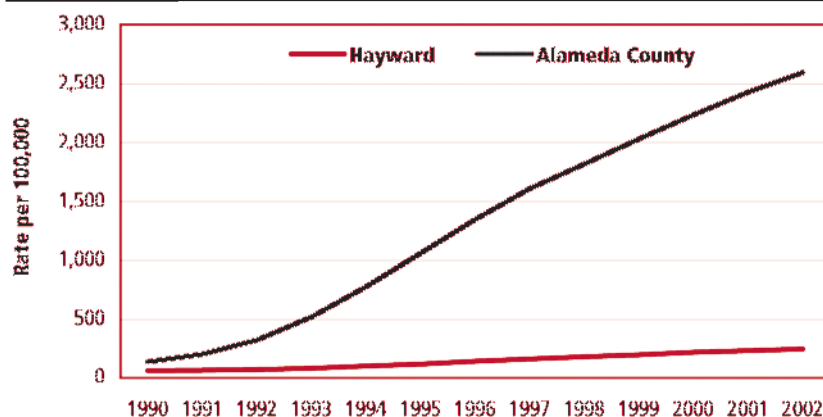
Historically, males comprised the majority of AIDS cases in Hayward and Alameda County. The sex distribution of AIDS cases in Hayward has narrowed slightly over the past five years. Although the number of cases among both men and women decrease each year, women account for an increasing proportion of the cases (Appendix table 6A.3).

Figure 6.2 shows that MSM continued to be the predominant mode of exposure in Hayward, although it accounted for a decreasing proportion of annual AIDS cases between 1987 and 2001 (Appendix table 6A.4). Hayward AIDS cases attributed to heterosexual contact have increased in proportion, and cases attributed to IDU and the combination of MSM and IDU have fluctuated over the years.

A greater proportion of persons with AIDS are surviving. The proportion of persons with AIDS that died decreased from about 92% in 1988 to less than 10% in 2002 (Table 6A.5 in the Appendix). This trend was observed in Hayward and Alameda County. Increased availability of antiretroviral therapies, improved clinical management, and earlier diagnosis have resulted in fewer AIDS deaths, and increased numbers of persons living with AIDS (Table 6A.6 in the Appendix).

Figure 6.3

Persons Living with AIDS: Hayward and Alameda County
1990-2002



The number of persons living with AIDS (PLWA) has increased dramatically since the early 1990s as people are living longer with the disease. In 2002, there were 189 persons living with AIDS in Hayward, accounting for less than 10% of the 2,593 PLWA residing in Alameda County (Figure 6.3 on previous page).

PLWA in Hayward and Alameda County have similar age and sex distributions. PLWA in Hayward have a smaller proportion of cases attributed to IDU or MSM and IDU as modes of exposure than in the county. The race/ethnic composition of PLWA differs from the county as well. African Americans accounted for 27% of PLWA in Hayward compared to 47% in the county. Conversely, 37% of PLWA in Alameda County are White, compared to 46% in Hayward (Table 6A.7 in Appendix).

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) are infections that are acquired through sexual contact. They are among the most common infectious diseases in the United States today. In the United States 65 million people are living with an incurable STD and 15 million people are infected every year.⁵ STDs affect men and women of all race/ethnic and socioeconomic backgrounds; however they are most prevalent among teenagers and young adults. Nearly two-thirds of all STDs occur in people younger than 25 years of age.

Many individuals infected with STDs show no symptoms of the disease and are therefore unlikely to be diagnosed and treated. Even cases of disease that are detected are often not reported. Thus, the extent of infection of STDs is difficult to monitor as each new case that goes undetected and untreated magnifies this “hidden” epidemic. Untreated STDs can lead to serious health problems such

as pelvic inflammatory disease in women, which can cause infertility.

More than 25 diseases are spread primarily through sexual activity. The risk of infection by age and sex as well as trends for each disease vary considerably, but together these infections comprise a significant public health problem.⁵ The most common STDs (excluding HIV) in the United States are chlamydia, gonorrhea, syphilis, genital herpes, human papillomavirus, hepatitis B, trichomoniasis, and bacterial vaginosis.

In this report, profiles of the two most common STDs in Hayward—chlamydia and gonorrhea—are discussed based on cases reported between 2000 and 2002. The patterns of infection rates by selected characteristics and by year are presented. Counts, percents, and rates for Alameda County that are used for comparison with Hayward exclude cases reported for the City of Berkeley.^a

Chlamydia Incidence

Chlamydia is one of the most dangerous STDs among women and is the most commonly reported infectious disease in the United States. While it affects both sexes, women suffer the most severe consequences of untreated infection. Up to 40% of untreated women will develop pelvic inflammatory disease and 20% of these will become infertile. Millions of people go untreated even though antibiotics can easily cure infection. Chlamydia can cause premature birth and cause eye disease and pneumonias in infants. Additionally, the risk of contracting HIV is three to five times greater for women infected with chlamydia.

Fifty percent of men and 75% percent of women infected with chlamydia show no symptoms. Many of these cases go undiagnosed and untreated, leading to severe infection



Two-thirds of chlamydia cases in Hayward are among young adults 15 to 24 years.

Table 6.2	Chlamydia: Average Annual Cases, Percent, and Rates by Sex and Age Group, Hayward and Alameda County, 2000-2002					
	Hayward			Alameda County		
	Count	%	Rate	Count	%	Rate
Total	466.3	100.0	325.5	4,772.7	100.0	348.4
Sex						
Male	101.0	21.7	142.1	1,060.7	22.2	157.6
Female	360.7	77.3	499.8	3,665.7	76.8	526.1
Unknown	4.7	1.0	–	46.3	1.0	–
Age Group						
≤14 years	5.3	1.1	*	111.7	2.3	38.0
15-19 years	157.0	33.7	1,608.4	1,647.0	34.5	1,908.8
20-24 years	161.7	34.7	1,409.9	1,499.0	31.4	1,743.5
25-29 years	77.7	16.7	604.6	727.3	15.2	666.7
30-34 years	31.0	6.6	252.6	363.0	7.6	306.6
35-44 years	25.3	5.4	111.7	287.7	6.0	120.1
≥45 years	5.3	1.1	*	96.3	2.0	22.1
Unknown	3.0	0.6	–	40.7	0.9	–

Notes: (*) = Rate not calculated due to small numbers. (–) = Not applicable

and a high risk of transmission to others. The number of chlamydia cases is thought to be declining in the United States from an estimated annual incidence of four million cases in the early 1980s to an estimated three million annual cases today. The annual number of reported cases of chlamydia in the United States is lower—only 660,000 in 1999.

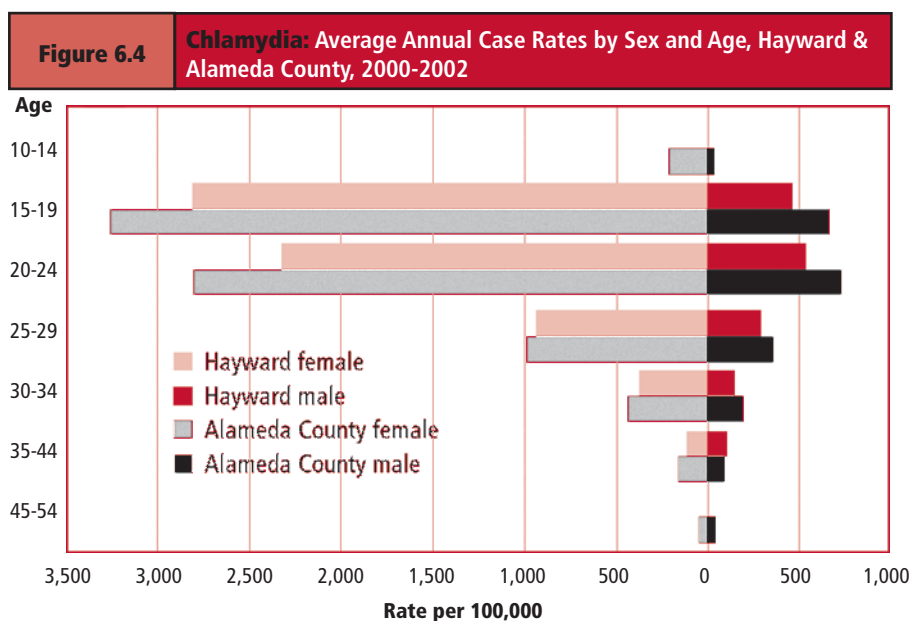
Table 6.2 shows the average annual case counts, percent, and rates of chlamydia by sex and age group in Hayward and Alameda County between 2000 and 2002. Hayward, which comprises approximately one-tenth of the county population, accounts for one-tenth of the county's chlamydia cases. The average annual number of chlamydia cases in Hayward was 466 and the infection rate was 325.5 per 100,000, slightly lower than the rate of infection in the county (348.4), as illustrated in Appendix table 6B.1. Hayward's infection rates were notably higher than the 2001 rates in the neighboring counties of Contra Costa (242.8), Santa Clara (239.5), and in California as a whole (293.6), but lower than that of San Francisco County (384.4).⁶

The average annual rate of chlamydia infection among females in Hayward was 499.8 per 100,000, which was 3.5 times the rate for males (142.1), and accounted for 77% of all cases. This is similar to the pattern in the county. Infection rates for both males and females in Hayward

were significantly lower than in the county. The apparent dramatic sex disparity in chlamydia rates can be explained at least in part by differential utilization of health care services—women undergo periodic, routine examinations for reproductive health and are therefore more likely to be diagnosed. A similar sex disparity is seen in other health jurisdictions at the state and national levels.

By far, the burden of chlamydia falls on young adults—about two-thirds of all cases in Hayward and the county occurring in the 15 to 24 year age group.

Further understanding regarding groups impacted by chlamydia in Hayward can be gained by describing the infection rates of males and females in different age groups. **Figure 6.4** on the following page shows average annual rates of chlamydia among males and females by age group in Hayward and Alameda County from 2000 to 2002. Females aged 15 to 19 years have the highest chlamydia infection rate (2,782.8 per 100,000), which is over six times the rate for males in the same age group (460.6), and higher than the rates for males or females in any other age group in Hayward (Appendix table 6B.5). The rates in Hayward are comparable to those in the county. The distribution of males and females diagnosed with chlamydia can serve as a basis to prioritize prevention and control efforts at young females aged 15 to 24 years, to reduce the impact of chlamydia in this population.



Data on race/ethnicity of chlamydia cases in Hayward and Alameda County are largely incomplete. Fifty-five percent of cases reported in Hayward, and 57% in Alameda County had “unknown” race/ethnicity (Appendix table 6B.2). This missing information is of concern because it limits the understanding of chlamydia risk in these race/ethnic groups and the extent to which prevention efforts can be tailored to specific cultural groups.

Gonorrhea Incidence

Gonorrhea is a sexually transmitted bacterial infection. Reported cases of gonorrhea declined in the United States until the late 1990s; however, from 1997 to 1999 gonorrhea rates increased by nine percent. Gonorrhea rates remain high for African Americans, adolescents, and young adults. It is a major cause of pelvic inflammatory disease, which can lead to infertility and tubal pregnancies in women. Gonorrhea can be cured easily, and its long-term consequences avoided, by early detection and treatment with antibiotics.

An estimated 650,000 cases of gonorrhea occur each year in the United States.⁵ Like chlamydia, gonorrhea infections are under-reported: it is believed that only half of all cases are reported. The reported rate of gonorrhea infection in the United States is the highest of any industrialized country. Historically, gonorrhea rates have been higher in men than in women, most likely because many women who are infected do not experience symptoms. As with chlamydia, recent increases in reproductive health screening in women have contributed to a reduction of the disparity in detected cases between men and women.

Table 6.3 on the following page shows the average annual case counts, percent, and rates of gonorrhea by sex and age group in Hayward and Alameda County between 2000 and 2002. Hayward accounted for 6% of gonorrhea cases in Alameda County. The annual average number of gonorrhea cases for Hayward in this time period was 119.7. The rate of gonorrhea infection in Hayward was 83.5 per 100,000, compared to 139.8 for Alameda County (Appendix table 6B.3). The infection rate in Hayward was higher than 2001 infection rates of neighboring counties of Santa Clara (31.8), and Contra Costa (69.7), and in California (67.1 per 100,000), but lower than San Francisco (260.5).⁶

Males comprised the majority of the gonorrhea cases in Hayward. In contrast, in the county the majority of cases occurred among females. The average annual rate of gonorrhea infection among males in Hayward was 84.4 per 100,000, slightly higher than the rate for females (80.8). Infection rates for males and females in Hayward were lower than those in the county. In Hayward and in the county, the burden of gonorrhea falls on adolescents and young adults—two-thirds of all cases occurred in teens and adults 15 to 29 years old.

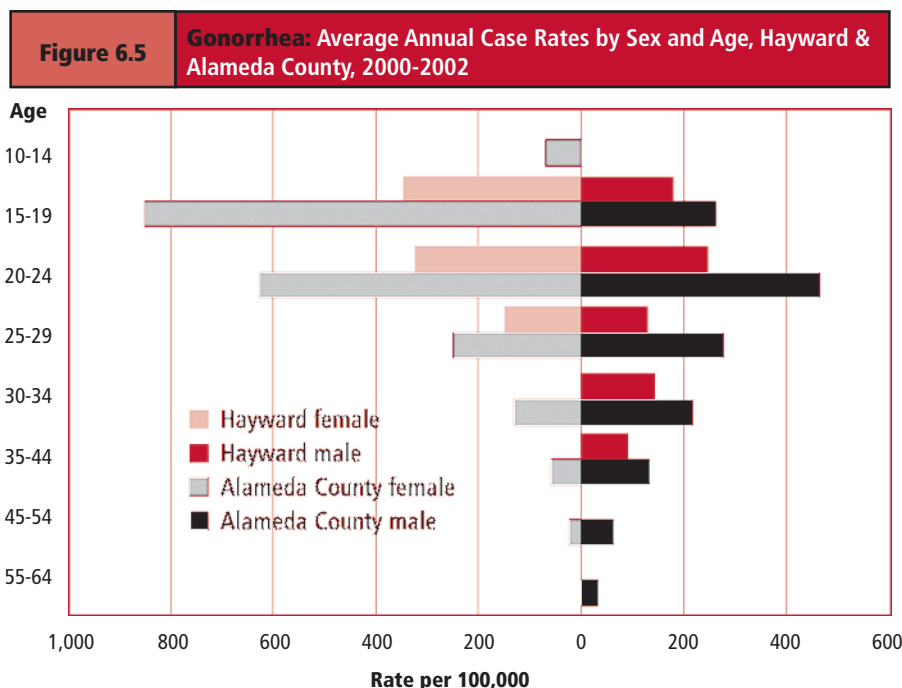
Groups at risk for gonorrhea can be further described by sex and by age. **Figure 6.5** on the following page shows infection rates of gonorrhea among males and females by age group in Hayward and Alameda County. Females aged 15 to 19 years in Hayward have a gonorrhea infection rate (362.1 per 100,000) twice that of Hayward males in the same age group (184.2), and higher than any other

Table 6.3 Gonorrhea: Average Annual Cases, Percent, and Rates by Sex and Age Group, Hayward and Alameda County, 2000-2002						
	Hayward			Alameda County		
	Count	%	Rate	Count	%	Rate
Total	119.7	100.0	83.5	1,914.7	100.0	139.8
Sex						
Male	60.0	50.1	84.4	887.7	46.4	131.9
Female	58.3	48.7	80.8	1,007.3	52.6	144.6
Unknown	1.3	1.1	–	19.7	1.0	–
Age Group						
≤14 years	1.7	1.4	*	41.7	2.2	14.2
15-19 years	26.7	22.3	273.2	499.0	26.1	578.3
20-24 years	34.0	28.4	296.5	492.0	25.7	572.3
25-29 years	18.7	15.6	145.3	302.3	15.8	277.1
30-34 years	15.3	12.8	125.0	216.3	11.3	182.7
35-44 years	15.3	12.8	67.6	242.0	12.6	101.1
≥45 years	7.0	5.8	16.9	103.3	5.4	23.7
Unknown	1.0	0.8	–	18.0	0.9	–

Notes: (*) = Rate not calculated due to small numbers. (–) = Not applicable.

age group for either sex in Hayward (Appendix table 6B.6). These sex differences were more pronounced in the county; the rate for females aged 15 to 19 (892.1) was three times the rate for their male counterparts (273.3) and 1.5 times that for females in this age group in the county (659.7). As with chlamydia, the apparent sex disparity in gonorrhea rates can be explained in part

by differences in utilization of screening and prevention services. The high rates of gonorrhea infection among males and females in Hayward—and excessive infection rates among adolescents and young women—points to the need to target screening, prevention, and treatment efforts at young males and females aged 15 to 29 years.



Similar to the findings on chlamydia described above, data on race/ethnicity of gonorrhea cases in Hayward and Alameda County are largely incomplete. Sixty percent of cases reported for Hayward, and 54% in Alameda County, had “unknown” race/ethnicity (Appendix table 6B.4). This is of concern because it limits the extent to which these data can be used to target prevention efforts appropriate to different cultural groups.

Tuberculosis

Tuberculosis (TB) is a communicable disease caused by *Mycobacterium tuberculosis*, also referred to as tubercle bacilli. It is transmitted from person to person through particles carrying the bacteria through the air. Transmission can occur when people breathe in the bacteria

while in close and prolonged contact with a person with infectious TB.

Once a person has been exposed to someone with TB and has inhaled the TB bacteria, that person may become infected with TB. In most people who inhale the bacteria, the body is able to fight the bacteria to stop it from growing but will still show evidence of exposure when tested. This is referred to as latent TB infection (LTBI). For other individuals who inhale the TB bacteria and become infected, TB infection can progress to TB disease when the immune system cannot fight off the tubercle bacilli. TB is curable if a person takes all of their TB medications as prescribed. Individuals with active TB disease may have some or all of the following symptoms: cough, weight loss, fevers, fatigue, night sweats, or loss of appetite.

Table 6.4		Tuberculosis: Average Annual Cases, Percent, and Case Rates by Sex, Race/Ethnicity, Age Group, Place of Birth, and Drug Resistance, Hayward & Alameda County, 2000-2002				
	Hayward			Alameda County		
	Count	%	Rate	Count	%	Rate
Total	23.7	100.0	16.5	212.0	100.0	15.5
Sex						
Male	15.0	63.4	21.1	122.0	57.5	18.1
Female	8.7	36.6	12.0	90.0	42.5	12.9
Race/Ethnicity						
African American	2.0	8.5	*	39.3	18.6	18.9
Asian/Pacific Islander	13.3	56.3	41.9	129.3	61.0	42.3
Hispanic/Latino	7.0	29.6	14.3	31.7	14.9	11.7
White	1.3	5.6	*	11.3	5.3	*
Other	0.3	0.0	*	0.3	0.2	*
Age Group						
≤4 years	0.7	2.8	*	7.0	3.3	7.3
5-14 years	1.0	4.2	*	7.7	3.6	3.9
15-24 years	1.0	4.2	*	17.0	8.0	9.9
25-44 years	8.0	33.8	16.7	72.0	34.0	15.4
45-64 years	8.3	35.2	30.9	56.0	26.4	18.9
≥65 years	4.7	19.7	*	52.3	24.7	37.3
Place of Birth						
U.S.-born	3.3	14.1	*	53.3	25.2	5.4
Foreign-born	20.3	85.9	40.9	158.7	74.8	41.8
Drug Resistance	2.7	11.3	–	17.7	8.3	–

Notes: (*) = Rate not calculated due to small numbers. (–) = Not applicable



The majority of TB cases in Hayward were among Asians and Latinos.

Approximately one-third of the world's population is infected with *Mycobacterium tuberculosis*, with more than eight million people becoming sick with TB disease and approximately two million people dying from TB each year.⁷ The majority of these cases occur in the countries of Asia, Africa, Eastern Europe, and Latin America where there are high rates of TB. In the United States, there are an estimated ten to 15 million Americans infected with TB, who have the potential to develop active TB disease in the future. About 10% of these infected individuals will develop TB disease at some point in their lives. The remaining 90% will stay infected but free of TB disease. In 2002, the United States had a case rate of 5.2 per 100,000 with just over 15,000 cases of tuberculosis reported nationwide.⁸

Incidence of TB disease in Hayward is discussed in this section by selected characteristics, by year, and by geographic area. Counts, percents and rates for Alameda County that are used for comparison, exclude cases reported for the City of Berkeley.⁴

TB Incidence

Table 6.4 on the previous page shows the average annual counts, case rates, and percent of reported TB cases in Hayward and Alameda County between 2000 and 2002 for several demographic sub-groups and selected risk groups.

Hayward, which constitutes 30% of the county's population, accounted for 11% of new TB cases reported between 2000 and 2002. The average annual number of new cases in Hayward was 23.7. The TB incidence rate of 16.5 per 100,000 was comparable to the county rate (15.5). Ap-

proximately 11% of Hayward and 8% of county cases had some drug resistance. Drug-resistant strains of tuberculosis can occur when a person with TB disease does not take their medications as prescribed. This is of particular concern because drug-resistant strains and multi-drug resistant (MDR) TB are more difficult to treat and require longer treatment regimens.

TB Incidence by Sex

In Hayward the average annual TB case rate among males was 21.1 per 100,000, higher than the rate for females (12.0). The sex difference was less pronounced in the county (Appendix table 6C.1).

TB Incidence by Race/Ethnicity

There are striking race/ethnic differences among persons diagnosed with TB. As seen in Table 6.4, the Asian/Pacific Islander population comprised the majority of TB cases in Hayward and Alameda County. Asian/Pacific Islanders had the highest case rates (41.9 per 100,000) in Hayward, almost three times the rates for Latinos (14.3). Rates could not be calculated for the African American and White populations in Hayward due to the small number of cases. At the county level, the case rate for Asian/Pacific Islanders (42.3) was highest, followed by African Americans (18.9) and Latinos (11.7).

TB Incidence by Age Group

Older adults were at greater risk of having TB compared to the younger population. In Hayward, this is particularly true of adults ages 45 to 64, who had a case rate of 30.9 per 100,000. This is almost twice the rate for adults 25 to 44 years (16.7). In the county, the age group at greatest risk was those 65 and older with a rate of 37.3, followed

by those aged 45 to 64 and 25 to 44 (18.9 and 15.4, respectively).

TB cases among children four years and younger is of particular interest because it indicates a recent transmission of TB has occurred. In Hayward, the average annual number of TB cases in this age group was less than one; the average annual count was seven in Alameda County (Appendix table 6C.1).

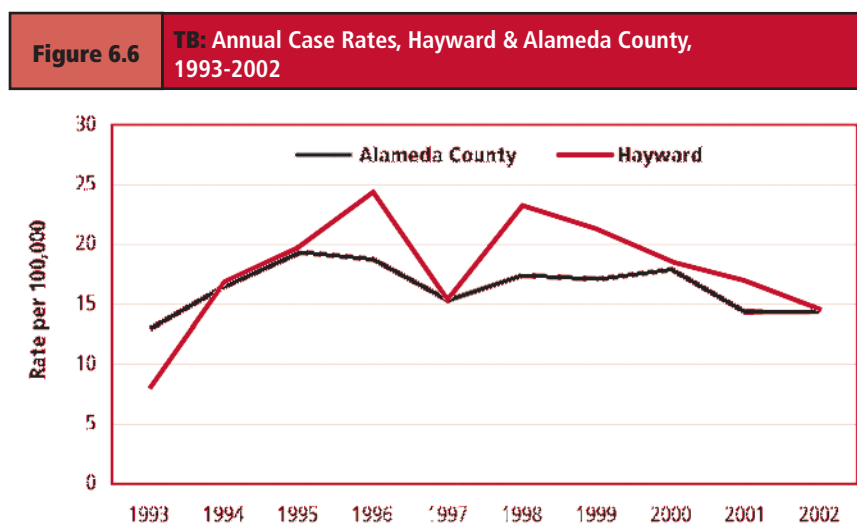
TB Incidence by Place of Birth

Foreign-born persons account for a majority of new TB cases in recent years. Persons from countries with much higher rates of TB than the United States account for the majority of cases among the foreign-born. Between 2000 and 2002 the average annual rate of TB among foreign-born persons in Hayward was 40.9 per 100,000. The contrast between foreign-born and U.S.-born residents is also evident at the county level where the average annual rate among foreign-born persons is 41.8 per 100,000, almost eight times the rate for U.S.-born persons (5.4) as illustrated in Table 6C.1 in the Appendix. TB cases

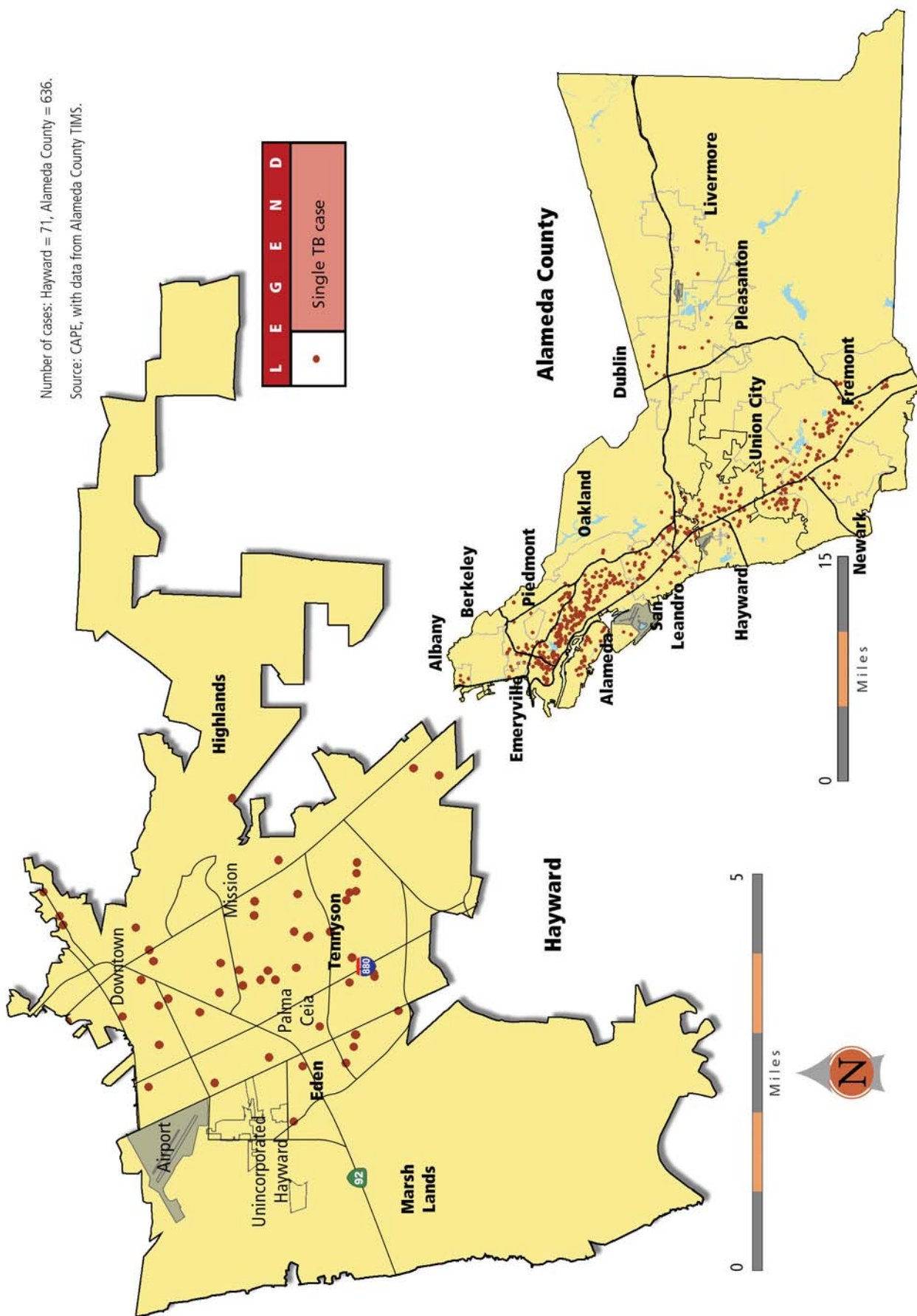
among foreign-born persons accounted for 86% of cases in Hayward and 75% of cases in the county. These findings are generally consistent with local and national trends showing that foreign-born persons account for an increasing proportion of TB cases over the last decade.

As seen in **Figure 6.6**, TB case rates in Hayward have been consistently higher than the rates for Alameda County since 1994. Case rates have fluctuated in Hayward in the past decade, showing a continuous decline from 1998 to 2002 (Appendix table 6C.2). In the county case rates have remained relatively stable in the same time period.

Map 6.1 on the following page shows the geographic distribution of TB cases in Hayward and Alameda County. Seventy-one or 11% of new TB cases in Alameda County from 2000 to 2002 occurred in Hayward. In general, cases were concentrated in the more densely populated areas of the city, primarily in Eden and Tennyson. This is consistent with the pattern in the county, where cases were concentrated primarily between I-880 and I-580 and continuing down the I-880 corridor.



Map 6.1 Tuberculosis Cases: Hayward and Alameda County, 2000-2002



Summary and Recommendations

AIDS

Hayward's AIDS case rate is comparable to that in the county. Males accounted for 79% of cases in Hayward. African Americans were 2.5 times more likely to be diagnosed with AIDS than White persons. Adults aged 30 to 39 accounted for 69% of cases in Hayward. MSM and heterosexual contact were the two most common modes of exposure in Hayward.

Some trends observed in the AIDS epidemic in Hayward could inform local surveillance and prevention efforts. AIDS cases have been on the decline in Hayward, as in the county. However, the proportion of Hayward cases attributed to heterosexual contact has increased over the years. Improved clinical care and earlier diagnosis have resulted in fewer AIDS deaths, and increased numbers of persons living with AIDS.

The use of surveillance data based on non-name reporting of HIV in addition to AIDS reporting to target risk groups for testing, diagnosis, and early entry into care should be continued. Continued prevention efforts targeted at HIV-infected individuals need to be a priority for Hayward and the county. Prevention activities conducted by the county include outreach to high-risk populations such as intravenous drug users and sex trade workers to provide counseling, testing, and referrals. The NIGHT Program (Neighborhood Intervention Geared to High-risk Testing) enables certified test counselors to provide outreach and HIV testing services in areas where people may be engaging in high-risk behavior, rather than waiting for these individuals to come into the testing sites. Agencies involved in prevention are also encouraged to integrate harm reduction education into their services. In addition, there are social marketing efforts targeted at high-risk populations and collaboration in several community events.

Sexually Transmitted Diseases

Females aged 15 to 19 years bear a disproportionate burden of chlamydia than males or females in other age groups. The chlamydia rate for females in Hayward was over three times higher than that of males. Infection rates for males and females in Hayward are less pronounced for gonorrhea. In Hayward young adult females 20 to 24 years had the highest rates, whereas females 15 to 19 years had the highest rates in the county.

Data on race/ethnicity of reported cases, which are largely incomplete for these STDs, could seriously impede prevention and control efforts directed at specific cultural groups.

STD prevention strategies need to include efforts at improving surveillance to ensure timely diagnosis and reporting. Local STD prevention also needs to focus on increasing community awareness regarding high rates of STDs; which can be done by developing culturally diverse education materials and peer-education training. Given the high burden of disease among teens and youth, it is critical for the public health department to partner with health care providers to improve screening of sexually active adolescents and young adults. Furthermore, collaboration with and training of community-based organizations is needed—integrating reproductive health into programs targeted at adolescents and young adults aged 15 to 24 years.

Tuberculosis

Hayward has a high rate of TB disease, which is comparable to the county rate, and is over three times the national rate. In the past decade, there have been fluctuations in TB case rates in Hayward, with a gradual decrease from 1998 to 2002.

Males in Hayward were more likely than females to have TB disease, and had case rates that were 60% higher than males in the county. Major gaps in TB rates exist among different race/ethnic groups. Asian/Pacific Islanders

have the highest rate of TB disease by far among all race/ethnic groups in Hayward and in the county. The majority of TB cases in Hayward were among Asian/Pacific Islanders or Latinos. The risk of TB disease in Hayward increases with age—seniors and the elderly have the highest rates among all age groups. Foreign-born persons account for 86% of all TB cases in Hayward, and three-fourths of cases in the county.

Targeted prevention efforts for individuals with TB disease are warranted. Strategies include early detection and medical diagnosis of TB among individuals exposed to the bacteria; prescribing appropriate medical treatment of individuals with TB disease; identifying and addressing barriers to medical care; and ensuring treatment regimens are adhered to. Heightened screening and assessment of immigrants from countries with elevated TB rates entering Alameda County is also necessary.

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Endnote

- a. The City of Berkeley has a health department and is an independent jurisdiction for collection of data on communicable diseases, unlike other cities in Alameda County. Cases diagnosed among Berkeley residents are included in reports produced by the city's health department. These cases are excluded from the county total to make county statistics presented in this report comparable to other county reports on communicable disease.

Appendix 1

Demographic and Social Profile

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See Appendix 7: Technical Notes for data sources.

Table 1A.1. Subgroups of Two or More Races Population

	Hayward		Alameda County	
	Count	%	Count	%
Total population	140,030		1,443,741	
Hispanic or Latino	47,850		273,910	
Population of one race	85,704		1,113,332	
Population of two or more races	6,476		56,499	
Population of two races	5,941	100.0	51,705	100.0
White; Black or African American	529	8.9	5,748	11.1
White; American Indian and Alaska Native	477	8.0	4,796	9.3
White; Asian	1,349	22.7	15,779	30.5
White; Native Hawaiian and Other Pacific Islander (NHOPI)	296	5.0	1,633	3.2
White; Some other race	1,023	17.2	9,679	18.7
Black or African American; American Indian and Alaska Native	181	3.0	2,145	4.1
Black or African American; Asian	198	3.3	2,045	4.0
Black or African American; NHOPI	55	0.9	293	0.6
Black or African American; Some other race	133	2.2	1,651	3.2
American Indian and Alaska Native; Asian	56	0.9	659	1.3
American Indian and Alaska Native; NHOPI	12	0.2	96	0.2
American Indian and Alaska Native; Some other race	15	0.3	132	0.3
Asian; NHOPI	912	15.4	3,034	5.9
Asian; Some other race	475	8.0	3,434	6.6
NHOPI; Some other race	230	3.9	581	1.1
Population of three or more races	535		4,794	

Table 1A.2. Subgroups of Hispanic/Latino Ethnicity

	Hayward		Alameda County	
	Count	%	Count	%
Total population	140,030		1,443,741	
Hispanic or Latino (of any race)	47,850	100.0	273,910	100.0
Mexican	34,035	71.1	193,011	70.5
Puerto Rican	2,177	4.5	10,186	3.7
Cuban	213	0.4	1,935	0.7
Other Hispanic or Latino	11,425	23.9	68,778	25.1
Not Hispanic or Latino	92,180		1,169,831	

Table 1A.3. Subgroups of Asian Population

	Hayward		Alameda County	
	Count	%	Count	%
Total population	140,030		1,443,741	
Not Hispanic/Latino Asian	26,189	100.0	292,673	100.0
Asian Indian	4,026	15.4	42,473	14.5
Chinese	3,939	15.0	111,040	37.9
Filipino	12,568	48.0	68,531	23.4
Japanese	991	3.8	12,432	4.2
Korean	769	2.9	14,094	4.8
Vietnamese	2,742	10.5	23,612	8.1
Other Asian	1,154	4.4	20,491	7.0
Hispanic/Latino Asian	390		2,545	
Not Asian	113,451		1,148,523	

Table 1A.4. Subgroups of Native Hawaiian and Other Pacific Islander Population

	Hayward		Alameda County	
	Count	%	Count	%
Total population	140,030		1,443,741	
Not Hispanic/Latino Native Hawaiian and Other Pacific Islander (NHOPI)	2,511	100.0	8,458	100.0
Native Hawaiian	280	11.2	1,357	16.0
Guamanian or Chamorro	370	14.7	1,371	16.2
Samoa	325	13.0	1,395	16.5
Other Pacific Islander	1,535	61.1	4,334	51.2
Hispanic/Latino NHOPI	168		684	
Not NHOPI	137,351		1,434,599	

Table 1B.1. Household Characteristics, 2000

	Hayward		Alameda County	
	Count	%	Count	%
Types of Households				
Total households	44,804	100.0	523,366	100.0
Family households (families)	31,931	71.3	339,096	64.8
With own children under 18 years	16,590	37.0	170,762	32.6
Married-couple family	22,555	50.3	245,766	47.0
With own children under 18 years	11,886	26.5	123,145	23.5
Female householder, no husband present	6,503	14.5	67,886	13.0
With own children under 18 years	3,454	7.7	36,674	7.0
Nonfamily households	12,873	28.7	184,270	35.2
Householder living alone	9,369	20.9	136,066	26.0
Householder 65 years and over	3,254	7.3	38,391	7.3
Households with individuals under 18 years	19,045	42.5	190,790	36.5
Households with individuals 65 years and over	9,934	22.2	107,144	20.5
Size				
Average household size	3.1		2.7	
Average family size	3.6		3.3	
Occupancy				
Total households	44,902	100.0	523,366	100.0
Owner occupied	23,955	53.3	286,277	54.7
Renter occupied	20,947	46.7	237,089	45.3
Public Assistance				
Total households	44,809	100.0	523,787	100.0
With public assistance income	1,910	4.3	22,240	4.2
No public assistance income	42,899	95.7	501,547	95.8
Household Income				
Total households	44,809	100.0	523,787	100.0
Less than \$10,000	2,732	6.1	41,257	7.9
\$10,000 to \$24,999	6,124	13.7	69,695	13.3
\$25,000 to \$49,999	12,732	28.4	121,984	23.3
\$50,000 to \$99,999	16,798	37.5	174,500	33.3
\$100,000 or more	6,423	14.3	116,351	22.2
Median household income, 1999	\$51,177		\$55,946	
Change from 1989 to 1999	4.0%		9.8%	

Notes: When calculating the change in median annual income, dollars in 1989 were inflation-adjusted to 1999 equivalents. Total number of households shown for each statistic are those for which the statistic is available.

Table 1B.2. Language Spoken at Home and Linguistic Isolation

	Hayward		Alameda County	
	Count	%	Count	%
Total households	44,809		523,787	
English	23,345	52.1	333,646	63.7
Spanish	10,413	23.2	67,000	12.8
Linguistically isolated	2,793	26.8	15,661	23.4
Not linguistically isolated	7,620	73.2	51,339	76.6
Other Indo-European languages	3,723	8.3	40,422	7.7
Linguistically isolated	624	16.8	5,738	14.2
Not linguistically isolated	3,099	83.2	34,684	85.8
Asian and Pacific Island languages	6,736	15.0	76,142	14.5
Linguistically isolated	1,500	22.3	23,356	30.7
Not linguistically isolated	5,236	77.7	52,786	69.3
Other languages	592	1.3	6,577	1.3
Linguistically isolated	109	18.4	837	12.7
Not linguistically isolated	483	81.6	5,740	87.3

Notes: A linguistically isolated household is one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "very well." In other words, all members 14 years old and over have at least some difficulty. Indo-European languages include south Asia and Eastern Mediterranean Europe.

Table 1B.3. English Learners By School Year

School Year	Hayward USD		Alameda County	California
	Count	%	%	%
1992-93	4,762	23.3%	16.2%	22.2%
1993-94	4,917	24.4%	16.8%	23.1%
1994-95	4,941	24.8%	17.3%	23.7%
1995-96	5,104	24.9%	17.8%	24.2%
1996-97	5,511	25.4%	18.5%	24.6%
1997-98	5,932	26.6%	19.0%	24.6%
1998-99	6,439	27.8%	19.8%	24.7%
1999-00	7,019	29.5%	20.5%	24.9%
2000-01	7,451	30.8%	20.8%	25.0%
2001-02	7,818	32.3%	21.9%	25.4%
2002-03	8,072	33.6%	21.6%	25.6%

Source: Ed Data (<http://www.ed-data.k12.ca.us/>).

Note: Hayward USD = Hayward Unified School District.

Table 1B.4. Nativity and Immigration, 2000

	Hayward		Alameda County	
	Count	%	Count	%
Nativity				
Total persons	139,895		1,443,741	
Native	91,276	65.2	1,051,085	72.8
Foreign born	48,619	34.8	392,656	27.2
Naturalized citizen	19,046	39.2	169,708	43.2
Not a citizen	29,573	60.8	222,948	56.8
Year of Entry for Foreign-born Population				
Total foreign-born	48,619		392,656	
Before 1970	4,410	9.1	43,054	11.0
1970-1979	6,844	14.1	57,577	14.7
1980-1989	16,172	33.3	126,012	32.1
1990-1999	21,193	43.6	166,013	42.3

Table 1B.5. Percentage Households in Poverty, 1999

	Hayward		Alameda County	
	Count	%	Count	%
Households	44,809		523,787	
Income below poverty level	3,820	8.5	51,410	9.8
Income above poverty level	40,989	91.5	472,377	90.2

Table 1B.6. Percentage of Persons in Poverty by Age Group, 1999

	Hayward	Alameda County
Total persons for whom poverty determined	137,965	1,419,998
Percentage in Poverty		
All	10.0	11.0
≤4 years	11.9	12.4
5 years	14.7	13.5
6 to 11 years	11.5	14.5
12 to 17 years	12.9	14.5
18 to 64 years	9.5	10.4
65 to 74 years	6.5	7.2
≥75 years	8.0	9.1

Table 1B.7. Income Inequality

Place	Gini Ratio	Place	Gini Ratio
United States	0.462	Castro Valley	0.405
California	0.472	Albany	0.401
Alameda County	0.448	Pleasanton	0.394
Hayward	0.384	San Leandro	0.390
		Fremont	0.388
Berkeley	0.530	San Lorenzo	0.367
Oakland	0.494	Livermore	0.367
Emeryville	0.451	Union City	0.363
Piedmont	0.431	Cherryland	0.363
Alameda	0.431	Newark	0.349
Sunol	0.424	Fairview	0.341
Ashland	0.422	Dublin	0.332

Source: CAPE using Census 2000 data

Table 1B.8. Relative Cost of Living

	Hayward	Berkeley	Hayward	Fremont	San Francisco	Alameda County	United States
Overall	142	176	142	184	217	160	100
Housing	183	286	183	310	390		100
Food	122	122	122	122	117		100
Transportation	134	134	134	134	142		100
Utilities	107	108	107	107	120		100
Health	147	147	147	146	148		100
Miscellaneous	115	115	115	115	137		100

Source: <http://www.Bestplaces.net>. Downloaded December 2003.

Note: Numbers shown are an index related to the average across the United States, represented as 100. As an example, the cost of housing in Hayward is 1.83 times that of the national average.

Table 1B.9. Commute to Work

	Hayward		Alameda County	
	Number	%	Number	%
Total	61,696	100.0	678,910	100.0
Car, truck, or van	53,870	87.3	544,148	80.2
Drove alone	42,622	69.1	450,496	66.4
Carpooled	11,248	18.2	93,652	13.8
Public transportation	4,164	6.7	72,174	10.6
Motorcycle	229	0.4	2,506	0.4
Bicycle, walked	1,543	2.5	30,304	4.5
Other means	742	1.2	5,837	0.9
Worked at home	1,148	1.9	23,941	3.5

Note: For workers 16 years and over.

Appendix 2

Mortality

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See Appendix 7: Technical Notes for data sources.

Table 2A.1. All-Cause Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	1,240.3	1,068.1	1,033.7	1,102.6	9,770.3	786.9	777.8	795.9
Sex								
Male	611.3	1,295.2	1,234.4	1,355.9	4,783.7	945.5	929.6	961.4
Female	629.0	906.4	865.3	947.5	4,986.7	670.6	659.8	681.4
Race/Ethnicity								
African American	103.0	1,631.7	1,375.3	1,888.2	2,029.5	1,138.4	1,103.1	1,173.7
American Indian	3.0	*			30.5	870.4	665.8	1,118.1
Asian	111.5	644.1	555.7	732.5	1,028.5	521.5	498.2	544.9
Hispanic/Latino	175.5	882.7	783.0	982.3	743.5	634.5	599.6	669.4
NHOPI	19.5	1,870.5	1,330.1	2,557.0	54.5	1,302.4	1,010.7	1,594.1
White	823.0	1,259.5	1,196.1	1,322.9	5,833.5	815.4	800.5	830.4
Two or more races	4.5	*			32.5	109.9	84.8	140.1
Other	0.0	*			1.0	*		

Notes: Figures by race are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI = Native Hawaiian and Other Pacific Islander.

Table 2A.2. All-Cause Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	1,132	1,253.5	1,178.7	1,328.2	9,614	916.0	897.5	934.6
1991	1,188	1,290.9	1,216.2	1,365.7	9,787	915.1	896.8	933.4
1992	1,102	1,156.4	1,087.1	1,225.7	9,499	871.3	853.6	888.9
1993	1,137	1,161.4	1,093.0	1,229.7	9,802	881.6	864.0	899.2
1994	1,205	1,198.0	1,129.7	1,266.3	9,715	858.8	841.6	876.0
1995	1,180	1,134.7	1,069.4	1,199.9	9,872	857.3	840.2	874.3
1996	1,184	1,121.1	1,056.8	1,185.3	9,625	825.5	808.9	842.0
1997	1,135	1,046.6	985.4	1,107.7	9,518	803.7	787.5	819.9
1998	1,156	1,045.1	984.6	1,105.6	9,760	813.9	797.7	830.1
1999	1,241	1,095.7	1,034.6	1,156.9	9,809	803.6	787.7	819.6
2000	1,243	1,069.5	1,009.8	1,129.1	9,780	787.2	771.6	802.9
2001	1,237	1,039.2	981.1	1,097.2	9,722	766.2	750.9	781.5

Table 2B.1. Leading Causes of Death by Sex: Average Annual Number of Deaths and Percent of Total, Hayward and Alameda County, 1999-2001

Hayward Total				Alameda County Total			
Rank	Cause of Death	Count	%	Rank	Cause of Death	Count	%
1	Diseases of Heart	362.7	29.2	1	Diseases of Heart	2,804.7	28.7
2	Malignant Neoplasms (Cancer)	279.3	22.5	2	Malignant Neoplasms (Cancer)	2,345.3	24.0
3	Stroke (Cerebrovascular Disease)	101.3	8.2	3	Stroke (Cerebrovascular Disease)	850.0	8.7
4	Chronic Lower Respiratory Diseases	71.7	5.8	4	Chronic Lower Respiratory Diseases	460.3	4.7
5	Unintentional Injuries	42.7	3.4	5	Unintentional Injuries	333.3	3.4
6	Diabetes Mellitus	42.0	3.4	6	Influenza & Pneumonia	314.7	3.2
7	Influenza & Pneumonia	38.3	3.1	7	Diabetes Mellitus	281.3	2.9
8	Alzheimer's Disease	26.0	2.1	8	Alzheimer's Disease	194.0	2.0
9	Chronic Liver Disease & Cirrhosis	21.7	1.7	9	Chronic Liver Disease & Cirrhosis	146.0	1.5
10	Pneumonitis due to Solids & Liquids	16.0	1.3	10	Essential Hypertension & Hypertensive Renal Disease	109.7	1.1
				10	Suicide	109.7	1.1
Hayward Males				Alameda County Males			
Rank	Cause of Death	Count	%	Rank	Cause of Death	Count	%
1	Diseases of Heart	173.3	28.3	1	Diseases of Heart	1345.7	28.1
2	Malignant Neoplasms (Cancer)	136.3	22.3	2	Malignant Neoplasms (Cancer)	1175.3	24.6
3	Stroke (Cerebrovascular Disease)	41.3	6.8	3	Stroke (Cerebrovascular Disease)	336.0	7.0
4	Chronic Lower Respiratory Diseases	35.7	5.8	4	Chronic Lower Respiratory Diseases	223.3	4.7
5	Unintentional Injuries	26.0	4.3	5	Unintentional Injuries	218.7	4.6
6	Diabetes Mellitus	20.7	3.4	6	Influenza & Pneumonia	144.3	3.0
7	Influenza & Pneumonia	17.3	2.8	7	Diabetes Mellitus	132.7	2.8
8	Chronic Liver Disease & Cirrhosis	15.0	2.5	8	Chronic Liver Disease & Cirrhosis	93.0	1.9
9	Suicide	10.0	1.6	9	Homicide	89.7	1.9
10	Alzheimers Disease	9.3	1.5	10	Suicide	85.7	1.8
Hayward Females				Alameda County Females			
Rank	Cause of Death	Count	%	Rank	Cause of Death	Count	%
1	Diseases of Heart	189.3	30.1	1	Diseases of Heart	1459.0	29.3
2	Malignant Neoplasms (Cancer)	143.0	22.7	2	Malignant Neoplasms (Cancer)	1170.0	23.5
3	Stroke (Cerebrovascular Disease)	60.0	9.5	3	Stroke (Cerebrovascular Disease)	514.0	10.3
4	Chronic Lower Respiratory Diseases	36.0	5.7	4	Chronic Lower Respiratory Diseases	237.0	4.8
5	Diabetes Mellitus	21.3	3.4	5	Influenza & Pneumonia	170.3	3.4
6	Influenza & Pneumonia	21.0	3.3	6	Diabetes Mellitus	148.7	3.0
7	Alzheimers Disease	16.7	2.6	7	Alzheimers Disease	140.7	2.8
8	Unintentional Injuries	16.7	2.6	8	Unintentional Injuries	114.7	2.3
9	Pneumonitis due to Solids & Liquids	8.7	1.4	9	Essential Hypertension & Hypertensive Renal Disease	65.7	1.3
10	Nephritis, Nephrotic Syndrome & Nephrosis	7.0	1.1	10	Chronic Liver Disease & Cirrhosis	53.0	1.1

Table 2B.2. Leading Causes of Death by Race/Ethnicity: Average Annual Number of Deaths and Percent of Total, Hayward, 2000-2001

Rank		Count	%
African American (Average annual deaths=103)			
1	Diseases of Heart	27.5	26.7
2	Malignant Neoplasms (Cancer)	24.5	23.8
3	Stroke (Cerebrovascular Disease)	6.5	6.3
4	Diabetes Mellitus	5	4.9
5	Influenza & Pneumonia	4.5	4.4
American Indian/Alaskan Native (Average annual deaths=3)			
1	Malignant Neoplasms (Cancer)	1.5	50.0
2	Diseases of Heart	1.0	33.3
Asian (Average annual deaths=112.5)			
1	Malignant Neoplasms (Cancer)	28	24.9
2	Diseases of Heart	25	22.2
3	Stroke (Cerebrovascular Disease)	12.5	11.1
4	Unintentional Injuries	7.5	6.7
5	Diabetes Mellitus	5	4.4
Hispanic/Latino (Average annual deaths=175.5)			
1	Diseases of Heart	39.5	22.5
2	Malignant Neoplasms (Cancer)	38.5	21.9
3	Stroke (Cerebrovascular Disease)	16	9.1
4	Unintentional Injuries	10.5	6.0
5	Diabetes Mellitus	10	5.7
Native Hawaiian/Other Pacific Islanders (Average annual deaths=19.5)			
1	Diseases of Heart	5.5	28.2
2	Malignant Neoplasms (Cancer)	3.5	17.9
3	Stroke (Cerebrovascular Disease)	2.5	12.8
White (Average annual deaths=823.5)			
1	Diseases of Heart	254	30.8
2	Malignant Neoplasms (Cancer)	186.5	22.6
3	Stroke (Cerebrovascular Disease)	67	8.1
4	Chronic Lower Respiratory Diseases	52	6.3
5	Influenza & Pneumonia	31.5	3.8
Two or more races (Average annual deaths=4.5)			
1	Diseases of Heart	1.5	33.3
2	Malignant Neoplasms (Cancer)	1.0	22.2

Table 2B.3. Leading Causes of Death by Race/Ethnicity: Average Annual Number of Deaths and Percent of Total, Alameda County, 2000-2001

Rank		Count	%
African American (Average annual deaths=2,029.5)			
1	Diseases of Heart	575.5	28.4
2	Malignant Neoplasms (Cancer)	456.5	22.5
3	Stroke (Cerebrovascular Disease)	169.5	8.4
4	Diabetes Mellitus	84.0	4.1
5	Homicide	75.5	3.7
American Indian/Alaskan Native (Average annual deaths=30.5)			
1	Malignant Neoplasms (Cancer)	6.5	21.3
2	Diseases of Heart	6.5	21.3
3	Chronic Liver Disease & Cirrhosis	3.5	11.5
4	Stroke (Cerebrovascular Disease)	2.0	6.6
Asian (Average annual deaths=1,028.5)			
1	Malignant Neoplasms (Cancer)	283.5	27.6
2	Diseases of Heart	242.5	23.6
3	Stroke (Cerebrovascular Disease)	119.0	11.6
4	Unintentional Injuries	48.5	4.7
5	Influenza & Pneumonia	40.5	3.9
Hispanic/Latino (Average annual deaths=743.5)			
1	Diseases of Heart	172.0	23.1
2	Malignant Neoplasms (Cancer)	152.5	20.5
3	Stroke (Cerebrovascular Disease)	62.5	8.4
4	Unintentional Injuries	49.0	6.6
5	Diabetes Mellitus	34.5	4.6
Native Hawaiian/Other Pacific Islanders (Average annual deaths=54.5)			
1	Diseases of Heart	17.5	32.1
2	Malignant Neoplasms (Cancer)	11.5	21.1
3	Stroke (Cerebrovascular Disease)	5.5	10.1
4	Unintentional Injuries	3.0	5.5
5	Chronic Lower Respiratory Diseases	2.0	3.7
5	Homicide	2.0	3.7
White (Average annual deaths=5,833.5)			
1	Diseases of Heart	1,745.0	29.9
2	Malignant Neoplasms (Cancer)	1,443.5	24.7
3	Stroke (Cerebrovascular Disease)	494.0	8.5
4	Chronic Lower Respiratory Diseases	308.0	5.3
5	Influenza & Pneumonia	208.0	3.6
Two or more races (Average annual deaths=32.5)			
1	Diseases of Heart	7.0	21.5
2	Malignant Neoplasms (Cancer)	4.0	12.3
3	Unintentional Injuries	4.0	12.3
4	Stroke (Cerebrovascular Disease)	3.5	10.8
5	Certain Conditions Originating in the Perinatal Period	2.0	6.2

Table 2C.1. Leading Causes of Death by Age Group: Average Annual Number of Deaths and Percent of Age Group Total, Hayward, 1999-2001

	Count	%
<1 Year (Average annual deaths=17.3)		
Congenital Malformations & Chromosomal Abnormalities	5.0	28.8
Sudden Infant Death Syndrome	2.0	11.5
Disorders Related to Short Gestation & Low Birth Weight	1.0	5.8
1 to 14 Years (Average annual deaths=7.3)		
Congenital Malformations & Chromosomal Abnormalities	1.3	18.2
Malignant Neoplasms (Cancer)	1.0	13.6
Unintentional Injuries	1.0	13.6
15-24 Years (Average annual deaths=13.3)		
Unintentional Injuries	4.7	35.0
Homicide	3.7	27.5
Suicide	1.7	12.5
25-34 Years (Average annual deaths=18.7)		
Diseases of Heart	3.0	16.1
Unintentional Injuries	2.7	14.3
Homicide	2.0	10.7
Malignant Neoplasms (Cancer)	2.0	10.7
Suicide	1.3	7.1
35-44 Years (Average annual deaths=55.3)		
Unintentional Injuries	12.0	21.7
Malignant Neoplasms (Cancer)	10.0	18.1
Diseases of Heart	8.3	15.1
Chronic Liver Disease & Cirrhosis	3.3	6.0
Suicide	3.0	5.4
45-54 Years (Average annual deaths=96.3)		
Malignant Neoplasms (Cancer)	28.7	29.8
Diseases of Heart	20.3	21.1
Unintentional Injuries	7.3	7.6
Chronic Liver Disease & Cirrhosis	5.3	5.5
Diabetes Mellitus	4.3	4.5
55-64 Years (Average annual deaths=132.7)		
Malignant Neoplasms (Cancer)	47.0	35.4
Diseases of Heart	34.0	25.6
Diabetes Mellitus	8.7	6.5
Chronic Lower Respiratory Diseases	7.7	5.8
Stroke (Cerebrovascular Disease)	6.0	4.5
65-74 Years (Average annual deaths=223.3)		
Malignant Neoplasms (Cancer)	71.3	31.9
Diseases of Heart	61.7	27.6
Chronic Lower Respiratory Diseases	18.7	8.4
Stroke (Cerebrovascular Disease)	12.0	5.4
Diabetes Mellitus	10.3	4.6
≥75 Years (Average annual deaths=676.0)		
Diseases of Heart	234.0	34.6
Malignant Neoplasms (Cancer)	118.0	17.5
Stroke (Cerebrovascular Disease)	78.0	11.5
Chronic Lower Respiratory Diseases	40.0	5.9
Influenza & Pneumonia	28.7	4.2

Table 2C.2. Leading Causes of Death by Age Group: Average Annual Number of Death and Percent of Age Group Total, Alameda County, 1999-2001

	Count	%
<1 Year (Average annual deaths=114.3)		
Congenital Malformations & Chromosomal Abnormalities	27.3	23.9
Sudden Infant Death Syndrome	14.0	12.2
Disorders Related to Short Gestation & Low Birth Weight	13.7	12.0
Neonatal Hemorrhage	5.7	5.0
Newborn Affected by Maternal Complications of Pregnancy	3.7	3.2
1 to 14 Years (Average annual deaths=49.7)		
Unintentional Injuries	14.7	29.5
Malignant Neoplasms (Cancer)	7.0	14.1
Congenital Malformations & Chromosomal Abnormalities	5.3	10.7
15-24 Years (Average annual deaths=113.7)		
Homicide	36.3	32.0
Unintentional Injuries	35.7	31.4
Suicide	10.0	8.8
Malignant Neoplasms (Cancer)	9.3	8.2
25-34 Years (Average annual deaths=184.7)		
Unintentional Injuries	35.3	19.1
Homicide	33.0	17.9
Malignant Neoplasms (Cancer)	23.0	12.5
Suicide	16.7	9.0
Diseases of Heart	15.7	8.5
35-44 Years (Average annual deaths=413.7)		
Malignant Neoplasms (Cancer)	91.0	22.0
Unintentional Injuries	63.0	15.2
Diseases of Heart	56.7	13.7
Suicide	26.7	6.4
HIV Disease	26.0	6.3
45-54 Years (Average annual deaths=777.3)		
Malignant Neoplasms (Cancer)	237.3	30.5
Diseases of Heart	154.0	19.8
Unintentional Injuries	62.7	8.1
Chronic Liver Disease & Cirrhosis	42.3	5.4
Stroke (Cerebrovascular Disease)	31.0	4.0
55-64 Years (Average annual deaths=1,038.7)		
Malignant Neoplasms (Cancer)	390.3	37.6
Diseases of Heart	262.0	25.2
Stroke (Cerebrovascular Disease)	55.7	5.4
Chronic Lower Respiratory Diseases	43.0	4.1
Diabetes Mellitus	42.7	4.1
65-74 Years (Average annual deaths=1,640.0)		
Malignant Neoplasms (Cancer)	575.7	35.1
Diseases of Heart	437.3	26.7
Stroke (Cerebrovascular Disease)	110.7	6.7
Chronic Lower Respiratory Diseases	104.3	6.4
Diabetes Mellitus	64.7	3.9
≥75 Years (Average annual deaths=5,446.0)		
Diseases of Heart	1,873.3	34.4
Malignant Neoplasms (Cancer)	1,011.3	18.6
Stroke (Cerebrovascular Disease)	634.0	11.6
Chronic Lower Respiratory Diseases	289.0	5.3
Influenza & Pneumonia	246.0	4.5

Table 2D.1. Leading Causes of Premature Death: Rank of Average Annual Years of Potential Life Lost by Race/Ethnicity, Hayward, 2000-2001

Rank	African American	Asian	Hispanic/Latino	White	Total Population
1	Malignant Neoplasms (Cancer)	Malignant Neoplasms (Cancer)	Malignant Neoplasms (Cancer)	Diseases of Heart	Malignant Neoplasms (Cancer)
2	Diseases of Heart	Diseases of Heart	Diseases of Heart	Malignant Neoplasms (Cancer)	Diseases of Heart
3	Homicide	Unintentional Injuries	Unintentional Injuries	Chronic Lower Respiratory Diseases	Unintentional Injuries
4	Unintentional Injuries	Stroke (Cerebrovascular Disease)	Certain Conditions Originating in the Perinatal Period	Stroke (Cerebrovascular Disease)	Stroke (Cerebrovascular Disease)
5	Diabetes Mellitus	Diabetes Mellitus	Congenital Malformations & Chromosomal Abnormalities	Unintentional Injuries	Chronic Lower Respiratory Diseases
6	Stroke (Cerebrovascular Disease)	Certain Conditions Originating in the Perinatal Period	Homicide	Diabetes Mellitus	Diabetes Mellitus
7	Certain Conditions Originating in the Perinatal Period	Suicide	Stroke (Cerebrovascular Disease)	Influenza & Pneumonia	Congenital Malformations & Chromosomal Abnormalities
8	Nephritis, Nephrotic Syndrome & Nephrosis	Congenital Malformations & Chromosomal Abnormalities	Diabetes Mellitus	Chronic Liver Disease & Cirrhosis	Chronic Liver Disease & Cirrhosis
9	Chronic Liver Disease & Cirrhosis	Chronic Lower Respiratory Diseases	Chronic Liver Disease & Cirrhosis	Suicide	Certain Conditions Originating in the Perinatal Period
10	Suicide	Nephritis, Nephrotic Syndrome & Nephrosis	Chronic Lower Respiratory Diseases	Pneumonitis due to Solids & Liquids	Homicide

Table 2D.2. Leading Causes of Premature Death: Rank of Average Annual Years of Potential Life Lost by Race/Ethnicity, Alameda County, 2000-2001

Rank	African American	American Indian	Asian	Hispanic/Latino
1	Diseases of Heart	Malignant Neoplasms (Cancer)	Malignant Neoplasms (Cancer)	Malignant Neoplasms (Cancer)
2	Malignant Neoplasms (Cancer)	Chronic Liver Disease & Cirrhosis	Diseases of Heart	Diseases of Heart
3	Homicide	Diseases of Heart	Unintentional Injuries	Unintentional Injuries
4	Unintentional Injuries	HIV Disease	Stroke (Cerebrovascular Disease)	Certain Conditions Originating in the Perinatal Period
5	Stroke (Cerebrovascular Disease)	Stroke (Cerebrovascular Disease)	Certain Conditions Originating in the Perinatal Period	Congenital Malformations & Chromosomal Abnormalities
6	Certain Conditions Originating in the Perinatal Period	Unintentional Injuries	Congenital Malformations & Chromosomal Abnormalities	Chronic Liver Disease & Cirrhosis
7	Diabetes Mellitus	Septicemia	Suicide	Stroke (Cerebrovascular Disease)
8	HIV Disease	Homicide	Diabetes Mellitus	Homicide
9	Chronic Lower Respiratory Diseases	Influenza & Pneumonia	Chronic Lower Respiratory Diseases	Diabetes Mellitus
10	Chronic Liver Disease & Cirrhosis	Diabetes Mellitus	Influenza & Pneumonia	HIV Disease
Native Hawaiian & Other				
Rank	Pacific Islander	White	Two or More races	Total Population
1	Diseases of Heart	Malignant Neoplasms (Cancer)	Unintentional Injuries	Malignant Neoplasms (Cancer)
2	Malignant Neoplasms (Cancer)	Diseases of Heart	Certain Conditions Originating in the Perinatal Period	Diseases of Heart
3	Stroke (Cerebrovascular Disease)	Unintentional Injuries	Malignant Neoplasms (Cancer)	Unintentional Injuries
4	Unintentional Injuries	Stroke (Cerebrovascular Disease)	Diseases of Heart	Stroke (Cerebrovascular Disease)
5	Homicide	Chronic Lower Respiratory Diseases	Suicide	Chronic Lower Respiratory Diseases
6	Nephritis, Nephrotic Syndrome & Nephrosis	Suicide	Homicide	Homicide
7	Certain Conditions Originating in the Perinatal Period	Chronic Liver Disease & Cirrhosis	Stroke (Cerebrovascular Disease)	Certain Conditions Originating in the Perinatal Period
8	Congenital Malformations & Chromosomal Abnormalities	Influenza & Pneumonia	Congenital Malformations & Chromosomal Abnormalities	Diabetes Mellitus
9	Chronic Lower Respiratory Diseases	Diabetes Mellitus	Chronic Liver Disease & Cirrhosis	Suicide
10	Suicide	Certain Conditions Originating in the Perinatal Period	Chronic Lower Respiratory Diseases	Chronic Liver Disease & Cirrhosis

Appendix 3

Chronic Disease

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See Appendix 7: Technical Notes for data sources.

Table 3A.1. Coronary Heart Disease-Related Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	2,439.3	1,711.9	1,672.6	1,751.2	17,937.3	1,455.9	1,443.6	1,468.2
Sex								
Male	1,322.0	2,188.4	2,119.6	2,257.2	9,615.0	1,831.1	1,809.5	1,852.6
Female	1,117.3	1,348.3	1,302.4	1,394.1	8,322.0	1,164.0	1,149.5	1,178.5
Race/Ethnicity								
African American	153.7	1,483.8	1,337.0	1,630.7	3,143.3	1,712.0	1,677.2	1,746.8
American Indian	2.3	*			21.3	618.3	476.2	789.5
Asian/Pacific Islander	325.0	1,348.4	1,260.7	1,436.2	2,029.3	910.4	887.0	933.9
Hispanic/Latino	316.7	1,330.4	1,242.9	1,417.9	1,444.3	1,287.8	1,247.9	1,327.6
White	1,514.3	1,867.6	1,812.3	1,923.0	10,611.3	1,511.7	1,495.0	1,528.4

Note: (*) = Rate not calculated due to small numbers.

Table 3A.2. Coronary Heart Disease-Related Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1995-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	2,193	1,684.0	1,613.3	1,754.6	16,699	1,458.1	1,435.9	1,480.3
1996	2,585	1,951.7	1,876.3	2,027.0	17,727	1,529.6	1,507.0	1,552.1
1997	2,472	1,829.3	1,757.1	1,901.5	17,955	1,526.6	1,504.2	1,549.0
1998	2,464	1,791.0	1,720.2	1,861.8	18,533	1,550.5	1,528.2	1,572.9
1999	2,715	1,936.8	1,863.9	2,009.7	18,946	1,559.6	1,537.3	1,581.9
2000	2,456	1,725.3	1,657.0	1,793.6	17,970	1,459.2	1,437.8	1,480.6
2001	2,147	1,472.7	1,410.3	1,535.1	16,896	1,342.4	1,322.1	1,362.7

Table 3A.3. Coronary Heart Disease Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	297.0	260.8	243.7	277.9	2,242.3	184.5	180.1	189.0
Sex								
Male	142.0	319.2	288.3	350.0	1,084.3	226.4	218.5	234.4
Female	155.0	219.2	199.2	239.3	1,158.0	152.5	147.4	157.6
Race/Ethnicity								
African American	22.0	428.3	311.2	575.0	445.0	259.2	242.1	276.3
American Indian	<1	*			5.5	*		
Asian	22.0	141.7	103.0	190.2	196.5	107.1	96.2	118.0
Hispanic/Latino	28.5	167.7	127.0	217.3	127.0	131.8	115.1	148.5
NHOPI	4.0	*			14.5	404.2	270.7	580.5
White	213.5	305.9	276.2	335.5	1,419.5	193.4	186.2	200.5
Two or more races	<1	*			5.5	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3A.4. Coronary Heart Disease Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	293	352.3	311.3	393.3	2,504	251.1	241.2	261.0
1991	312	360.0	319.5	400.4	2,354	231.8	222.4	241.2
1992	282	312.1	275.3	348.9	2,289	219.5	210.5	228.5
1993	272	295.4	260.1	330.8	2,337	221.1	212.1	230.1
1994	313	325.9	289.7	362.2	2,340	216.3	207.5	225.1
1995	260	261.7	229.7	293.6	2,367	214.2	205.6	222.9
1996	289	282.0	249.4	314.6	2,334	207.3	198.9	215.7
1997	264	251.3	220.9	281.6	2,235	194.6	186.5	202.6
1998	295	273.9	242.6	305.2	2,339	200.0	191.9	208.2
1999	309	277.6	246.6	308.6	2,300	192.8	184.9	200.7
2000	298	262.3	232.5	292.1	2,278	187.4	179.7	195.1
2001	284	243.2	214.9	271.5	2,149	173.0	165.7	180.3

Table 3B.1. Stroke Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	762.7	531.6	509.8	553.5	6,758.7	549.4	541.8	556.9
Sex								
Male	346.0	587.7	551.5	623.9	2,964.3	584.1	571.7	596.5
Female	416.7	496.8	469.2	524.5	3,794.0	524.0	514.3	533.6
Race/Ethnicity								
African American	77.7	789.5	679.8	899.2	1,601.3	874.4	849.5	899.3
American Indian	3.7	*			12.3	372.8	262.5	513.8
Asian/Pacific Islander	85.0	366.5	319.4	413.6	851.0	394.8	379.0	410.5
Hispanic/Latino	94.7	396.2	348.4	444.1	468.3	419.5	396.5	442.4
White	466.0	547.1	517.8	576.5	3,620.0	509.9	500.2	519.5

Note: (*) = Rate not calculated due to small numbers.

Table 3B.2. Stroke Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1995-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	782	604.9	562.4	647.4	6,267	551.2	537.5	564.9
1996	832	630.5	587.6	673.5	6,616	574.3	560.4	588.2
1997	846	626.2	583.9	668.5	6,588	562.9	549.3	576.5
1998	843	611.8	570.4	653.1	7,136	600.6	586.7	614.6
1999	866	614.7	573.7	655.7	6,907	570.3	556.8	583.8
2000	822	574.4	535.1	613.7	6,998	570.1	556.7	583.6
2001	600	409.2	383.3	435.2	6,370	505.4	492.9	517.9

Table 3B.3. Stroke Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	101.3	88.7	78.7	98.7	850.0	70.1	67.4	72.8
Sex								
Male	41.3	95.8	78.7	113.0	336.0	73.5	68.9	78.1
Female	60.0	84.4	72.0	96.7	514.0	67.7	64.3	71.1
Race/Ethnicity								
African American	6.5	*			169.5	99.1	88.5	109.7
American Indian	0.0	*			2.0	*		
Asian	12.5	75.2	48.7	111.0	119.0	65.2	56.7	73.7
Hispanic/Latino	16.0	99.3	67.9	140.2	62.5	64.0	52.4	75.6
NHOPI	2.5	*			5.5	*		
White	67.0	90.2	74.7	105.7	494.0	66.4	62.2	70.6
Two or more races	0.0	*			3.5	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3B.4. Stroke Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	69	83.8	65.2	106.1	732	74.6	69.1	80.0
1991	89	103.0	82.7	126.8	771	76.6	71.2	82.0
1992	73	82.0	64.3	103.1	770	74.8	69.5	80.1
1993	70	73.4	57.2	92.7	753	71.2	66.1	76.3
1994	82	85.7	68.2	106.4	744	68.9	64.0	73.9
1995	99	97.7	79.4	118.9	766	69.0	64.1	73.9
1996	85	84.1	67.2	104.0	750	66.5	61.8	71.3
1997	88	82.7	66.3	101.9	786	68.6	63.8	73.4
1998	92	85.5	68.9	104.9	793	68.0	63.2	72.7
1999	95	86.1	69.7	105.3	838	70.6	65.8	75.4
2000	104	90.0	72.7	107.3	870	71.7	66.9	76.5
2001	105	89.7	72.6	106.9	842	67.9	63.3	72.5

Table 3C.1. Diabetes-Related Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	2,146.3	1,474.6	1,438.4	1,510.7	15,068.7	1,181.2	1,170.2	1,192.1
Sex								
Male	941.0	1,472.1	1,417.0	1,527.2	6,737.0	1,194.6	1,177.7	1,211.4
Female	1,205.3	1,494.1	1,445.2	1,543.0	8,331.7	1,176.2	1,161.6	1,190.8
Race/Ethnicity								
African American	248.7	2,114.2	1,946.5	2,281.8	4,376.3	2,267.9	2,228.8	2,307.0
American Indian	3.7	*			27.7	617.4	491.8	765.4
Asian/Pacific Islander	277.7	1,099.1	1,021.5	1,176.8	1,831.7	782.1	760.9	803.4
Hispanic/Latino	407.3	1,456.1	1,369.7	1,542.5	1,835.3	1,391.3	1,352.4	1,430.3
White	1,092.0	1,469.9	1,418.4	1,521.3	6,502.7	945.9	932.5	959.3

Note: (*) = Rate not calculated due to small numbers.

Table 3C.2. Diabetes-Related Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1995-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	1,700	1,265.5	1,205.0	1,325.9	12,403	1,043.7	1,025.3	1,062.2
1996	1,870	1,374.6	1,312.1	1,437.1	13,082	1,087.9	1,069.1	1,106.6
1997	1,850	1,334.7	1,273.7	1,395.7	13,572	1,112.1	1,093.3	1,130.9
1998	2,144	1,520.0	1,455.4	1,584.6	14,403	1,166.1	1,147.0	1,185.3
1999	2,308	1,615.1	1,549.0	1,681.2	15,314	1,220.1	1,200.7	1,239.6
2000	2,233	1,538.3	1,474.3	1,602.3	15,492	1,216.3	1,197.0	1,235.6
2001	1,898	1,266.4	1,209.1	1,323.6	14,400	1,099.8	1,081.7	1,117.9

Table 3C.3. Diabetes Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	42.0	36.7	30.3	43.1	281.3	22.9	21.3	24.4
Sex								
Male	20.7	42.2	32.4	54.1	132.7	25.9	23.3	28.5
Female	21.3	32.2	24.8	41.1	148.7	20.6	18.7	22.6
Race/Ethnicity								
African American	5.0	*			84.0	47.7	40.5	55.0
American Indian	0.0	*			1.0	*		
Asian	5.0	*			34.0	17.2	13.4	21.8
Hispanic/Latino	10.0	56.4	34.5	87.1	34.5	31.8	24.7	40.2
NHOPI	1.0	*			1.5	*		
White	23.5	36.6	26.9	48.7	124.5	17.8	15.6	20.0
Two or more races	0.0	*			<1	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3C.4. Diabetes Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	24	24.4	15.6	36.3	153	14.6	12.2	16.9
1991	25	28.5	18.4	42.1	175	16.1	13.7	18.5
1992	25	26.9	17.4	39.7	166	15.2	12.9	17.5
1993	24	23.7	15.2	35.3	187	16.8	14.4	19.2
1994	29	29.2	19.6	41.9	219	19.4	16.8	22.0
1995	38	37.1	26.3	50.9	261	22.9	20.1	25.7
1996	41	39.0	28.0	52.9	266	22.8	20.1	25.6
1997	32	29.6	20.2	41.8	253	21.3	18.6	23.9
1998	35	31.9	22.2	44.4	251	21.0	18.4	23.6
1999	37	33.0	23.2	45.5	284	23.5	20.8	26.2
2000	45	39.1	28.5	52.3	276	22.4	19.8	25.1
2001	44	37.7	27.4	50.6	284	22.6	19.9	25.2

Table 3D.1. All-Cancer Incidence: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1996-2000

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	496.8	444.1	426.6	461.6	5,957.2	477.3	471.9	482.8
Sex								
Male	237.6	500.6	471.7	529.5	2,812.8	527.4	518.5	536.3
Female	258.8	412.9	390.3	435.4	3,140.6	448.7	441.6	455.7
Race/Ethnicity								
African American	35.6	457.2	379.6	534.7	931.2	504.6	490.0	519.2
Asian/Pacific Islander	61.6	270.5	239.1	301.9	705.8	287.8	278.0	297.6
Hispanic/Latino	81.4	373.0	334.6	411.5	504.0	391.1	374.8	407.4
White	309.6	549.9	521.8	577.9	3,604.6	534.4	526.6	542.3

Table 3D.2. All-Cancer Incidence: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	476	491.3	446.2	536.4	5,874	527.7	514.0	541.3
1991	510	508.6	463.7	553.5	6,194	546.9	533.1	560.6
1992	524	515.3	470.5	560.2	6,365	555.8	542.0	569.5
1993	516	494.6	451.5	537.8	6,045	519.9	506.7	533.1
1994	509	483.0	440.6	525.4	6,236	527.2	514.0	540.4
1995	538	499.3	456.8	541.8	6,334	527.2	514.1	540.3
1996	494	455.9	415.5	496.2	5,715	475.8	463.4	488.2
1997	477	432.7	393.8	471.7	5,768	474.1	461.8	486.4
1998	462	410.7	373.1	448.3	5,922	479.3	467.0	491.6
1999	527	461.3	421.8	500.8	6,213	495.7	483.3	508.1
2000	524	448.5	410.0	487.0	6,168	485.3	473.1	497.4

Table 3D.3. Lung Cancer Incidence: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1996-2000

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	67.8	62.1	55.5	68.8	752.8	62.5	60.5	64.5
Sex								
Male	34.4	73.8	62.6	84.9	394.8	76.6	73.2	80.1
Female	33.4	53.9	45.7	62.1	357.8	52.6	50.1	55.0
Race/Ethnicity								
African American	3.8	*			149.0	82.3	76.4	88.2
Asian/Pacific Islander	7.4	33.6	15.8	61.5	76.2	33.8	30.4	37.3
Hispanic/Latino	7.2	37.7	17.5	69.6	51.8	46.3	40.5	52.2
White	49.4	85.8	75.0	96.7	469.0	70.2	67.3	73.0

Note: (*) = Rate not calculated due to small numbers.

Table 3D.4. Lung Cancer Incidence: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	85	88.7	55.5	133.4	824	75.9	70.7	81.1
1991	72	74.4	44.7	115.6	743	68.0	63.1	72.9
1992	82	83.3	51.8	125.9	826	74.3	69.2	79.4
1993	76	74.2	45.2	113.9	793	70.6	65.6	75.5
1994	68	65.9	38.9	103.4	738	64.8	60.1	69.5
1995	81	77.8	48.3	117.8	840	73.2	68.2	78.2
1996	67	62.3	36.7	98.0	740	63.5	59.0	68.1
1997	58	53.6	30.2	87.1	724	61.3	56.8	65.8
1998	63	57.1	33.0	91.1	742	61.9	57.5	66.4
1999	83	74.0	46.3	111.4	764	63.0	58.6	67.5
2000	68	59.8	35.4	93.8	794	64.7	60.2	69.2

Table 3D.5. Breast Cancer Incidence: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1996-2000

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
All Females	85.4	138.2	125.1	151.3	1119.8	159.7	155.6	163.9
Race/Ethnicity								
African American	35.0	127.6	55.7	243.8	150.2	137.1	127.2	146.9
Asian/Pacific Islander	13.6	98.4	58.3	154.3	142.0	97.0	89.8	104.2
Hispanic/Latino	11.6	87.7	49.1	143.2	85.4	113.4	102.3	124.5
White	52.0	172.1	150.4	193.9	702.4	191.7	185.3	198.1

Table 3D.6. Breast Cancer Incidence: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	63	117.6	67.8	188.1	925	154.4	144.4	164.5
1991	77	146.6	89.5	224.6	926	151.0	141.2	160.8
1992	69	124.4	74.1	194.3	935	150.0	140.4	159.7
1993	72	125.9	75.5	195.6	874	137.1	127.9	146.2
1994	90	156.3	99.0	233.4	976	151.3	141.8	160.8
1995	82	139.6	86.9	210.7	991	150.8	141.4	160.2
1996	77	130.7	80.1	199.9	1,019	152.9	143.5	162.3
1997	84	138.7	87.0	208.6	1,107	162.4	152.8	172.0
1998	81	129.6	80.5	196.3	1,104	159.4	150.0	168.8
1999	95	148.9	96.1	218.7	1,211	172.6	162.8	182.3
2000	90	142.0	90.6	210.7	1,158	162.4	153.0	171.7

Table 3D.7. Prostate Cancer Incidence: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1996-2000

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
All Males	62.8	137.5	122.2	152.9	790.0	153.7	148.8	158.5
Race/Ethnicity								
African American	7.2	221.9	96.0	424.6	159.6	218.7	203.2	234.2
Asian/Pacific Islander	6.2	71.2	33.1	132.9	71.8	75.2	67.2	83.3
Hispanic/Latino	12.2	148.0	83.7	239.5	60.6	128.6	113.4	143.8
White	34.2	140.1	119.0	161.2	437.6	150.5	144.2	156.9

Table 3D.8. Prostate Cancer Incidence: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	41	115.0	55.5	207.3	588	139.1	127.4	150.8
1991	57	144.5	79.7	238.1	816	187.3	174.1	200.6
1992	68	171.2	103.3	265.5	874	198.1	184.6	211.6
1993	65	152.8	88.3	243.5	886	190.9	178.0	203.7
1994	63	153.6	88.3	246.2	844	179.9	167.5	192.3
1995	62	138.3	79.2	222.3	736	153.0	141.7	164.2
1996	77	154.2	94.3	236.2	729	149.3	138.3	160.4
1997	84	176.0	109.7	265.5	709	143.7	132.9	154.4
1998	81	163.5	100.9	248.5	769	150.7	139.9	161.5
1999	95	193.8	124.5	285.6	851	164.6	153.4	175.8
2000	90	168.6	107.2	250.5	892	167.5	156.4	178.6

Table 3D.9. All-Cancer Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	279.3	243.1	226.7	259.6	2,345.3	189.6	185.1	194.0
Sex								
Male	136.3	287.1	258.9	315.4	1,175.3	230.5	222.7	238.2
Female	143.0	214.9	194.5	235.3	1,170.0	163.9	158.4	169.3
Race/Ethnicity								
African American	24.5	338.4	250.4	447.4	456.5	257.3	240.5	274.1
American Indian	1.5	*			6.5	*		
Asian	28.0	143.3	108.2	186.1	283.5	133.9	122.5	145.3
Hispanic/Latino	38.5	192.0	151.5	240.0	152.5	135.2	119.3	151.0
NHOPI	3.5	*			11.5	303.6	192.5	455.5
White	186.5	294.6	263.9	325.3	1,443.5	208.8	201.1	216.5
Two or more races	1.0	*			4.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3D.10. All-Cancer Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	257	268.4	235.0	301.8	2,258	212.5	203.7	221.3
1991	266	278.7	244.7	312.6	2,322	215.9	207.0	224.7
1992	260	269.4	236.3	302.4	2,296	210.6	201.9	219.2
1993	271	274.1	241.2	307.0	2,338	210.0	201.4	218.5
1994	273	268.2	236.2	300.3	2,251	199.3	191.0	207.5
1995	292	281.6	249.1	314.0	2,302	201.1	192.9	209.4
1996	255	240.9	211.3	270.6	2,238	192.4	184.4	200.4
1997	267	246.0	216.4	275.6	2,203	186.2	178.4	194.0
1998	234	212.1	184.9	239.4	2,210	184.1	176.4	191.8
1999	271	241.0	212.3	269.8	2,319	190.1	182.3	197.8
2000	276	239.8	211.4	268.1	2,395	193.5	185.7	201.3
2001	291	248.0	219.4	276.5	2,322	183.9	176.4	191.4

Table 3D.11. Lung Cancer Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	77.7	68.4	59.6	77.2	627.3	51.4	49.1	53.7
Sex								
Male	42.0	88.5	72.9	104.1	335.7	65.6	61.5	69.7
Female	35.7	54.6	44.2	64.9	291.7	41.8	39.0	44.6
Race/Ethnicity								
African American	8.0	*			136.5	76.7	67.6	85.9
American Indian	<1	*			0.0	*		
Asian	6.0	*			64.0	31.4	25.9	37.0
Hispanic/Latino	4.0	*			33.0	30.4	23.5	38.7
NHOPI	<1	*			2.0	*		
White	54.5	86.6	70.0	103.2	397.0	58.4	54.3	62.5
Two or more races	<1	*			0.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3D.12. Lung Cancer Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	86	88.6	70.9	109.4	613	56.9	52.4	61.5
1991	75	77.1	60.6	96.6	627	57.8	53.2	62.3
1992	62	61.9	47.5	79.4	598	54.1	49.7	58.4
1993	93	92.0	74.3	112.7	687	61.4	56.8	66.0
1994	75	73.8	58.0	92.5	595	52.6	48.3	56.8
1995	77	73.8	58.2	92.2	653	57.2	52.8	61.6
1996	56	52.6	39.7	68.3	607	52.6	48.4	56.8
1997	75	69.7	54.8	87.4	582	49.5	45.5	53.5
1998	63	57.8	44.4	74.0	564	47.4	43.4	51.3
1999	85	75.9	60.6	93.9	610	50.6	46.6	54.7
2000	71	62.4	48.7	78.7	633	51.9	47.8	55.9
2001	77	66.7	52.6	83.4	639	51.3	47.3	55.3

Table 3D.13. Breast Cancer Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total Female	21.3	32.6	25.1	41.6	189.3	26.1	24.0	28.3
Race/Ethnicity								
African American	3.0	*			35.5	32.5	25.4	41.0
American Indian	<1	*			0.0	*		
Asian	3.5	*			20.0	15.0	10.7	20.4
Hispanic/Latino	4.5	*			12.0	17.3	11.1	25.7
NHOPI	0.0	*			1.5	*		
White	12.5	34.5	22.3	50.9	122.0	31.6	27.6	35.7
Two or more races	0.0	*			0.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3D.14. Breast Cancer Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Hayward					Alameda County				
Year	Count	Rate	95% CI		Year	Count	Rate	95% CI	
1991-1992	44	41.0	29.8	55.0	1990	205	34.2	29.4	38.9
1993-1994	47	41.4	30.4	55.1	1991	197	32.7	28.1	37.3
1995-1996	57	47.7	36.1	61.8	1992	185	29.6	25.3	33.8
1997-1998	39	31.2	22.2	42.7	1993	193	30.3	26.0	34.6
1999-2000	43	33.0	23.9	44.5	1994	180	27.7	23.6	31.7
					1995	165	24.9	21.1	28.7
					1996	193	28.7	24.6	32.7
					1997	178	26.2	22.3	30.1
					1998	191	27.3	23.4	31.2
					1999	184	25.9	22.1	29.6
					2000	206	28.4	24.5	32.3
					2001	178	24.1	20.5	27.6

Table 3D.15. Prostate Cancer Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total Male	13.3	32.6	23.3	44.4	137.0	30.5	27.5	33.5
Race/Ethnicity								
African American	1.0	*			39.0	65.0	51.4	81.1
American Indian	0.0	*			0.0	*		
Asian	<1	*			11.0	16.0	10.0	24.2
Hispanic/Latino	1.5	*			8.0	*		
NHOPI	0.0	*			<1	*		
White	11.0	40.7	25.5	61.6	77.0	28.7	24.1	33.2
Two or more races	0.0	*			0.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 3D.16. Prostate Cancer Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and Confidence Intervals (CI) by Year, 1990-2001

Hayward					Alameda County				
Year	Count	Rate	95% CI		Year	Count	Rate	95% CI	
1991-1992	36	55.8	39.1	77.3	1990	139	37.1	30.7	43.6
1993-1994	33	48.5	33.4	68.1	1991	153	40.9	34.2	47.7
1995-1996	34	44.6	30.9	62.3	1992	170	45.4	38.3	52.4
1997-1998	36	47.8	33.5	66.2	1993	181	45.4	38.6	52.2
1999-2000	26	32.6	21.3	47.8	1994	136	33.6	27.8	39.4
					1995	150	36.5	30.6	42.5
					1996	161	39.3	33.1	45.4
					1997	157	36.9	31.0	42.7
					1998	140	33.1	27.6	38.7
					1999	140	32.0	26.7	37.4
					2000	131	29.4	24.3	34.5
					2001	140	30.2	25.1	35.2

Table 3E.1. Asthma Hospitalization (All Ages): Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

	Hayward					Alameda County			
	Count	Rate	95% CI			Count	Rate	95% CI	
Total	279.0	167.5	156.0	179.0		2,478.0	178.0	174.0	182.1
Sex									
Male	124.0	150.5	134.8	166.3		1,149.3	166.7	161.1	172.4
Female	155.0	182.9	166.2	199.6		1,328.3	185.4	179.6	191.2
Race/Ethnicity									
African American	54.7	265.4	221.2	309.6		1,035.7	446.5	430.7	462.3
American Indian	<1	*				3.7	*		
Asian/PI	41.0	131.8	107.4	156.2		271.0	96.1	89.2	102.9
Hispanic/Latino	60.3	117.2	96.4	138.1		340.0	128.3	119.0	137.5
White	100.3	181.0	159.1	202.8		669.3	116.6	111.3	121.8

Note: (*) = Rate not calculated due to small numbers.

Table 3E.2. Asthma Hospitalization (All Ages): Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1995-2001

Table 1. Annual Incidence of HIV Infection by Sex, Race, and Ethnicity, 1995-2001									
Year	Hayward				Alameda County				
	Count	Rate	95% CI		Count	Rate	95% CI		
1995	279	179.5	158.2	200.8	2,367	179.0	171.8	186.3	
1996	241	156.7	136.7	176.7	2,295	172.3	165.2	179.4	
1997	263	165.7	145.4	185.9	2,464	183.0	175.8	190.3	
1998	264	166.1	145.9	186.4	2,634	194.8	187.3	202.2	
1999	305	166.4	146.7	186.1	2,785	202.1	194.5	209.6	
2000	260	156.9	137.6	176.2	2,400	172.3	165.4	179.2	
2001	272	161.0	141.7	180.3	2,249	158.8	152.2	165.4	

Table 3E.3. Childhood Asthma Hospitalization (Ages 0-14): Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	109.7	271.6	242.2	300.9	1,202.0	398.1	385.1	411.1
Sex								
Male	72.3	350.5	303.8	397.2	768.0	497.0	476.7	517.3
Female	37.3	189.0	154.0	224.1	433.7	294.3	278.3	310.3
Race/Ethnicity								
African American	25.3	451.7	355.9	565.3	556.0	1,030.2	980.7	1,079.7
American Indian	<1	*			1.7	*		
Asian/PI	10.0	122.1	82.4	174.3	117.7	163.7	146.6	180.7
Hispanic/Latino	36.3	187.6	152.2	223.0	210.7	250.5	230.9	270.1
White	22.0	303.6	234.8	386.2	192.3	212.5	195.2	229.9

Note: (*) = Rate not calculated due to small numbers.

Table 3E.4. Childhood Asthma Hospitalization (Ages 0-14): Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1995-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	123	339.9	279.5	400.2	1,191	415.5	391.9	439.2
1996	82	221.1	179.7	269.2	1,058	365.4	343.3	387.4
1997	114	299.2	244.1	354.2	1,203	411.3	388.1	434.6
1998	101	261.9	210.7	313.1	1,228	416.5	393.2	439.8
1999	118	301.4	248.0	354.8	1,317	441.0	417.2	464.8
2000	96	234.7	190.8	285.8	1,220	403.8	381.2	426.5
2001	115	277.8	226.9	328.6	1,069	346.4	325.7	367.2

Appendix 4

Maternal, Child, and Adolescent Health

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See Appendix 7: Technical Notes for data sources.

Table 4A.1. Live Births: Annual Counts, Rates per 1,000 Population, and 95% Confidence Intervals (CI) by Race/Ethnicity, 2000-2002

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	2,999.3	20.9	20.5	21.4	21,982.3	14.9	14.7	15.1
Race/Ethnicity of Mother								
African American	284.3	18.7	15.2	22.8	3,037.0	14.1	13.6	14.6
American Indian	9.7	16.6	11.1	23.8	55.0	10.1	7.5	12.8
Asian	554.7	20.7	16.8	25.2	5,486.3	18.4	17.9	18.8
Hispanic/Latino	1,497.3	30.6	29.7	31.5	6,379.3	22.8	22.2	23.4
NHOPI	71.0	27.6	22.5	33.7	211.3	24.5	21.2	27.8
White	509.0	12.2	9.9	14.8	6,235.0	10.3	10.1	10.6
Two or more races	58.3	8.8	7.2	10.7	354.3	6.1	5.5	6.8
Other	15.0	–	15.5		224.0	–		

Notes: NHOPI = Native Hawaiian and Other Pacific Islander. (–) = Not applicable.

Table 4A.2. Live Births: Annual Counts, Rates per 1,000 Population, and 95% Confidence Intervals (CI) by Year, 1990-2002

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	2,865	25.7	24.8	26.6	23,315	18.2	18.0	18.5
1991	2,904	25.4	24.5	26.3	23,146	17.9	17.6	18.1
1992	2,935	25.0	24.1	25.9	22,647	17.3	17.0	17.5
1993	2,817	23.5	22.6	24.3	21,910	16.5	16.3	16.7
1994	2,777	22.6	21.8	23.4	21,460	16.0	15.7	16.2
1995	2,801	22.3	21.4	23.1	20,441	15.0	14.8	15.2
1996	2,808	21.8	21.0	22.6	20,659	15.0	14.8	15.2
1997	2,862	21.8	21.0	22.6	20,761	14.9	14.7	15.1
1998	2,892	21.5	20.7	22.3	20,907	14.8	14.6	15.0
1999	2,867	20.9	20.1	21.7	20,475	14.3	14.1	14.5
2000	3,004	21.5	20.7	22.2	22,164	15.4	15.1	15.6
2001	3,032	21.2	20.4	21.9	21,995	14.9	14.7	15.1
2002	2,962	20.5	19.8	21.3	21,785	14.6	14.4	14.8

Table 4B.1. Infant Mortality: Annual Counts, Rates per 1,000 Live Births, and 95% Confidence Intervals (CI) by Race/Ethnicity, 1999-2001

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	17.3	5.8	4.4	7.7	114.3	5.3	4.7	5.9
Race/Ethnicity of Mother								
African American	2.5	*			36.0	11.5	9.0	14.4
American Indian	0.0	*			0.0	*		
Asian	2.0	*			20.5	3.8	2.7	5.1
Hispanic/Latino	6.5	*			29.0	4.6	3.5	5.9
NHOPI	<1	*			2.0	*		
White	3.5	*			24.5	3.8	2.8	5.1
Two or more races	1.0	*			5.0	*		
Other	0.0	*			0.0	*		

Notes: Figures for race/ethnicity are based on data for 2000-2001 only. NHOPI = Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Table 4B.2. Infant Mortality: Annual Counts, Rates per 1,000 Live Births, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	25	8.7	5.6	12.9	206	8.8	7.6	10.0
1991	16	5.5	3.1	8.9	178	7.7	6.6	8.8
1992	23	7.8	5.0	11.8	166	7.3	6.2	8.4
1993	12	4.3	2.2	7.4	141	6.4	5.4	7.5
1994	16	5.8	3.3	9.4	137	6.4	5.3	7.5
1995	13	4.6	2.5	7.9	115	5.6	4.6	6.7
1996	15	5.3	3.0	8.8	122	5.9	4.9	7.0
1997	10	3.5	1.7	6.4	125	6.0	5.0	7.1
1998	13	4.5	2.4	7.8	107	5.1	4.1	6.1
1999	20	7.0	4.3	10.8	109	5.3	4.3	6.3
2000	15	5.0	2.8	8.2	101	4.6	3.7	5.4
2001	17	5.6	3.3	9.0	133	6.1	5.1	7.1

Table 4C.1. Low Birth Weight: Annual Counts, Percent per 100 Live Births, and 95% Confidence Intervals (CI) by Race/Ethnicity and Age Group, 2000-2002

	Hayward				Alameda County			
	Count	%	95% CI		Count	%	95% CI	
Total	183.0	6.1	5.6	6.6	1,499.7	6.8	6.6	7.0
Race/Ethnicity of Mother								
African American	30.3	10.7	8.6	12.7	370.3	12.2	11.5	12.9
American Indian	0.0	*			3.3	*		
Asian	38.0	6.9	5.6	8.1	398.3	7.3	6.9	7.7
Hispanic/Latino	77.0	5.1	4.5	5.8	341.7	5.4	5.0	5.7
NHOPI	4.3	*			11.7	5.5	3.7	7.3
White	27.3	5.4	4.2	6.5	334.7	5.4	5.0	5.7
Two or more races	4.3	*			28.0	7.9	6.3	9.5
Other	1.7	*			11.7	5.2	3.5	6.9
Age Group								
≤19 years	17.3	6.6	4.9	8.4	142.3	9.1	8.3	9.9
20-34 years	135.0	5.8	5.3	6.4	1,011.7	6.3	6.1	6.5
≥35 years	30.7	7.4	5.9	8.8	345.3	7.9	7.5	8.4

Notes: NHOPI = Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Table 4C.2. Low Birth Weight: Annual Counts, Percent per 100 Live Births, and 95% Confidence Intervals (CI) by Year, 1990-2002

Year	Hayward				Alameda County			
	Count	%	95% CI		Count	%	95% CI	
1990	157	5.5	4.6	6.3	1,547	6.6	6.3	7.0
1991	182	6.3	5.4	7.1	1,665	7.2	6.9	7.5
1992	172	5.9	5.0	6.7	1,625	7.2	6.8	7.5
1993	174	6.2	5.3	7.1	1,484	6.8	6.4	7.1
1994	184	6.6	5.7	7.6	1,600	7.5	7.1	7.8
1995	181	6.5	5.6	7.4	1,423	7.0	6.6	7.3
1996	175	6.2	5.3	7.1	1,439	7.0	6.6	7.3
1997	206	7.2	6.3	8.1	1,439	6.9	6.6	7.3
1998	194	6.7	5.8	7.6	1,503	7.2	6.8	7.5
1999	164	5.7	4.9	6.6	1,338	6.5	6.2	6.9
2000	195	6.5	5.6	7.4	1,490	6.7	6.4	7.1
2001	192	6.3	5.5	7.2	1,560	7.1	6.8	7.4
2002	162	5.5	4.7	6.3	1,449	6.7	6.3	7.0

Table 4D.1. First Trimester Prenatal Care: Annual Counts, Percent (per 100 Live Births), and 95% Confidence Intervals (CI) by Race/Ethnicity and Age Group, 2000-2002

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	2,528.3	84.3	83.5	85.0	19,532.7	88.9	88.6	89.1
Race/Ethnicity of Mother								
African American	254.3	89.4	87.4	91.5	2,637.3	86.8	86.1	87.5
American Indian	8.0	82.8	69.0	96.5	48.0	87.3	82.2	92.4
Asian	487.0	87.8	86.2	89.4	4,968.0	90.6	90.1	91.0
Hispanic/Latino	1,226.3	81.9	80.8	83.0	5,401.3	84.7	84.2	85.2
NHOPI	51.3	72.3	66.3	78.3	156.0	73.8	70.4	77.2
White	445.0	87.4	85.8	89.1	5,823.7	93.4	93.0	93.8
Two or more races	45.3	77.7	71.5	83.9	308.0	86.9	84.9	89.0
Other	11.0	73.3	60.4	86.3	190.3	85.0	82.3	87.7
Age Group								
≤19 years	186.3	71.4	68.2	74.6	1,190.0	76.2	75.0	77.5
20-34 years	1,978.7	85.2	84.4	86.0	14,308.0	89.1	88.8	89.4
≥35 years	363.3	87.4	85.6	89.3	4,033.7	92.4	92.0	92.9

Note: NHOPI = Native Hawaiian and Other Pacific Islander

Table 4D.2. First Trimester Entry for Prenatal Care: Annual Counts, Percent (per 100 Live Births), and 95% Confidence Intervals (CI) by Year, 1990-2002

Year	Hayward				Alameda County			
	Count	%	95% CI		Count	%	95% CI	
1990	2,360	82.4	81.0	83.8	19,121	82.0	81.5	82.5
1991	2,362	81.3	79.9	82.8	19,172	82.8	82.3	83.3
1992	2,457	83.7	82.4	85.0	19,075	84.2	83.7	84.7
1993	2,290	81.3	79.9	82.7	18,500	84.4	83.9	84.9
1994	2,310	83.2	81.8	84.6	18,304	85.3	84.8	85.8
1995	2,355	84.1	82.7	85.4	17,645	86.3	85.8	86.8
1996	2,357	83.9	82.6	85.3	17,982	87.0	86.6	87.5
1997	2,450	85.6	84.3	86.9	18,228	87.8	87.3	88.2
1998	2,394	82.8	81.4	84.2	18,156	86.8	86.4	87.3
1999	2,403	83.8	82.5	85.2	17,910	87.5	87.0	87.9
2000	2,503	83.3	82.0	84.7	19,631	88.6	88.1	89.0
2001	2,548	84.0	82.7	85.3	19,614	89.2	88.8	89.6
2002	2,534	85.6	84.3	86.8	19,361	88.9	88.5	89.3

Table 4E.1. Teen Births (15-19): Average Annual Counts, Rates per 1,000 Female Population, and 95% Confidence Intervals (CI) by Race/Ethnicity, 2000-2002

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	258.7	55.1	51.2	59.0	1,533.7	33.4	32.4	34.3
Race/Ethnicity of Mother								
African American	27.7	46.0	36.6	57.0	423.7	56.4	53.3	59.5
American Indian	0.3	*			3.0	*		
Asian	19.0	21.1	16.0	27.3	106.0	10.8	9.6	12.0
Hispanic/ Latino	169.0	95.4	87.1	103.7	752.7	70.9	68.0	73.8
NHOPI	5.3	*			15.0	39.1	28.5	52.3
White	29.0	30.4	24.4	37.5	187.7	12.8	11.7	13.8
Two or more races	6.7	23.3	14.2	35.9	36.3	14.4	11.7	17.1
Other	1.7	*			9.3	*		

Notes: Figures for race/ethnicity are based on data for 2000-2001 only. NHOPI = Native Hawaiian and Other Pacific Islander. (*) = Rate not calculated due to small numbers.

Table 4E.2. Teen Births (Ages 15-19): Annual Counts, Rates per 1,000 Female Population, and 95% Confidence Intervals (CI) by Year, 1990-2002

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	267	78.9	69.5	88.4	2,177	55.7	53.4	58.1
1991	288	82.2	72.7	91.7	2,183	55.0	52.7	57.3
1992	312	86.1	76.5	95.6	2,212	54.9	52.7	57.2
1993	293	78.2	69.3	87.2	2,049	50.2	48.0	52.3
1994	266	68.8	60.5	77.1	1,913	46.2	44.1	48.2
1995	321	80.5	71.7	89.3	1,968	46.8	44.8	48.9
1996	289	70.4	62.3	78.5	1,828	42.9	40.9	44.9
1997	273	64.6	56.9	72.2	1,777	41.1	39.2	43.0
1998	318	73.1	65.1	81.2	1,756	40.1	38.2	42.0
1999	257	57.5	50.5	64.5	1,595	35.9	34.2	37.7
2000	264	57.5	50.6	64.5	1,682	37.4	35.6	39.2
2001	268	57.1	50.2	63.9	1,559	33.9	32.2	35.6
2002	244	51.6	45.1	58.0	1,360	29.3	27.7	30.8

Appendix 5

Injury

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See Appendix 7: Technical Notes for data sources.

**Table 5A.1. Unintentional Injury Hospitalizations by Mechanism:
Average Annual Count and Percent, 1998-2000**

Injury by Mechanism	Hayward		Alameda County	
	Count	%	Count	%
Cutting/pierce	21	2.6	121	2.1
Drowning	1	0.2	17	0.3
Fall	369	46.6	2,865	49.6
Fire/hot object or substance	9	1.2	109	1.9
Firearm	2	0.3	15	0.3
Machinery	16	2.0	76	1.3
Motor vehicle-traffic	210	26.5	1,277	22.1
Other-bike/pedestrian	16	2.1	139	2.4
All other transport-related	9	1.1	93	1.6
Nature/environment	3	0.4	36	0.6
Bite/sting	6	0.8	52	0.9
Overexertion	19	2.4	147	2.5
Poisoning	41	5.1	350	6.1
Struck by/against	28	3.5	164	2.8
Suffocation/strangulation	4	0.5	30	0.5
Other/unspecified	38	4.8	283	4.9
Total	793	100.0	5,771	100.0

**Table 5A.2. Unintentional Injury Mortality by Mechanism:
Average Annual Count and Percent, 1999-2001**

Injury by Mechanism	Hayward		Alameda County	
	Count	%	Count	%
Cut/pierce	0		0	
Drowning	2	3.9	15	4.4
Fall	8	18.0	57	17.1
Fire/hot object or substance	0	0.8	11	3.2
Firearm	0	0.8	2	0.7
Machinery	0		1	0.2
Motor vehicle-traffic	10	23.4	105	31.5
All other transport-related	3	7.8	19	5.7
Natural/environment	1	1.6	2	0.5
Overexertion	0		<1	0.1
Poisoning	13	31.2	85	25.4
Struck by/against	0	0.8	2	0.6
Suffocation/strangulation	2	4.7	13	4.0
Other/unspecified	3	7.0	22	6.6
Total	43	100.0	333	100

Notes: Totals exclude adverse effects of medical and therapeutic intervention. Counts may not add to totals due to rounding.

Table 5A.3. Unintentional Injury Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1998-2000

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	801.0	506.1	485.6	526.5	5,825.3	439.8	433.2	446.4
Sex								
Male	415.7	533.8	503.1	564.6	2,909.7	459.3	449.3	469.3
Female	385.3	453.0	426.8	479.3	2,914.7	400.8	392.3	409.2
Race/Ethnicity								
African American	65.3	371.5	311.9	431.1	976.0	459.0	442.1	475.8
American Indian	2.7	*			10.7	209.9	143.5	296.2
Asian/Pacific Islander	46.3	163.7	134.5	192.9	463.3	179.8	169.8	189.8
Hispanic/Latino	165.7	346.8	310.5	383.1	693.3	331.9	314.8	349.0
White	444.3	652.5	615.3	689.6	3,321.7	500.6	490.6	510.7

Note: (*) = Rate not calculated due to small numbers.

Table 5A.4. Unintentional Injury Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000 and 95% Confidence Intervals (CI) by Year, 1995-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	654	452.0	416.8	487.2	5,783	457.6	445.7	469.6
1996	673	453.2	418.5	487.9	5,291	415.3	403.9	426.6
1997	691	458.0	423.5	492.6	5,518	427.1	415.8	438.5
1998	752	489.1	453.7	524.4	5,658	434.6	423.1	446.0
1999	833	522.0	481.1	562.8	5,815	437.8	426.5	449.2
2000	818	506.7	471.6	541.8	6,003	446.9	435.5	458.3

Table 5A.5. Unintentional Injury Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	42.7	33.1	27.4	38.9	332.7	23.9	22.4	25.4
Sex								
Male	26.0	43.6	34.5	54.4	218.0	33.5	30.9	36.2
Female	16.7	24.0	17.8	31.6	114.7	15.4	13.8	17.0
Race/Ethnicity								
African American	3.5	*			69.5	33.9	28.2	39.6
American Indian	0.0	*			1.0	*		
Asian	7.5	*			48.5	20.5	16.6	25.0
Hispanic/Latino	10.5	32.9	20.4	50.3	49.0	23.3	18.9	28.4
NHOPI	1.5	*			3.0	*		
White	19.5	38.3	27.2	52.4	160.5	23.9	21.2	26.6
Two or more races	0.0	*			4.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 5A.6. Unintentional Injury Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1990	51.0	48.4	36.0	63.6	341	27.9	24.9	31.0
1991	47.0	43.8	32.2	58.2	385	30.9	27.7	34.0
1992	51.0	45.7	34.0	60.1	334	26.6	23.7	29.5
1993	43.0	35.3	25.5	47.5	364	27.7	24.8	30.6
1994	42.0	35.6	25.7	48.1	359	27.6	24.7	30.5
1995	47.0	38.6	28.4	51.3	380	28.9	25.9	31.8
1996	42.0	34.6	24.9	46.8	334	25.0	22.3	27.7
1997	49.0	39.5	29.2	52.2	308	22.8	20.3	25.4
1998	34.0	25.7	17.8	35.9	337	25.0	22.3	27.7
1999	43.0	34.2	24.8	46.1	328	23.7	21.1	26.3
2000	40.0	31.3	22.4	42.6	328	23.7	21.1	26.3
2001	45.0	33.9	24.7	45.4	342	24.3	21.7	26.9

Table 5A.7. Motor Vehicle Crash Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1998-2000

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	218.7	130.3	120.2	140.4	1,343.0	94.3	91.3	97.2
Sex								
Male	133.3	161.4	145.1	177.7	832.0	118.5	113.7	123.2
Female	85.3	100.2	87.8	112.5	510.7	70.4	66.9	74.0
Race/Ethnicity								
African American	23.0	115.8	86.5	145.0	259.7	114.1	106.0	122.2
American Indian	1.3	*			2.3	*		
Asian/Pacific Islander	10.7	30.2	20.7	42.7	116.0	36.9	32.9	41.0
Hispanic/Latino	46.0	83.0	67.4	98.6	179.7	68.2	61.7	74.7
White	95.3	164.0	144.4	183.7	627.7	101.3	96.6	106.0

Note: (*) = Rate not calculated due to small numbers.

Table 5A.8. Motor Vehicle Crash Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000 and 95% Confidence Intervals (CI) by Year, 1995-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	256	168.3	147.2	189.3	1,468	108.6	102.9	114.2
1996	186	117.3	100.2	134.4	1,251	90.9	85.8	96.0
1997	195	121.2	103.9	138.4	1,301	93.1	88.0	98.2
1998	208	127.4	109.9	145.0	1,223	87.1	82.2	92.1
1999	209	123.7	106.7	140.7	1,394	98.4	93.2	103.6
2000	239	139.7	121.8	157.6	1,412	97.2	92.1	102.4

Table 5A.9. Motor Vehicle Crash Mortality: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	10.7	7.7	5.3	10.9	106.0	7.5	6.6	8.3
Sex								
Male	9.0	13.3	8.8	19.4	77.0	11.3	9.8	12.8
Female	1.7	*			29.0	4.0	3.2	4.9
Race/Ethnicity								
African American	1.0	*			19.0	9.4	6.7	12.9
American Indian	0.0	*			<1	*		
Asian	4.0	*			24.5	9.1	6.7	12.0
Hispanic/Latino	3.5	*			24.0	8.9	6.5	11.8
NHOPI	0.0	*			1.5	*		
White	1.5	*			41.0	6.5	5.2	8.1
Two or more races	0.0	*			2.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 5A.10. Motor Vehicle Crash Mortality: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Hayward					Alameda County				
Year	Count	Rate	95% CI		Year	Count	Rate	95% CI	
1991-1992	37	15.7	11.1	21.6	1990	146	11.2	9.3	13.0
1993-1994	28	10.3	6.8	14.9	1991	144	10.9	9.1	12.7
1995-1996	22	8.8	5.5	13.3	1992	126	9.8	8.1	11.5
1997-1998	23	8.5	5.4	12.8	1993	111	8.0	6.4	9.5
1999-2000	22	8.0	5.0	12.1	1994	116	8.7	7.1	10.3
					1995	130	9.5	7.9	11.2
					1996	105	7.8	6.3	9.3
					1997	100	7.2	5.8	8.6
					1998	106	7.7	6.2	9.2
					1999	92	6.5	5.2	8.0
					2000	115	8.1	6.6	9.6
					2001	111	7.7	6.3	9.1

Table 5B.1. Intentional Injury Hospitalizations by Mechanism and Intent: Average Annual Count and Percent, 1998-2000

Injury by Mechanism	Hayward				Alameda County			
	Assault		Self-Inflicted		Assault		Self-Inflicted	
	Count	%	Count	%	Count	%	Count	%
Cut/pierce	21	23.3	6	9.6	150	21.8	35	8.2
Drowning	0		0		0		<1	0.1
Fall	0		<1	1.1	2	0.3	8	1.8
Fire/hot object or substance	0		0		2	0.3	0	0.1
Firearm	16	18.1	1	2.1	148	21.5	9	2.1
Machinery	0		0		0		0	
Motor vehicle-traffic	0		0		0		1	0.2
Other-bike/pedestrian	0		0		0		0	
All other transport-related	<1	0.4	0	0.0	2	0.2	0	
Nature/environment	0		0		0		0	
Bite/sting	0		0		0		0	
Overexertion	0		0		0		0	
Poisoning	0		54	85.6	1	0.1	369	85.6
Struck by/against	43	48.1	0		311	45.3	0	
Suffocation/strangulation	<1	0.4	0		1	0.1	3	0.7
Other/unspecified	9	9.6	1	1.6	69	10.1	6	1.3
Total	90	100.0	63	100.0	686	100.0	431	100.0

Table 5B.2. Intentional Injury Mortality by Mechanism and Intent: Average Annual Count and Percent, 1999-2001

Injury by Mechanism	Hayward				Alameda County			
	Homicide		Suicide		Homicide		Suicide	
	Count	%	Count	%	Count	%	Count	%
Cut/pierce	1	13.3	1	5.6	11	10.2	5	4.9
Drowning	0		0		0		4	3.3
Fall	0		0		0		3	3.0
Fire/hot object or substance	0		0		0		0	
Firearm	7	66.7	5	41.7	80	74.3	47	43.2
Machinery	0		0		0		0	
Motor vehicle-traffic	0		0		0		0	
All other transport-related	0		0		1	1.2	0	
Natural/environment	0		0		0		0	
Overexertion	0		0		0		0	
Poisoning	<1	3.3	2	16.7	<1	0.6	17	15.5
Struck by/against	<1	3.3	0	0.0	6	5.3	0	
Suffocation/strangulation	<1	6.7	4	33.3	3	2.8	29	26.1
Other/unspecified	<1	6.7	0	2.8	6	5.6	4	4.0
Total	10	100.0	12	100.0	108	100.0	110	100.0

Notes: Totals exclude adverse effects of medical and therapeutic intervention. Counts may not add to totals due to rounding.

Table 5B.3. Assault Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1998-2000

	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	88.7	49.3	43.4	55.3	684.0	45.7	43.7	47.7
Sex								
Male	76.7	82.9	72.1	93.7	579.0	77.2	73.6	80.9
Female	12.0	13.7	9.6	19.0	105.0	14.1	12.5	15.6
Race/Ethnicity								
African American	15.3	68.0	49.8	90.7	340.7	147.8	138.7	156.9
American Indian	<1	*			1.7	*		
Asian/Pacific Islander	1.0	*			27.3	8.4	6.7	10.4
Hispanic/Latino	24.0	36.2	28.4	45.6	119.7	38.2	33.9	42.4
White	33.3	68.6	54.9	82.4	146.7	24.6	22.3	27.0

Note: (*) = Rate not calculated due to small numbers.

Table 5B.4. Assault Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1995-2000

Year	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
1995	87	52.0	42.3	63.3	861	59.0	55.0	63.0
1996	59	34.4	28.0	41.9	765	52.5	48.8	56.3
1997	87	51.2	41.7	62.4	764	51.7	48.0	55.4
1998	98	55.3	45.0	67.3	760	51.4	47.7	55.1
1999	77	42.7	34.7	52.0	642	42.9	39.6	46.3
2000	91	50.1	40.7	61.0	650	43.0	39.7	46.3

Table 5B.5. Homicide Deaths: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	10.0	7.1	4.8	10.1	107.7	7.1	6.3	7.9
Sex								
Male	9.0	12.7	8.4	18.5	89.7	11.7	10.3	13.1
Female	1.0	*			18.0	2.4	1.8	3.1
Race/Ethnicity								
African American	4.0	*			75.5	34.7	29.1	40.2
American Indian	0.0	*			<1	*		
Asian	0.0	*			8.0	*		
Hispanic/Latino	3.5	*			12.5	4.4	2.8	6.5
NHOPI	<1	*			2.0	*		
White	3.0	*			12.5	2.1	1.4	3.1
Two or more races	0.0	*			1.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 5B.6. Homicide Deaths: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Hayward					Alameda County				
Year	Count	Rate	95% CI		Year	Count	Rate	95% CI	
1991-1992	28	10.1	6.7	14.6	1990	192	13.7	11.7	15.6
1993-1994	29	11.1	7.4	15.9	1991	210	14.9	12.9	17.0
1995-1996	34	12.0	8.3	16.8	1992	214	15.2	13.1	17.3
1997-1998	27	9.7	6.4	14.1	1993	196	13.6	11.6	15.5
1999-2000	20	7.2	4.4	11.1	1994	192	13.1	11.2	15.0
					1995	186	12.6	10.8	14.5
					1996	151	10.2	8.6	11.9
					1997	157	10.7	9.0	12.4
					1998	110	7.5	6.1	8.9
					1999	99	6.6	5.4	8.0
					2000	118	7.8	6.4	9.2
					2001	106	6.8	5.5	8.1

Table 5B.7. Self-Inflicted Injury Hospitalization: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1998-2000

Hayward					Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	62.7	37.3	31.9	42.7	432.0	29.5	27.9	31.1
Sex								
Male	25.0	29.6	23.3	37.1	166.3	23.2	21.1	25.3
Female	37.7	44.9	36.6	53.2	265.7	36.1	33.6	38.6
Race/Ethnicity								
African American	8.0	40.0	25.6	59.5	70.0	30.7	26.5	34.8
American Indian	0.0	*			1.3	*		
Asian/Pacific Islander	4.7	*			46.3	13.3	11.1	15.6
Hispanic/Latino	9.3	17.1	11.4	24.7	53.0	19.7	16.4	23.0
White	34.3	60.4	48.4	72.3	236.7	37.5	34.7	40.3

Note: (*) = Rate not calculated due to small numbers.

Table 5B.8. Self-Inflicted Injury Hospitalization: Annual Counts, Age-Adjusted Rates per 100,000 and 95% Confidence Intervals (CI) by Year, 1995-2000

Hayward					Alameda County			
Year	Count	Rate	95% CI		Count	Rate	95% CI	
1995	49	30.0	24.4	36.5	438	31.0	28.0	33.9
1996	60	36.0	29.2	43.8	423	29.2	26.4	32.0
1997	68	41.6	33.9	50.7	408	28.1	25.4	30.9
1998	55	33.7	27.4	41.0	455	31.4	28.5	34.4
1999	61	34.6	28.1	42.1	406	27.6	24.9	30.3
2000	72	43.4	35.3	52.9	435	29.4	26.6	32.2

Table 5B.9. Suicide Deaths: Average Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Race/Ethnicity, 1999-2001

Population	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
Total	12.0	9.2	6.4	12.7	109.7	7.8	6.9	8.6
Sex								
Male	10.0	15.7	10.6	22.4	85.7	13.1	11.5	14.8
Female	2.0	*			24.0	3.2	2.5	4.0
Race/Ethnicity								
African American	1.0	*			10.0	4.9	3.0	7.6
American Indian	0.0	*			0.0	*		
Asian	2.0	*			17.0	5.9	4.1	8.2
Hispanic/Latino	2.0	*			9.0	*		
NHOPI	<1	*			1.0	*		
White	8.5	*			69.5	10.3	8.6	12.0
Two or more races	<1	*			1.0	*		

Notes: Figures for race/ethnicity are for years 2000-2001 only. (*) = Rate not calculated due to small numbers. NHOPI= Native Hawaiian and Other Pacific Islander.

Table 5B.10. Suicide Deaths: Annual Counts, Age-Adjusted Rates per 100,000, and 95% Confidence Intervals (CI) by Year, 1990-2001

Hayward					Alameda County				
Year	Count	Rate	95% CI		Year	Count	Rate	95% CI	
1991-1992	40	17.8	12.7	24.2	1990	138	10.7	8.9	12.5
1993-1994	30	12.6	8.5	18.0	1991	143	11.4	9.5	13.3
1995-1996	36	14.4	10.1	19.9	1992	137	10.6	8.8	12.4
1997-1998	35	13.9	9.7	19.3	1993	151	11.5	9.6	13.3
1999-2000	23	8.9	5.6	13.4	1994	140	10.5	8.8	12.3
					1995	153	11.3	9.5	13.1
					1996	129	9.4	7.8	11.1
					1997	144	10.4	8.7	12.1
					1998	137	10.1	8.4	11.8
					1999	114	8.1	6.6	9.6
					2000	107	7.6	6.1	9.0
					2001	108	7.6	6.2	9.1

Appendix 6

Communicable Disease

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See Appendix 7: Technical Notes for data sources.

Table 6A.1. AIDS Cases: Average Annual Counts, Percent, Case Rates per 100,000, and 95% Confidence Intervals (CI) by Sex, Race/Ethnicity, Age Group and Mode of Exposure, 2000-2002

	Hayward					Alameda County				
	Count	%	Rate	95% CI		Count	%	Rate	95% CI	
Total	17.3	100.0	12.1	9.0	15.9	210.3	100.0	14.3	13.1	15.4
Sex										
Females	3.7	21.2	*			49.0	23.3	6.5	5.5	7.6
Males	13.7	78.8	19.2	13.8	26.1	161.3	76.7	22.3	20.3	24.3
Race/Ethnicity										
African American	6.7	38.5	42.0	25.7	64.9	120.0	57.1	53.8	48.3	59.4
American Indian	0.0	0.0	*			0.7	0.3	*		
Asian/Pacific Islander	1.7	9.6	*			9.7	4.6	3.0	2.0	4.3
Hispanic/Latino	1.7	9.6	*			31.3	14.9	11.2	9.0	13.7
White	7.3	42.3	16.7	10.5	25.3	48.0	22.8	7.7	6.4	8.9
Other/Unknown	0.0	0.0	*			0.7	0.3	*		
Age Group										
≤4 years	0.0	0.0	*			0.7	0.3	*		
5-12 years	0.0	0.0	*			0.7	0.3	*		
13-19 years	0.3	1.9	*			1.3	0.6	*		
20-29 years	1.0	5.8	*			19.0	9.0	8.5	6.5	11.1
30-39 years	7.3	42.3	30.0	18.8	45.4	84.3	40.1	32.7	28.7	36.7
40-49 years	4.7	26.9	*			64.7	30.7	27.9	24.0	31.8
≥50 years	4.0	23.1	*			39.7	18.9	11.0	9.0	12.9
Mode of Exposure										
MSM	9.3	53.8	—			88.3	42.0	—		
IDU	0.7	3.8	—			36.0	17.1	—		
MSM & IDU	0.7	3.8	—			8.0	3.8	—		
Heterosexual Contact	6.0	34.6	—			67.7	32.2	—		
Receipt of blood, components or tissue	0.3	1.9	—			1.7	0.8	—		
Mother with/at risk for HIV infection	0.0	0.0	—			0.7	0.3	—		
Risk not reported /Other	0.3	1.9	—			8.0	3.8	—		

Notes: (*) = Rate not calculated due to small numbers. (—) = Not applicable.

Table 6A.2. AIDS: Annual Counts, Percent, Rates per 100,000, and 95% Confidence Intervals (CI), 1988-2002

Hayward					Alameda County				Hayward % of County Cases
Year of Diagnosis	Cases	Rate	95% CI		Cases	Rate	95% CI		
<1988	107	–			681	–			15.7
1988	21	19.5	12.1	29.9	334	26.9	24.0	29.8	6.3
1989	34	31.0	21.4	43.3	420	33.3	30.1	36.5	8.1
1990	28	25.1	16.7	36.3	405	31.7	28.6	34.8	6.9
1991	38	32.7	23.2	44.9	485	37.7	34.4	41.1	7.8
1992	52	43.4	32.4	56.9	627	48.1	44.4	51.9	8.3
1993	42	34.1	24.6	46.1	584	44.3	40.7	47.9	7.2
1994	46	36.8	27.0	49.1	513	38.6	35.3	42.0	9.0
1995	25	19.8	12.8	29.2	451	33.8	30.7	37.0	5.5
1996	38	29.8	21.1	40.9	413	30.8	27.8	33.8	9.2
1997	23	17.6	11.2	26.4	329	24.2	21.6	26.8	7.0
1998	25	18.7	12.1	27.6	261	18.8	16.5	21.1	9.6
1999	21	15.4	9.6	23.6	249	17.6	15.4	19.8	8.4
2000	23	16.4	10.4	24.6	229	15.9	13.8	17.9	10.0
2001	16	*			219	14.9	13.0	16.9	7.3
2002	13	*			183	12.3	10.5	14.1	7.1
Total	497				6,383	–			7.8

Notes: (*) = Rate not calculated due to small numbers. (–) = Not applicable.

Table 6A.3. AIDS: Annual Counts and Percents by Sex, Hayward, 1980-2002

Year of Diagnosis	Male		Female		Total Count
	Count	%	Count	%	
1980	0	0.0	0	0.0	0
1981	1	100.0	0	0.0	1
1982	0	0.0	0	0.0	0
1983	1	100.0	0	0.0	1
1984	2	100.0	0	0.0	2
1985	6	100.0	0	0.0	6
1986	18	94.7	1	5.3	19
1987	22	95.7	1	4.3	23
1988	18	85.7	3	14.3	21
1989	33	97.1	1	2.9	34
1990	25	89.3	3	10.7	28
1991	36	94.7	2	5.3	38
1992	46	88.5	6	11.5	52
1993	38	90.5	4	9.5	42
1994	39	84.8	7	15.2	46
1995	22	88.0	3	12.0	25
1996	31	81.6	7	18.4	38
1997	20	87.0	3	13.0	23
1998	24	96.0	1	4.0	25
1999	17	81.0	4	19.0	21
2000	18	78.3	5	21.7	23
2001	11	68.8	5	31.3	16
2002	12	92.3	1	7.7	13
Total	440	88.5	57	11.5	497

Table 6A.4. AIDS: Annual Counts and Percent by Mode of Exposure, Hayward, 1980-2002

Year of Diagnosis	MSM		IDU		MSM & IDU		Heterosexual		Other		Total Count
	Count	%	Count	%	Count	%	Count	%	Count	%	
1980	0	0.0	0	0.0	0	0.0	0		0	0.0	0
1981	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1
1982	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
1983	1	100.0	0	0.0	0	0.0	0	0.0	0	5.3	1
1984	1	50.0	0	0.0	0	0.0	0	0.0	1	10.7	2
1985	4	66.7	0	0.0	1	16.7	0	0.0	1	0.0	6
1986	15	78.9	2	10.5	1	5.3	0	0.0	1	2.9	19
1987	16	69.6	0	0.0	4	17.4	0	0.0	3	6.1	23
1988	17	81.0	0	0.0	1	4.8	2	9.5	1	3.8	21
1989	25	73.5	3	8.8	3	8.8	0	0.0	3	6.7	34
1990	20	71.4	1	3.6	3	10.7	1	3.6	3	4.1	28
1991	28	73.7	2	5.3	3	7.9	2	5.3	3	5.1	38
1992	41	78.8	2	3.8	2	3.8	4	7.7	3	6.6	52
1993	29	69.0	8	19.0	1	2.4	3	7.1	1	4.7	42
1994	27	58.7	8	17.4	1	2.2	5	10.9	5	3.2	46
1995	15	60.0	2	8.0	3	12.0	4	16.0	1	3.1	25
1996	21	55.3	7	18.4	4	10.5	4	10.5	2	5.3	38
1997	15	65.2	2	8.7	2	8.7	4	17.4	0	3.2	23
1998	15	60.0	1	4.0	1	4.0	7	28.0	1	1.3	25
1999	11	52.4	3	14.3	2	9.5	5	23.8	0	4.1	21
2000	11	47.8	1	4.3	1	4.3	9	39.1	1	5.6	23
2001	7	43.8	1	6.3	1	6.3	6	37.5	1	5.0	16
2002	10	76.9	0	0.0	0	0.0	3	23.1	0	4.4	13
Total	330	66.4	43	8.7	34	6.8	59	11.9	31	6.2	497

Table 6A.5. AIDS: Annual Cases, Deaths, and Case Fatality (Percent) by Year of Diagnosis, 1988-2002

Year of Diagnosis	Hayward			Alameda County		
	Cases	Deaths	Case Fatality	Cases	Deaths	Case Fatality
<1988	107	50	46.7	681	649	95.3
1988	21	20	95.2	334	309	92.5
1989	34	32	94.1	420	390	92.9
1990	28	25	89.3	405	356	87.9
1991	38	35	92.1	485	420	86.6
1992	52	47	90.4	627	506	80.7
1993	42	31	73.8	584	387	66.3
1994	46	26	56.5	513	259	50.5
1995	25	11	44.0	451	163	36.1
1996	38	13	34.2	413	129	31.2
1997	23	4	17.4	329	66	20.1
1998	25	6	24.0	261	52	19.9
1999	21	3	14.3	249	35	14.1
2000	23	3	13.0	229	26	11.4
2001	16	1	6.3	219	25	11.4
2002	13	1	7.7	183	18	9.8
Total	497	308	62.0	6,383	3,790	59.4

Table 6A.6. Persons Living with AIDS: Annual Cases and Deaths by Year of Diagnosis, Aggregate Total PLWA, and Hayward PLWA as Percent of County PLWA, 1988-2002

Year of Diagnosis	Hayward			Alameda County		
	Cases	Deaths	PLWA	Cases	Deaths	PLWA
<1988	52	50	2	681	649	32
1988	21	20	3	334	309	57
1989	34	32	5	420	390	87
1990	28	25	8	405	356	136
1991	38	35	11	485	420	201
1992	52	47	16	627	506	322
1993	42	31	27	584	387	519
1994	46	26	47	513	259	773
1995	25	11	61	451	163	1,061
1996	38	13	86	413	129	1,345
1997	23	4	105	329	66	1,608
1998	25	6	124	261	52	1,817
1999	21	3	142	249	35	2,031
2000	23	3	162	229	26	2,234
2001	16	1	177	219	25	2,428
2002	13	1	189	183	18	2,593
Total	497	308	189	6,383	3,790	

Table 6A.7. Persons Living With AIDS (PLWA): Annual Counts and Percent by Sex, Race/Ethnicity, Age Group, and Mode of Exposure, 2002

	Hayward		Alameda County	
	Count	%	Count	%
Total	189	100.0	2,593	100.0
Sex				
Male	159	84.1	2,161	83.3
Female	30	15.9	432	16.7
Race				
African American	54	28.6	1,226	47.3
Asian/Pacific Islander	14	7.4	96	3.7
Hispanic/Latino	33	17.5	303	11.7
White	87	46.0	949	36.6
Other	1	0.5	19	0.7
Age Group				
≤12 years	1	0.5	13	0.5
13-19 years	2	1.1	16	0.6
20-29 years	22	11.6	342	13.2
30-39 years	96	50.8	1,121	43.2
40-49 years	45	23.8	769	29.7
≥50 years	23	12.2	332	12.8
Mode of Exposure				
MSM	114	60.3	1,489	57.4
IDU	19	10.1	369	14.2
MSM & IDU	13	6.9	144	5.6
Heterosexual	35	18.5	465	17.9
Other	8	4.2	126	4.9

Table 6B.1. Chlamydia: Average Annual Counts, Percent, Case Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Age Group, 2000-2002

	Hayward					Alameda County				
	Count	%	Rate	95% CI		Count	%	Rate	95% CI	
Total	466.3	100.0	325.5	308.5	342.6	4,772.7	100.0	348.4	342.7	354.1
Sex										
Male	101.0	21.7	142.1	126.1	158.1	1,060.7	22.2	157.6	152.1	163.1
Female	360.7	77.3	499.8	470.0	529.6	3,665.7	76.8	526.1	516.2	535.9
Unknown	4.7	1.0	–			46.3	1.0			
Age Group										
≤14 years	5.3	1.1	*			111.7	2.3	38.0	33.9	42.1
15-19 years	157.0	33.7	1,608.4	1,463.2	1,753.7	1,647.0	34.5	1,908.8	1,855.6	1,962.0
20-24 years	161.7	34.7	1,409.9	1,284.4	1,535.4	1,499.0	31.4	1,743.5	1,692.6	1,794.5
25-29 years	77.7	16.7	604.6	527.0	682.3	727.3	15.2	666.7	638.7	694.7
30-34 years	31.0	6.6	252.6	203.9	309.5	363.0	7.6	306.6	288.4	324.8
35-44 years	25.3	5.4	111.7	88.0	139.8	287.7	6.0	120.1	112.1	128.2
≥45 years	5.3	1.1	*			96.3	2.0	22.1	19.5	24.6
Unknown	3.0	0.6	–			40.7	0.9	*		

Notes: (*) = Rate not calculated due to small numbers. (–) = Not applicable.

Table 6B.2. Chlamydia: Average Annual Counts and Percent by Race/Ethnicity, 2000-2002

	Hayward		Alameda County	
	Count	%	Count	%
African American	69.0	14.8	1,158.7	24.3
American Indian	0.3	0.1	12.3	0.3
Asian/Pacific Islander	24.7	5.3	199.3	4.2
Hispanic/Latino	81.7	17.5	468.3	9.8
White	31.3	6.7	214.3	4.5
Other	1.7	0.4	15.3	0.3
Unknown	257.7	55.3	2,704.3	56.7
Total	466.3	100.0	4,772.7	100.0

Table 6B.3. Gonorrhea: Average Annual Counts, Percent, Case Rates per 100,000, and 95% Confidence Intervals (CI) by Sex and Age Group, 2000-2002

	Hayward					Alameda County				
	Count	%	Rate	95% CI		Count	%	Rate	95% CI	
Total	119.7	100.0	83.5	74.9	92.2	1,914.7	100.0	139.8	136.2	143.4
Sex										
Male	60.0	50.1	84.4	72.1	96.7	887.7	46.4	131.9	126.9	136.9
Female	58.3	48.7	80.8	68.9	92.8	1,007.3	52.6	144.6	139.4	149.7
Unknown	1.3	1.1	–			19.7	1.0			
Age Group										
≤14 years	1.7	1.4	*			41.7	2.2	14.2	11.7	16.7
15-19 years	26.7	22.3	273.2	216.6	340.0	499.0	26.1	578.3	549.0	607.6
20-24 years	34.0	28.4	296.5	239.0	354.1	492.0	25.7	572.3	543.1	601.5
25-29 years	18.7	15.6	145.3	109.8	188.7	302.3	15.8	277.1	259.1	295.2
30-34 years	15.3	12.8	125.0	91.5	166.7	216.3	11.3	182.7	168.7	196.8
35-44 years	15.3	12.8	67.6	49.5	90.1	242.0	12.6	101.1	93.7	108.4
≥45 years	7.0	5.8	16.9	10.4	25.8	103.3	5.4	23.7	21.0	26.3
Unknown	1.0	0.8	–			18.0	0.9	–		

Notes: (*) = Rate not calculated due to small numbers. (–) = Not applicable.

Table 6B.4. Gonorrhea: Average Annual Counts and Percent by Race/Ethnicity, 2000-2002

	Hayward		Alameda County	
	Count	%	Count	%
African American	30.0	25.1	681.3	35.6
American Indian	0.3	0.3	4.0	0.2
Asian/Pacific Islander	1.7	1.4	31.3	1.6
Hispanic/Latino	8.0	6.7	67.7	3.5
White	8.0	6.7	86.3	4.5
Other	0.0	–	2.7	0.1
Unknown	71.7	59.9	1,041.3	54.4
Total	119.7	100.0	1,914.7	100.0

Note: (–) = Not applicable.

Table 6B.5. Chlamydia: Average Annual Counts, Rate per 100,000, and 95% Confidence Intervals by Sex, 2000-2002

Sex/Age Group	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
All Males	100.7	141.6	125.6	157.6	1,051.3	156.2	150.8	161.7
≤9 years	0.3	*			3.3	*		
10-14 years	1.3	*			11.7	24.1	16.8	33.5
15-19 years	23.3	460.6	359.1	582.0	283.7	637.3	594.5	680.1
20-24 years	31.3	538.3	435.0	658.8	307.3	709.1	663.3	754.9
25-29 years	20.0	300.2	229.1	386.4	188.7	345.7	317.2	374.2
30-34 years	9.3	145.9	97.0	210.9	109.0	182.9	163.1	202.7
35-44 years	12.3	105.8	74.5	145.8	103.0	86.1	76.5	95.7
45-54 years	1.7	*			36.0	38.9	31.6	46.3
55-64 years	0.7	*			6.3	*		
≥65 years	0.3	*			2.3	*		
All Females	360.7	499.8	470.0	529.6	3,639.3	522.3	512.5	532.1
≤9 years	0.0	*			3.0	*		
10-14 years	3.7	*			91.0	196.4	173.1	219.7
15-19 years	130.7	2,782.8	2,507.4	3,058.3	1,349.7	3,231.0	3,131.5	3,330.5
20-24 years	130.0	2,302.6	2,074.1	2,531.1	1,181.3	2,770.9	2,679.7	2,862.1
25-29 years	56.7	916.5	778.7	1,054.3	532.3	976.5	928.6	1,024.4
30-34 years	21.3	363.1	279.7	463.7	250.3	425.7	395.3	456.1
35-44 years	13.0	117.9	83.8	161.1	181.0	151.1	138.4	163.8
45-54 years	2.3	*			43.3	44.3	36.7	52.0
55-64 years	0.7	*			5.0	*		
≥65 years	2.3	*			2.3	*		

Note: (*) = Rate not calculated due to small numbers.

Table 6B.6. Gonorrhea: Average Annual Counts, Rate per 100,000, and 95% Confidence Intervals by Sex, 2000-2002

Sex/Age Group	Hayward				Alameda County			
	Count	Rate	95% CI		Count	Rate	95% CI	
All Males	59.3	83.5	71.2	95.7	876.7	130.3	125.3	135.2
≤9 years	0.0	*			1.3	*		
10-14 years	0.0	*			4.7	*		
15-19 years	9.3	184.2	122.4	266.3	121.7	273.3	245.3	301.4
20-24 years	15.0	257.7	188.0	344.8	210.3	485.3	447.4	523.2
25-29 years	9.0	135.1	89.0	196.5	158.0	289.5	263.4	315.6
30-34 years	9.7	151.1	101.2	217.1	134.3	225.4	203.4	247.4
35-44 years	11.0	94.3	64.9	132.5	166.7	139.3	127.1	151.5
45-54 years	4.0	*			59.0	63.8	54.4	73.2
55-64 years	1.3	*			16.3	31.9	23.6	42.1
≥65 years	0.0	*			4.3	*		
All Females	58	80.4	68.4	92.3	1,000.7	143.6	138.5	148.7
≤9 years	0.0	*			1.7	*	*	*
10-14 years	1.7	*			33.3	72.0	57.8	86.1
15-19 years	17.0	362.1	269.6	476.0	372.7	892.1	839.8	944.4
20-24 years	19.0	336.5	254.9	436.0	275.3	645.8	601.8	689.9
25-29 years	9.3	151.0	100.3	218.2	141.7	259.9	235.2	284.6
30-34 years	5.3	*			80.7	137.2	119.9	154.5
35-44 years	4.3	*			72.7	60.7	52.6	68.7
45-54 years	1.3	*			21.3	21.8	16.8	27.9
55-64 years	0.0	*			0.7	*		
≥65 years	0.0	*			0.7	*		

Note: (*) = Rate not calculated due to small numbers.

Table 6C.1. Tuberculosis: Average Annual Counts, Percent, Case Rates per 100,000 and 95% Confidence Intervals (CI) by Sex, Race/Ethnicity, Age Group, Place of Birth and Drug Resistance, 2000-2002

	Hayward					Alameda County				
	Count	%	Rate	95% CI		Count	%	Rate	95% CI	
Total	23.7	100.0	16.5	12.9	20.8	212.0	100.0	15.5	14.3	16.7
Sex										
Males	15.0	63.4	21.1	15.4	28.2	122.0	57.5	18.1	16.3	20.0
Females	8.7	36.6	12.0	7.8	17.6	90.0	42.5	12.9	11.4	14.4
Race/Ethnicity										
African American	2.0	8.5	*			39.3	18.6	18.9	15.5	22.3
Asian/Pacific Islander	13.3	56.3	41.9	29.9	57.1	129.3	61.0	42.3	38.0	46.5
Hispanic/Latino	7.0	29.6	14.3	8.9	21.9	31.7	14.9	11.7	9.5	14.4
White	1.3	5.6	*			11.3	5.3	*		
Other	0.0	0.0	*			0.3	0.2	*		
Age Group										
≤4 years	0.7	2.8	*			7.0	3.3	7.3	4.5	11.1
5-14 years	1.0	4.2	*			7.7	3.6	3.9	2.5	5.8
15-24 years	1.0	4.2	*			17.0	8.0	9.9	7.3	13.0
25-44 years	8.0	33.8	16.7	10.7	24.9	72.0	34.0	15.4	13.4	17.5
45-64 years	8.3	35.2	30.9	20.0	45.6	56.0	26.4	18.9	16.0	21.7
≥65 years	4.7	19.7	*			52.3	24.7	37.3	31.5	43.2
Place of Birth										
US-Born	3.3	14.1	*			53.3	25.2	5.4	4.5	6.2
Foreign-born	20.3	85.9	40.9	31.3	52.5	158.7	74.8	41.8	38.0	45.5
Drug Resistance	2.7	11.3	—			17.7	8.3	—		

Notes: (*) = Rate not calculated due to small numbers. (-) = Not applicable.

Table 6C.2. Tuberculosis: Annual Case Counts, Percent Change, Case Rate per 100,000, and 95% Confidence Interval (CI), by Year, 1993-2002

Year	Hayward					Alameda County				
	Count	% Change	Rate	95% CI		Count	% Change	Rate	95% CI	
1993	10	-	8.1	3.9	14.9	158	-	13.0	11.0	15.0
1994	21	110.0	16.8	10.4	25.7	200	27	16.3	14.0	18.6
1995	25	19.0	19.8	12.8	29.2	238	19	19.3	16.9	21.8
1996	31	24.0	24.3	16.5	34.5	234	-2	18.9	16.4	21.3
1997	20	-35.5	15.3	9.4	23.7	192	-18	15.2	13.1	17.4
1998	31	55.0	23.2	15.8	32.9	223	16	17.3	15.1	19.6
1999	29	-6.5	21.3	14.3	30.6	224	0	17.1	14.9	19.3
2000	26	-10.3	18.6	12.1	27.2	241	8	18.0	15.7	20.2
2001	24	-7.7	16.9	10.8	25.1	196	-19	14.4	12.4	16.4
2002	21	-12.5	14.6	9.0	22.3	199	2	14.4	12.4	16.4

Note: (-) = Not applicable.

Appendix 7

Technical Notes

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■ Data Sources

Census 2000

The United States Department of Commerce, Bureau of the Census, Census 2000 data were downloaded using American Fact Finder. Summary File 1 and Summary File 3 were summarized to describe demographic, social and economic characteristics presented in the Demographic and Social Profile. Detailed information on these data is available at: <http://factfinder.census.gov>.

Census 1990

The United States Department of Commerce, Bureau of the Census, Census 1990 data were downloaded using American Fact Finder. Data on median home prices from Summary Tape File 3 were summarized to describe housing presented in the Demographic and Social Profile. Detailed information on these data is available at: <http://factfinder.census.gov>.

Census 1980

The United States Department of Commerce, Bureau of the Census, Census 1980 historical data was obtained from library archives. Data on median home prices from Summary Tape File 3 were summarized to describe housing in the Demographic and Social Profile.

Employment Development Department (EDD) Data

Unemployment rates are based on EDD data on monthly unemployment claims. Further information on this data source is available at: <http://www.calmis.cahwnet.gov>.

FBI Uniform Crime Reports

Property and violent crime rates are based on U.S. Department of Justice Programs reports of arrests in different jurisdictions. These reports are prepared by Bureau of Justice Statistics. Further details are available: <http://www.ojp.usdoj.gov/bjs>.

Hayward Unified School District (HUSD) Data

Data on English learners (children for whom English is not a first language) enrolled in Hayward schools, were obtained through the Education Data Partnership. Information on these data is available at: <http://www.ed-data.k12.ca.us>.

Data on high school dropout rates for Hayward schools were obtained from the California Department of Education. Education Demographics Unit website. Further information is available at: <http://www.cde.ca.gov>.

Mortality Data

The Alameda County Public Health Department (ACPHD) vital statistics files were the source of data on deaths among Alameda County residents. These data were obtained from the Automated Vital Statistics System (AVSS) maintained by ACPHD.

These data are the source for mortality rates for all causes, chronic disease mortality rates, and infant mortality rates.

Findings on death from all causes and mortality of chronic diseases in this report are based on three-year aggregate of these data for years 1999 through 2001. Data related to deaths by race/ethnicity for all indicators are based on a two-year aggregate of years 2000 and 2001.

Findings on mortality by race/ethnicity may be subject to bias because of the manner in which information on race/ethnicity is collected. The race and ethnicity of the decedent is from the death certificate as reported by family members to the funeral director. However, birth and census population data use the self-reported race of the respondent. As a result of the combined effect of numerator and denominator biases, it has been estimated that death rates are overestimated by about 1% among Whites, and 5% among African Americans; and are underestimated by 21% for the American Indian or Alaska Natives, 11% among Asian or Pacific Islanders, and 2% among Hispanics.¹

Hospital Discharge Data

The California Office of Statewide Health Planning and Development's (OSHPD) Hospital Inpatient Discharge Data was the source for hospitalization rates for chronic diseases (coronary heart disease, stroke, diabetes, and asthma) and injury.

This data source has certain characteristics that limit its usefulness for estimating incidence or prevalence of health conditions. Persons with multiple hospitalizations during the year can be counted more than once, so hospital discharge data produces the estimates for discharges, not persons. Changes in rates of hospitalization may be attributed to changes in hospital admission practices or the diagnostic coding of illnesses, or reflective of true changes in the patterns of disease. Hospitalization data captures those illnesses or injuries serious enough to get people admitted to the hospital, but may not describe the prevalence of a given illness in the population since many who have the illness are not hospitalized for it.

Race and ethnicity data is missing for many cases, due to the omission of a race field on a high proportion of

hospital discharge reporting forms. Reportedly, race is not recorded in about 18% of hospital discharge records.² Therefore, there are a large number of 'unknown' and 'other' for which rates are not calculated, resulting in over-estimation of rates for some racial groups and under-estimation for others.

Cancer Incidence Data

California Cancer Registry (CCR) data provided by the Northern California Cancer Center (NCCC) is the source of data on new cases of cancer. This data source has reports of cases diagnosed by site, as well as a range of clinical characteristics such as extent of disease and stage.

Birth Data

The ACPHD vital statistics files were the source of data on births in Alameda County. These data were obtained from the Automated Vital Statistics System (AVSS) maintained by ACPHD.

These data are the source for maternal, child and adolescent health indicators: birth rates, low birth weight, early prenatal care, and teen births.

All information on the newborn is taken from the birth certificate. The race/ethnicity on the birth certificate is reported by self-identification according to the race and ethnicity of the mother.

AIDS Data

The HIV/AIDS Reporting System (HARS) database maintained by ACPHD is the source of data on cases of Acquired Immune Deficiency Syndrome (AIDS). AIDS cases are reported to the ACPHD Division of Communicable Diseases using the HIV/AIDS Confidential Case Report form. HARS data are used for AIDS surveillance. Cases are described based on date of AIDS diagnosis, and do not reflect time of HIV infection or reporting delays.

Sexually Transmitted Disease Data

Gonorrhea and Chlamydia are reported to the ACPHD directly from laboratories and by Confidential Morbidity Report form from health care providers. Cases are classified by date of diagnosis. Data from 2000 to-2001 are from the California Department of Health Services (CADHS), Division of Communicable Disease Control, Sexually Transmitted Disease Control Branch. Data for 2002 were collected jointly by ACPHD and the CADHS. Data Information on race/ethnicity is largely incomplete due to the reliance on laboratory reporting.

Tuberculosis Data

The Tuberculosis Information Management System (TIMS) maintained by ACPHD is the source of data on reportable cases of tuberculosis. Cases of tuberculosis among Berkeley residents are reported to the City of Berkeley, and therefore, are excluded from county counts. Reportable cases of tuberculosis are submitted to the ACPHD TB Control Program. Demographic and clinical information is collected on the Report of Verified Case of Tuberculosis (RVCT) form and entered into the TIMS for surveillance. Individuals suspected of tuberculosis disease reported to the TB Control Program and are counted as a case once the case definition is met. Count dates, rather than date of report determine case counts.

■ Population Estimates

The sources and methods used for denominator data in used for the calculation of rates are described briefly below.

Census 2000

Census 2000 age, sex, and race distributions for Hayward and Alameda County were used to calculate mortality and hospitalization rates for chronic disease and injury.

Intercensal Estimates 1990-2000

Intercensal estimates of total annual population were calculated by assuming a linear change in population by sex and age group between 1990 and 2000 for Hayward and Alameda County. These estimates were used to calculate annual age-adjusted rates (trends) for all indicators except communicable diseases.

Postcensal Projections 2001-2002

Population estimates for years 2001 and forward, were calculated using the percent change in population based on the Department of Finance city/county population and housing estimates. These estimates are available at: <http://www.dof.ca.gov/html/demograp/e-5text2.htm>.

The percent population increase for Hayward and Alameda County for 2001 and 2002 was applied to the age, sex, and race distributions from Census 2000 population. The resulting populations for 2001 and 2002 calculated by this method were used in the calculation of crude or age-adjusted rates for several indicators.

Single-race 2000 Estimates

Two bridging methods were used to obtain single-race population estimates for Hayward and Alameda County.

a) The population of two or more races was redistributed into Census 1990 race categories by fractional allocation, and added to the population reporting a single race. This race distribution was used to estimate single-race denominators in the calculation of crude rates for communicable diseases.

b) Estimates of age, sex, and single-race distributions by zip code were done. The Urban Institute method was used as a bridging method.³ These estimates were used in the calculation of age-adjusted rates by sex and race for the City of Hayward,

1998 Single-race Estimates

The single-race 2000 estimates described above in b) were used to obtain single-race, 1998 age and, sex distributions. The percent change in housing units based on Census 2000 Summary File 3 data was used as a proxy for population change between 1998 and 2000. were estimated using the housing unit method. These estimates of the 1998 population were used in the calculation of age-adjusted cancer incidence rates.

Department of Finance (DOF) Projections

The Department of Finance Historical 1970-2040 population projections estimates were used in the calculation of annual rates for trends of communicable diseases to describe trends.

■ Data Interpretation Issues

Change of Disease Classification

Mortality data for specific causes of death in this report are classified and coded according to the World Health Organization's (WHO) tenth revision of the International Classification of Diseases (ICD-10) implemented in the United States in 1999. However, the mortality trend data for 1990 to 1998, and hospital discharge data are based on ninth revision of International Classification of Disease (ICD-9).

Since the beginning of the century, the International Classification of Disease for mortality has been modified about once every 10 years, except for the 20-year interval between the last two revisions, ICD-9 and ICD-10. ICD-10 differs from ICD-9 in many respects:

1. ICD-10 is far more detailed than ICD-9, about 8,000 categories compared with 4,000 categories, mainly to provide more clinical detail for morbidity applications.

2. ICD-10 uses 4-digit alpha-numeric codes compared with 4-digit numeric codes in ICD-9.

3. Three additional chapters have been added, some chapters rearranged, cause of death titles have been changed, and conditions have been regrouped.

4. Some coding rules have been changed.⁴

Introduction of ICD-10 creates discontinuities in trends for specific causes of death, because of the reclassification of diseases and changes in the coding rules. Annual rates of mortality from specific causes between 1990 and 1998 are not directly comparable to those for 1999 to 2001; for this reason recent changes in mortality trends should be interpreted with caution.

Multiple Race Coding

The data on race in Census 2000 are not directly comparable to those collected in previous censuses. The October 1997 revised standards issued by the US Office of Management and Budget (OMB) led to changes in the question on race for Census 2000. In Census 2000, respondents were allowed to select more than one category for race. Also, the "Asian and Pacific Islander" category was separated into two categories, "Asian" and "Native Hawaiian and Other Pacific Islander."

For racial/ethnic comparison of mortality data, aggregated two-year data, 2000 and 2001, is presented. Therefore, it is more vulnerable to random variation since the data is based on relatively small numbers.

Leading Causes of Death

Causes are ranked according to the number of deaths because it most accurately reflects the frequency of cause-specific mortality. In this report, leading causes of death were derived from the recommended list of 50 'rankable' causes from the 113 selected causes of death developed for use with ICD-10.⁵ Leading causes of infant mortality were derived from a separate ranking procedure using the recommended list of 71 'rankable' causes from the 130 selected causes of infant death developed in accordance with ICD-10.⁵

Ranking leading causes of death is a useful tool for illustrating the relative burden of cause-specific mortality. However, the rankings do not necessarily mean the causes of death of greatest public health importance. Some causes of death of public health importance, such as lung cancer and motor vehicle crashes are excluded from the ranking procedure and included in broader rankable categories, namely, all cancer and unintentional injuries, respectively. If they were included in the rank-

ings, both causes would be placed among the 10 leading causes of death.

Years of Potential Life Lost

Years of potential life lost (YPLL) is a summary measure often used to gauge the overall health of a population. Because females live longer than males, and actual life expectancies at birth in the United States are lower than some other regions of the world, the female life expectancy table from Murray was used to avoid underestimating the disease burden in the population.⁶

Life Expectancy

In this report, the period (or current) life table used to produce life expectancy at birth. Unlike the cohort life table, the period life table does not represent the mortality experience of an actual cohort. Rather, the period life table presents what would happen to a hypothetical cohort. Thus, a period life table can be characterized as “cross-sectional,” or “snapshot” of current mortality experience.^{7,8}

Life tables can be classified in two types according to the length of the age interval in which data are presented. An abridged life table method using five-year age intervals was used in this report.⁹

■ Data Definitions

Race and Ethnicity

The definitions of race and ethnicity for hospital discharge, cancer incidence and communicable disease data were as follows:

African American: ethnicity is non-Hispanic, and race is Black.

American Indian: ethnicity is non-Hispanic, and race is American Indian, Eskimo, or Aleut.

Asian/Pacific Islander: ethnicity is non-Hispanic, and race is any of the following: Asian (Unspecified) or Asian (Specified): Chinese, Japanese, Korean, Vietnamese, Cambodian, Thai, Laotian, Filipino, Indian, Samoan, Hawaiian, Guamanian, or other Pacific Islander.

Latino: ethnicity is Hispanic/Latino regardless of race.

White: ethnicity is not Hispanic/Latino, and race is White.

The definition of race and ethnicity for maternal, child, and adolescent health data and mortality data was as follows:

African American: ethnicity is non-Hispanic, and race is Black.

American Indian: ethnicity is non-Hispanic, and race is American Indian, or Eskimo, or Aleut.

Asian: ethnicity is non-Hispanic, and race is any of the following: Asian (Unspecified) or Asian (Specified): Chinese, Japanese, Korean, Vietnamese, Cambodian, Thai, Laotian, Filipino, Indian.

Latino: ethnicity is Hispanic regardless any race.

Native Hawaiian and Other Pacific Islander: Native Hawaiian, Samoan, Guamanian, or other Pacific Islander.

White: ethnicity is non-Hispanic, and race is White.

Two or More Races: ethnicity is non-Hispanic, and races are more than one of the above.

Case Definitions

AIDS: The 1993 Centers for Disease Control and Prevention expanded AIDS surveillance case definition was used. It includes all HIV-infected persons with a CD4+ T-lymphocyte count of less than 200 cells/uL or with one of the AIDS-defining clinical conditions.

Chlamydia: A case that is laboratory confirmed by isolation of *C. trachomatis* by culture

Gonorrhea: A case that is laboratory confirmed by isolation of *Neisseria gonorrhea* by culture

Tuberculosis: Positive cultures for *M. tuberculosis* confirm the diagnosis of TB; however, TB may also be diagnosed by the medical provider on the basis of clinical signs and symptoms in the absence of positive cultures.

Cancer Incidence: A cancer case is defined in this report as a primary malignant tumor, that is, one originating in a particular organ or anatomic site rather than having spread from another location. Surveillance Epidemiology and End Results (SEER) site codes in the California Cancer Registry were used to define and select cases by site for this report. The SEER site codes¹⁰ by site are described below:

Site	SEER Site Code
Breast	26000
Prostate	28010
Lung	22030

Asthma Hospitalization: Hospital discharge with an ICD-9 code of 493 (asthma) as the primary diagnosis.

Diabetes-Related Hospitalization: Hospital discharge with an ICD-9 code of 250 (diabetes) as the primary diagnosis or any one of four underlying diagnoses.

Coronary Heart Disease (CHD)-Related Hospitalization: Hospital discharge with an ICD-9 codes of 402, 410-414, and 429.2 (CHD) as the primary diagnosis or any one of four underlying diagnoses.

Stroke-Related Hospitalization: Hospital discharge with an ICD-9 codes of 430-438 (stroke) as the primary diagnosis or any one of four underlying diagnoses.

Injury Hospitalization: A subset of injury hospitalizations was created based on guidelines established by the National Center for Injury Prevention and Control.¹¹ The injury subset is defined using specific inclusion and exclusion criteria within the primary diagnosis field (N-codes). By this definition, an injury hospitalization is defined as:

A record in which the principal reason for admission, after study, to a non-federal, acute-care, inpatient facility was an injury, including late effects, but excluding adverse effects of therapeutic use of drugs and adverse effects of medical/surgical care and the late effects of those adverse effects.

Specific types of injury are defined by selection of specified E-codes. The first listed valid E-code is used unless it meets additional exclusion criteria. Additional E-codes are checked if the first E-code is excluded.

The following table presents ICD-10 codes for the selected causes of death in this report.

ICD-10 Codes for Mortality Data	
Cause of Death	ICD-10 Code
All Cancer	C00-C97
All Causes	A00-Y89
Alzheimer's Disease	G30
Asthma	J45-J46
Certain Conditions Originating in the Perinatal Period	P00-P96
Chronic Liver Disease and Cirrhosis	K70, K73-K74
Chronic Lower Respiratory Diseases	J40-J47
Congenital Malformations, Deformations, and Chromosomal Abnormalities	Q00-Q99
Coronary Heart Disease	I11, I20-I25
Diabetes	E10-E14
Diseases of Heart	I00-I09, I11, I13, I20-I51
Disorders Related to Short Gestation and Low Birth Weight, Not Elsewhere Classified	P07
Essential (primary) Hypertension and Hypertensive Renal Disease	I10-I12
Female Breast Cancer	C50
Homicide	X85-Y09, Y87.1
Human Immunodeficiency Virus (HIV) Disease	B20-B24
Influenza & Pneumonia	J10-J18
Lung Cancer	C33-C34
Motor Vehicle Crash	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Newborn Affected by Maternal Complications of Pregnancy	P01
Prostate Cancer	C61
Respiratory Distress of Newborn	P22
Stroke	I60-I69
Sudden Infant Death Syndrome (SIDS)	R95
Suicide	X60-X84, Y87.0
Unintentional Injury	V01-X59, Y85-Y86

The following tables present tabulation lists of ICD-9 codes of selected causes of death (1990-1998) and for hospitalization data.

ICD-9 Codes for Morbidity, Hospitalization, and Mortality Data	
Cause	ICD-9 Code
Acquired Immunodeficiency Syndrome (AIDS)	042-044
All Cancer	140-208
All Causes	001-E999
Asthma	493
Breast Cancer	174
Coronary Heart Disease	402, 410-414, 429.2
Diabetes	250
Diseases of the Heart	390-398, 402, 404-429
Homicide/Assault	E960-E969
Lung Cancer (bronchus & lung)	162.2-162.9
Motor Vehicle Crashes	E810-E825
Prostate Cancer	185
Stroke	430-438
Suicide/Self-Inflicted Injury	E950-E959
Unintentional Injury	E800-E949

ICD-9 Codes Used for Injury Hospitalization by Mechanism	
Cause	ICD-9 Code
Cut/Pierce	E920.0-.9, E956, E966, E986, E974
Drowning/Submersion	E830.0-.9, E832.0-.9, E910.0-.9, E954, E964, E984
Fall	E880.0-E886.9, E888, E957.0-.9, E968.1, E987.0-.9
Fire/Burn	E890.0-E899, E924.0-.9, E958.2,.7, E961, E968.0,.3, E988.1,.2,.7
Firearm	E922.0-.9, E955.0-.4, E965.0-.4, E985.0-.4, E970
Motor Vehicle Traffic	E810-E819 (.0-.9), E958.5, E988.5
Pedestrian	E800-E807 (.2), E820-E825 (.7), E826-E829 (.0)
Poisoning	E850.0-E869.9, E950.0-E952.9, E962.0-.9, E980.0-E982.9, E972
Suffocation	E911-E913.9, E953.0-.9, E963, E983.0-.9

■ Methods

Crude Rates

Case rates for communicable disease incidence are based on crude rates. Crude rates were calculated as:

$$\text{Number of cases/population} \times 100,000$$

Age-Adjustment

All age-adjusted rates in this report are adjusted by the direct method to the 2000 US Standard Population. In general, the number of deaths for specific causes of mortality in a community is affected by the size and age composition of the population. Due to the fact that the risk of dying and having certain diseases or health conditions is primarily a function of age, simply calculating a crude rate for vital events such as death or disease {e.g. (number of deaths/population)X100,000} can lead to misleading conclusions when comparing different sub-populations. This is because populations with many elderly people tend to have high death or disease rates simply because the risk of dying or having the disease is determined mostly by age.

In order to nullify the effect of differences in the age composition of populations, disease rates can be age-adjusted. Age-adjusting methodology involves first calculating rates for each age category for each sub-population to determine age-specific rates. Each age-specific rate is then multiplied by the proportion of the corresponding age category in a standard population. The sum of these weighted age-specific rates in a community is the age-adjusted rate for that community. Age-adjusted disease rates form a better basis for a fair comparison between sub-populations.

Reliability of Rates

All vital statistics, including death rates, are subject to random variation. This variation is inversely related to the number of events (e.g. deaths) used to calculate the rate. The smaller the number of events, the greater the likelihood of random variation.

To protect against providing misleading information based on statistically unreliable rates, this report adopts the recommendations of the National Center for Health Statistics (NCHS)¹² regarding the calculation of rates. NCHS recommends that rates are statistically reliable when they are based upon 20 or more events occurring during the period in question, and the relative standard error (RSE) of the related rate is less than 23%. Rates not meeting these criteria are not shown in the report. For all indicators presented in this report, two or three years of data were aggregated to get more stable rates.

For trend analysis of some indicators (e.g. breast cancer mortality) where numbers were too small to calculate annual rates, two years of data were aggregated to allow for calculation of stable rates. For cancer incidence, five years of data were aggregated to get stable rates at the city level. The aggregate cases/events had to be 20 or greater for any rate to be presented in this report.

Confidence Intervals

A good measure of the reliability of a rate is the confidence interval (CI) around the rate estimate. A confidence interval defines the range of rates that would be determined by repeated sampling of the same phenomenon. By statistical convention, a 95% confidence interval is considered a useful measure of the range of accuracy of an estimate. This means that with repeated sampling, one would obtain a rate within the confidence interval 95% of the time. CIs were calculated for rates and for proportions using the methods described below.

Confidence intervals for rates:

$$\begin{aligned} 95\% \text{ CI} &= \text{Rate} \pm (1.96 \times \text{SE}) \\ \text{SE} &= \text{Rate} / \sqrt{E}^* \\ \text{RSE} &= (\text{SE}/\text{Rate}) \times 100 \\ \text{Where: CI} &= \text{Confidence Interval} \\ \text{SE} &= \text{Standard Error} \\ E &= \text{Number of Events} \\ \text{RSE} &= \text{Relative Standard Error} \end{aligned}$$

*Standard error of an age-adjusted rate is calculated using the sum over the age groups of weighted age-specific rates divided by the square root of the number of events in each age group.

Based on recommendations of the National Center for Health Statistics (NCHS) regarding the calculation of rates and confidence intervals, the standard error of any rate based on fewer than 100 events is based on the Poisson distribution. The Poisson distribution is similar to the binomial distribution but is characterized by infrequent events in a large number of trials (n).¹³

Confidence intervals for proportions:

Based on recommendations of the Family Health Outcomes Project (FHOP)¹⁴ regarding the calculation of proportions and confidence intervals, if the numerator was less than 20 then the proportion was not reported and thus no confidence intervals were calculated.

$$\begin{aligned} 95\% \text{ CI} &= p \pm (1.96 \times \sqrt{pq/n}) \\ \text{Where: CI} &= \text{Confidence Interval} \\ p &= \text{proportion} \\ q &= 1 - p \\ n &= \text{population} \end{aligned}$$

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